Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Abelmoschus esculentus (L.) Moench	Malvaceae		fruit			Food (Okra)	OK	1
Abelmoschus moschatus Medik.	Malvaceae		seed			Essential oil: pyrazine and pyridine derivatives. Young leaves and shoots are eaten	OK	1
Abies alba Mill.	Pinaceae		bark, branch, needle, seed, resin			Branches: essential oil (0.2%-0.5%): bornyl acetate (30.31%), camphene (19.81%), 3-carene (13.85%), tricyclene (12.90%), dl-limonene (7.50%), a-pinene (2.87%), caryophyllene (2.18%), β-phellandrene (2.13%), borneol (1.74%), bicyclo[2.2.1]hept-2-ene,2,3-dimethyl (1.64%) and a-terpinene (1.24%)	OK	3
Abies balsamea (L.) Mill.	Pinaceae		bark, needle, resin, twig; essential oil			Essential oil needle twig (0.6%-1.4%): e.g. beta pinene (24%-35%), alpha pinene ((6%-11%), camphen ((6%-11%), . Resin: contains 16%-27% essential oil. Sesquiterpene derivatives: e.g. bisabolene. Resin acids: e.g. canadinol acids	OK	3
Abies nordmanniana subsp. equi-trojani (Asch. & Sint. ex Boiss.) Coode & Cullen	Pinaceae	Abies pectinata Dc. Var. Equi-Trojani Asch. & Sint. Ex Boiss	bark, branch, needle			Bark : tannins 10%. Essential oil in needles, branches, bark and resin: 0.24-0.35%. Sometimes used as falsification for Abies alba	OK	1
Abies sibirica Ledeb.	Pinaceae		bark, branch, needle, seed, resin			Needle: essential oil (1.3%-2%): e.g. bornylacetate (20%-40%), camphene (10%-26%), alpha pinene (8%-20%), beta pinene (3%-13%)	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Abroma augusta L. f	Malvaceae		root bark			Said to contain unknown alkaloids (0.01%), however seems to be betaine (trimethylglycine). Lipid fraction of the root formerly used as abortifacient and antifertility	OK but not during pregnancy. Warning in case of antidiabetic treatment.	1
Acacia catechu (L.f.) Willd.	Fabaceae		Flower, wood, gum			Flavonoids; catechines (2%-12%) catechuic acid, catechutannic acid (25%-33%), acacatechin (10%-12%), catechu red, phlebotanin (25%-33%)	OK	1
Acacia decurrens Willd.	Fabaceae		Flower, wood, gum			The O-Me derivatives of the gum: 2,3,4,6-tetra-O-methyl-D-galactose, 2,3-di-O-Methyl-L-arabinose, 2,3,4-tri-O-methyl-D-galactose, 2,4-di-O-methyl-D-galactose together with 2,3,4-tri-O-methyl-D-glucuronic acid. Abietane diterpenes.	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Acacia farnesiana (L.) Willd.	Fabaceae		flower, pod, wood	flower, root	Essential oil: methylsalicylate (30.9%), methyleugenol. Bark, leaf, root: phenethylamines, hordenine. Stem bark : tryptamine	Terpenes, aromatic aldehydes, alcohols	OK but if essential oil is used the amount of salicylates and methyleugenol must be determined	1
Acacia nilotica (L.) Delile	Leguminosae	Acacia arabica (Lam.) Willd.	bark, fruit, gum		Bark: unidentified alkaloids	Leaf: condensed tannins (21%-40%); bark: gallic acid (17%-20%)	OK	3
Acacia senegal (L.) Willd.	Leguminosae (Fabaceae)		Bark, gum			Polysaccharides: D-galactose (32-50%), L-arabinose (17-34%), D-galacturonic acid (13-19%)…No toxicity info	OK	3
Acalypha indica L.	Euphorbiaceae		leaf, root	aerial part	Aerial part: cyanogenic glycosides: acalyphin (0.3%). Root: diterpene esters	Leaf latex has an emetic effect. Induces antifertility and anti implantation effect in rats.	OK. Warning not to take during pregnancy.	1
Acanthus mollis L.	Acanthaceae		whole plant			Glycosides of arylnaphthalene lignans. Aerial part: feed for goats and cattle	OK	1
Acer negundo L.	Sapindaceae		cortex	leaf	Triterpenediesters: e.g. aceronin, acerotin; cyclopropyl aminoacids: e.g. hypoglycins	Ahorn syrup. Sap :saccharose	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Acer saccharinum L.	Sapindaceae		bark, wood			Ahorn syrup. Sap: saccharose. Leaf extract kills horses. Toxin(s) not known (probably triterpenediesters and cyclopropyl aminoacds (see A. negundo)	OK	1
Achillea ageratum L.	Compositae		aerial part	aerial part	Essential oil: e.g. 1,8-cineole	Essential oil: artemisia ketone, artemisia alcohol, β-caryophyllene oxide, 1,8-cineole.	OK but when the essential oil is used the amount of 1,8 cineole must be determined	1
Achillea atrata L.	Compositae		whole plant	whole plant	Essential oil: 1,8 cineole	Tannins. Used for liquors	OK but when the essential oil is used the amount of 1,8 cineole must be determined.	1
Achillea erba-rotta All.	Compositae		aerial part	aerial part; essential oil	Essential oil: monoterpenes: eg. 1,8 cineole, camphor	Coumarins, flavones, sesquiterpene lactones of the germacrane type. Tannins	OK but the amount of 1,8 cineole and camphor must be determined	1
Achillea erba-rotta subsp. moschata (Wulfen) I.Richardson	Compositae		aerial part; essential oil	aerial part; essential oil	Essential oil: monoterpenes: eg. 1,8 cineole, camphor	formerly name was A. moschata	OK but the amount of 1,8 cineole and camphor must be determined	1
Achillea maritima (L.) Ehrend. & Y.P.Guo	Compositae	Diotis candidissima Desf.; Otanthus maritimus (L.) Hoffmanns. & Link	aerial part; essential oil	aerial part; essential oil	Essential oil: monoterpenes (73%): e.g. camphor (16%), 1,8 cineole		OK but the amount of 1,8 cineole and camphor must be determined	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Achillea millefolium L.	Compositae		aerial part; essential oil	aerial part; essential oil	Essential oil: e.g. camphor (20%), 1,8 cineole (10%)	Essential oil (0.1%-1%): e.g. azulene (40%)	OK but when using the EO the amount of camphor and 1,8 cineole must be determined	3
Achillea nana L.	Compositae		aerial part; essential oil	aerial part; essential oil	Essential oil: monoterpenes: eg. 1,8 cineole, camphor	Essential oil rich in trans and cis- isoeugenol	No much info	1
Achillea ptarmica L.	Compositae			Root, leaf and flower	Essential oil : mono- and bicyclic monoterpenoids (β-myrcene), monocyclic monoterpenoids (isopulegol, 1,8-cineole, 1,4-cineole, 4-carvomenthenol, 4-terpineol, α-terpineol, β-terpineol), and bicyclic monoterpenoids (thujone, isoborneol, isobornyl acetate, camphor). Acid amides, polyphenols.	Tannins	OK but when the essential oil is used the amount of 1,8 cineole, camphor and thujones must be determined	1
Achyranthes bidentata Blume	Amaranthaceae		root	root	Sulfated oleanan saponins; e.g. sulfachyranthosides A & D	Anti-fertility activity of high doses of saponins (1000mg/kg). Stimulation of the growth of cancer in mice with high doses of polysaccharides but inhibition with low doses.	OK but the amount of saponins must be determined	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Acmella oleracea (L.) R.K. Jansen	Compositae (Asteraceae)		aerial part	aerial part		Fatty acid amides: e.g. N-isobutylamides (spilanthol, 21% in leaves and 17% in flowers measured in steam destillation extracts). Consumption of fresh leaves can lead to mouth numbness and salivation. High doses of hexane extract (100-150mg/kg) can produce tonic-clonic convulsion in Wistar rats by IP route	OK	2
Actaea heracleifolia (Kom.) J.Compton	Ranunculaceae	Cimicifuga heracleifolia Kom.	rhizome			Phenolic compounds: e.g. cimicifugic acids, triterpenoid glycosides. Asian Cimicifuga. Sometimes used to falsify C. racemosa. Cimicifuga racemosa under scrutiny for hepatotoxicity.		1
Actaea racemosa L.	Ranunculaceae	Cimicifuga racemosa (L.) Nutt.	root, rhizome			Cycloartenal-type triterpenes, phenolics and flavonoids. Herb under scrutiny for hepatotoxicity		3
Actinidia chinensis Planch.	Actinidiaceae		fruit, bud			Edible fruit without any toxicity. The hairs on the skin can cause throat irritation if ingested	OK	3
Actinidia deliciosa (A.Chev.) C.F.Liang & A.R.Ferguson	Actinidiaceae		fruit, bud			Edible fruit without any toxicity. The hairs on the skin can cause throat irritation if ingested	OK	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Adansonia digitata L.	Malvaceae		fruit, leaf	seed	Alkaloids: strophantus-like: e.g. adansonin	Baobab	OK	3
Adiantum capillus-veneris L.	Pteridaceae		whole plant			Flavonoids: e.g. naringin; proanthocyanidines,; triterpenes: e.g. adiantones	OK	3
Adiantum pedatum L.	Adiantaceae		whole plant			Norhopane terpenoids: e.g. adiantone, isoadiantone; In the essential oil: fernanetype triterpenoids: e.g. fernene(s) Norhopane terpenoids: e.g. adiantone, isoadiantone; In the essential oil: fernanetype triterpenoids: e.g. fernene(s)	OK	1
Adoxa moschatellina L.	Adoxaceae		Whole plant			Essential oil from flowers: trans-2-hexenal, cis-3-hexenol, trans-2-hexenol, hexanol, and benzyl alc. (42.0, 21.0, 13.5, 12.5, and 10.0% resp. of fragrance volatiles. Iridoid glucosides : secologanin, morroniside , adoxoside .	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Aegopodium podagraria L.	Apiaceae		leaf	seed, root	Furocoumarins: e.g. apterin, angelicin	Essential oil: limonene (23,0%), γ-terpinene (13,9%), β-E-farnezen (10,6%), p-cymole (7,2%), β-elemene (3,96%), E,E-a-farnezen (3,1%), a- and β-pinene (1,2% and 2,6%), sabinene (1,6%), β-myrcene (1,6%), cis-β-ocimene (2,1%), 9-epi-izokariofillen (1,2%), germakren D (1,82%). Young leaves eaten as salad. The content of apterin and angelicin decreased during development but phototoxicity increased. Due to production of derivatives?	OK but the amount of furocoumarines must be determined.	1
Aesculus hippocastanum L.	Hippocastanaceae		seed	leaf, bark, seed	Leaf and bark: coumarins: e.g. : aesculin (leaf: 0.02%; bark: 7.2%). Seed: saponins (3%-5%): eascins	Aesculin absent in seed. Very high doses of aescins may be nephrotoxic	OK but the amount of aescins must be determined. Warning not to take when under anticoagulant treatment	3
Aframomum angustifolium (Sonn.) K.Schum. (Amomum angustifolium Sonn.)	Zingiberaceae		fruit, seed	seed	Essential oil: monoterpene etheroxide: 1,8-cineole (4%)		OK but when the EO is used the amount of 1,8 cineole must be determined	2
Aframomum exscapum (Sims) Hepper	Zingiberaceae		fruit, seed	seed, root	Essential oil: monoterpene etheroxide: e.g. 1,8 cineole (47%-86%)		OK but the amount of 1,8 cineole must be determined	1
Agathosma betulina (P.J.Bergius) Pillans	Rutaceae	Barosma betulina (P.J.Bergius) Bartl. et H.L. Wendl.	leaf	leaf	Essential oil (10-20mg/kg): ketones: e.g. menthone, isomenthones, (-) pulegone (in general less than 4;5%). Diosphenols.	Leaf: sulfur derivatives: cis and trans 3-oxo-p-menthane-8-thiol. Presence of chemotypes in diosphenol and isomenthone.	OK but if the EO is used the amount of menthone, isomenthone and pulegone must be determined	3
Agathosma crenulata (L.) Pillans	Rutaceae	Barosma crenulata (L.) Hook., Barosma serratifolia (Curtis) Willd.	leaf	leaf	Essential oil: monoterpene ketone: e.g. pulegone (70%)		OK but if the EO is used the amount of pulegone must be determined	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Agathosma serratifolia (Curtis) Spreeth	Rutaceae		leaf	leaf	Essential oil: menthone, isomenthone, pulegone		OK but when the EO is used the amount of the menthones and pulegone must be determined	2
Agave americana L.	Asparagaceae		flower stem			Flower stem: steroidal saponins (e.g. hecogenin) and inulin. A syrup is produced from the flower stems.	OK but the amount of steroidal saponins must be determined	1
Agave sisalana Perrine	Asparagaceae		flower stem, root			Flower stem: steroidal saponins (e.g. barbourgenin) and inulin. A syrup is produced from the flower stems.	OK but the amount od steroidal saponins must be determined	1
Agave tequilana F.A.C. Weber	Asparagaceae		leaf, flower stem			Flower stem: steroidal saponins and inulin. A syrup is produced from the flower stems.	OK but the amount of steroidal saponins must be determined	1
Agrimonia eupatoria L.	Rosaceae		whole plant			Tannins (3%-20%): condensed tannins: e.g. catechins; gallotannins: small quantities. Triterpenes. Polyphenolic compounds eg. apigenin, kaempferol	OK	3
Agrimonia odorata Mill.	Rosaceae		aerial part			Aaerial part: tannins: catechins and epigallocatechins (5%)	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Ajuga chamaepitys (L.) Schreb.	Lamiaceae		aerial part	aerial part	Clerodane diterpenes: e.g. chamaepitin and neocloredane diterpenes : e.g. ajugapitin	These clerodanes have insect anti-feeding properties. Ajuga contains ecdysterones, toxic to insects. Ajuga is a protected plant.	OK but the amount of the diterpenes must be determined	1
Ajuga iva (L.) Schreb.	Lamiaceae		aerial part	aerial part	Neo-clerodane diterpenoids: e.g: 14,15-dihydroajugapitin, ivain I,II, III & IV		OK but the amount of the diterpenes must be determined	1
Ajuga reptans L.	Lamiaceae		aerial part		Neo-clerodane diterpenes: e.g. ajugatansins.	Iridoid glycosides. Phenylpropanoid glycosides: teupolioside. Ecdysteroids	OK but the amount of diterpenes must be determined	3
Albizia julibrissin Durazz.Albizia julibrissin Durazz.	Leguminosae (Fabaceae)		bark	seed	Unknown neurotoxin in the seed		OK but not the seed	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Alcea rosea L.	Malvaceae	Althaea rosea (L.) Cav	flower			Anthocyanes: delphinidin and malvidin monoglucosides; polysaccharides	OK	1
Alchemilla vulgaris L.	Rosaceae	Alchemilla xanthochlora Rothm.	whole plant		Tannins (8-10%): e.g. gallotannins and ellagitannins (agrimoniine, laevigatine)	Polyphenolic compounds eg. Flavonoids (2%)	OK	3
Aletris farinosa L.	Nartheciaceae		rhizome			Steroidal saponins: e.g. diosgenin (aglycon). High doses are narcotic and emetic. Uterine effect (stimulation or depression).	OK but the amount of steroidal saponins must be determined. Warning not to use during pregnancy.	1
Alisma plantago-aquatica L.	Alismataceae		root	leaf, root	Essential oil: sesquiterpenes: e.g. alismol	The fresh leaves and roots are toxic but the toxic principal is destroyed by heat or by drying.	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Alisma plantago-aquatica subsp. orientale (Sam.) Sam.	Alismataceae	Alisma orientale (Sam.) Juz.	rhizome and tuber			Triterpenes: e.g. alisols	OK	1
Alliaria petiolata (M.Bieb.) Cavara & Grande	Brassicaceae	Sisymbrium alliaria (L.) Scop.	whole plant	whole plant	Glucosinolates : e.g. alliarinoside. Cyanogenic glucosides: e.g. cyanoallyl glycoside	Leaf: cyanide 100ppm in fresh weight: corresponds to the toxicity level for many vertebrates. Leaf: cyanide 100ppm in fresh weight: corresponds to the toxicity level for many vertebrates.	OK but the amount of glucosinolates must be determined	3
Allium ampeloprasum L.	Amaryllidaceae	Allium porrum L.	whole plant			Contains alkylcysteinsulphoxides, flavones, ….	OK. Warning when under anticoagulant therapy	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Allium ascalonicum L.	Amaryllidaceae		whole plant			Food	OK	1
Allium cepa L.	Amaryllidaceae		bulb; essential oil			Trans-S-(1-propenyl) cysteine sulfoxide, S-methyl-cysteine sulfoxide, S-propylcysteine sulfoxide, and cycloalliin; flavonoids; phenolic acids; sterols including cholesterol, stigmasterol, b-sitosterol; saponins; sugars; and a trace of volatile oil composed mainly of sulfur compounds, including dipropyl disulfide	OK. Warning when under anticoagulant therapy	3
Allium sativum L.	Amaryllidaceae		bulb; essential oil			Sulfur compounds: aliin, allicin, ajoene, allylpropyl disulfide, diallyl trisulfide, sallylcysteine, vinyldithiines, S-allylmercaptocystein, and others	OK. Warning when under anticoagulant therapy	3
Allium schoenoprasum L.	Amaryllidaceae		leaf			Sulfur compounds: methyl pentyl disulfide, pentyl hydrodisulfide	OK. Warning when under anticoagulant therapy	3
Allium ursinum L.	Amaryllidaceae		whole plant			Cysteinesulphoxides; thiosulfinates; ajoenes	OK. Warning when under anticoagulant therapy	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Alnus glutinosa (L.) Gaertn.	Betulaceae		bark, gum, leaf			Leaf: diarylheptanoids, sterols, flavonoids eg. hyperoside. Bark: 20% tannins: ellagitannins eg. glutinoin, pedunculagin, pralcoxine.	OK	3
Alnus incana (L.) Moench	Betulaceae		bark, bud			Flavonglucosides: e.g. hyperoside. Tannins (20%)	OK	1
Aloe africana Mill.	Asparagaceae		leaf; leaf gel	leaf	Anthranoids (22%-26%): e.g. aloinosides, aloe-emodin	Juice is obtained from the pericycle cells and adjacent leaf parechyma and contains the aloins; the gel is the colourless mucilaginous gel obtained from the parenchymatous cells in the leaves and is exempt of aloins	OK but the amount of anthraquinones must be determined.	1
Aloe arborescens Mill.	Asparagaceae		leaf; leaf gel	leaf	Anthranoids: e.g. aloins (0.4%); anthraquinones: e.g. aloe-emodin; alkylchromones: e.g. aloeresins	Juice is obtained from the pericycle cells and adjacent leaf parechyma and contains the aloins; the gel is the colourless mucilaginous gel obtained from the parenchymatous cells in the leaves and is exempt of aloins	OK but the amount of anthraquinones must be determined.	1
Aloe ferox Mill.	Asparagaceae		leaf	leaf	Hydroxyanthracene derivatives: e.g. aloins, aloe-emodin; alkylchromones: e.g. aloeresins	Aloins are present only in the juice obtained from the pericycle cells and adjacent leaf parenchyma.	OK but the amount of hydroxyanthracenes must be determined	3
Aloe perryi Baker	Asparagaceae		leaf; leaf gel	leaf	Anthranoids: e.g. aloinosides, aloe-emodin	Juice is obtained from the pericycle cells and adjacent leaf parechyma and contains the aloins; the gel is the colourless mucilaginous gel obtained from the parenchymatous cells in the leaves and is exempt of aloins	OK but the amount of anthraquinones must be determined.	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Aloe plicatilis (L.) Mill.	Asparagaceae		leaf; leaf gel	leaf	Anthranoids: e.g. aloinosides, aloe-emodin	Juice is obtained from the pericycle cells and adjacent leaf parechyma and contains the aloins; the gel is the colourless mucilaginous gel obtained from the parenchymatous cells in the leaves and is exempt of aloins	OK but the amount of anthraquinones must be determined.	1
Aloe vera (L.) Burm. f.	Asparagaceae	Aloe barbadensis Mill.	leaf	leaf	Hydroxyanthracene derivatives: e.g. aloins, aloe-emodin; alkylchromones: e.g. aloeresins	Aloins are present only in the juice obtained from the pericycle cells and adjacent leaf parenchyma.	OK but the amount of hydroxyanthracenes must be determined	3
Aloysia citriodora Palau	Verbenaceae	Lippia citriodora (Lam.) Kunth; Aloysia triphylla (L'Hér) Britton	leaf; essential oil	leaf	Essential oil (0.1-0.7%): bicyclic monoterpenes: e.g. camphor (4%)	Leaf essential oil (0.1-0.7%): geranial, citrals (30-40%), limonene (10-20%), camphor (4%); beta-caryophyllene (2%), geraniol, neryl acetate.Leaf: polyphenolic compounds : flavonoid glycosides: luteoline, diosmetine, eupafoline. Iridoids: verbenaline, geniposidic acid. Spasmolytic. Calming infusion.	OK but when the EO is used the amount of camphor must be determined	3
Alpinia galanga (L.) Willd.	Zingiberaceae		rhizoma	rhizoma	Essential oil: phenylpropanoids: e.g. methyleugenol in unspecified quantities		OK but when the EO is used the amount of methyleugenol must be determined	3
Alpinia hainanensis K.Schum.	Zingiberaceae	Alpinia katsumadae Hayata	whole plant			Fruit: no toxicity; Essential oil from the leaf: ocimene (39.8%), beta-pinene (17.7%), terpinene (5.5%), p-menth-1-en-ol (4.9%), caryophyllene (4.9%), and phellandrene (4.4%). No 1,8 cineole nor camphor	OK	2
Alpinia officinarum Hance	Zingiberaceae		rhizoma	rhizoma	Essential oil: monoterpene etheroxide: 1,8-cineole (65%)		OK but when the EO is used the amount of 1,8 cineole must be determined	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Alpinia oxyphylla Miq.	Zingiberaceae		fruit , rhizome			Essential oil from fruit (1-2%) : p-cymene, neral, coriandrol, myrtenal, pinenes..and oxygenated sesquiterpenes. Essential oil: LD50 on mice: 0.8ml/kg.	OK	2
Althaea officinalis L.	Malvaceae		whole plant			Mucilages (leaf: 6%-10%; root: 10%-20%)	OK	3
Amaranthus caudatus L.	Amaranthaceae		leaf, seed	leaf	Possible presence of protoalkaloids: e.g. betaine (quaternair ammonium)	Betacyans; saponins, flavonols, oxalate. Seed is exempt of saponins or alkaloids.	OK	1
Amaranthus cruentus L.	Amaranthaceae		seed			triterpene saponins (0.1%)	OK	1
Amomum villosum var. xanthioides (Wall. ex Baker) T.L.Wu & S.J.Chen	Zingiberaceae	Amomum xanthioid	seed	seed, root	Essential oil (1.7%-3%): monoterpenes: e.g. camphor (28%), 1,8 cineole	False cardamom.	OK but when the essential oil is used the amount of camphor and 1,8 cineole must be detrmined.	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Amorphophallus konjac K. Koch	Araceae		root, amylum			Glucomannanes. Possible presence of 3,4-dihydroxybenzaldehyde in commercial species.	OK	3
Amyris balsamifera L.	Rutaceae		wood; oleoresin			Essential oil: sesquiterpenoids: e.g. valerianol, elemol, ß-eudesmol and epi-gamma-eudesmol; triterpenes: alpha and beta amyrinEssential oil: sesquiterpenoids: e.g. valerianol, elemol, ß-eudesmol and epi-gamma-eudesmol; triterpenes: alpha and beta amyrinEssential oil: sesquiterpenoids: e.g. valerianol, elemol, ß-eudesmol and epi-gamma-eudesmol; triterpenes: alpha and beta amyrin	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Anacardium occidentale L.	Anacardiaceae		leaf, fruit, bark juice, nut oil			Cashew nut. The plant exhibits hypoglycemic acitivity.	OK, but warning when taking antidiabetic medicines	1
Ananas comosus (L.) Merr.	Bromeliaceae		fruit			Proteolytic enzymes: e.g. bromelains. Present in all green parts and fruit.	OK. Warning when under anticoagulant therapy	3
Andrographis paniculata (Burm. f.) Nees	Acanthaceae		leaf			Diterpenoid lactones: e.g. andrographolides, also diterpene dimers : e.g. bis-andrographolides,. Only at very high doses an antifertility effect is seen	OK. Warning when under anticoagulant therapy or antidiabetic treatment.	3
Anemarrhena asphodeloides Bunge	Asparagaceae		rhizome	whole plant	Steroidal saponins e.g. timosaponins. Xanthone glycosides e.g. mangiferin. Isoflavonoids. Norlignans: e.g. (-)-nyasol.		OK but the amount of isoflavones must be determined. Warning when under anticoagulant therapy	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Angelica archangelica L.	Apiaceae		whole plant, essential oil	whole plant	Fruit, leaf, root: essential oil: furocoumarins: e.g. bergapten, angelicin	Roots: coumarins and furocoumarins (osthenol 0.37-0.47 microg/g; umbelliferone, bergapten, isoimperatorin, xanthotoxin, angelicin, archangelicin).	OK but the amount of the furocoumarins must be determined	2
Angelica dahurica (Hoffm.) Benth. & Hook.f. ex Franch. & Sav.	Apiaceae		root	whole plant	Root: furocoumarins : e.g. oxyimperatorin (10.23%), imperatorin (6.58%) and isoimperatorin (5.16%).	The essential oil of the root: 3-carene (12.70%), beta-elemene (6.20%), beta-terpinene (3.53%), beta-myrcene (1.97%), gamma-elemene (1.82%), beta-phellandrene (1.65%), and beta-maaliene (1.61%), et al. In addition, suberosin (0.16%), a coumarin compound	OK but the amount of the furocoumarins must be determined	2
Angelica pubescens Maxim.	Apiaceae		whole plant	whole plant	Furocoumarins: e.g. bergapten, isoimperatorin, psoralen		OK but the amount of the furocoumarins must be determined	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Angelica sinensis (Oliv.)	Apiaceae (Umbelliferae)		whole plant	root, seed	Essential oil from root: 0.2 - 0.4% with carvacrol, safrole and isosafrole ; contains furocoumarins: e.g. bergapten, psoralen	Safrole: carcinogenic on mice and rats (IARC, 1987). Polysaccharides from Angelica sinensis were orally administered daily to rats in doses of 0, 0.025, 0.1, 0.25 and 1 g/kg body weight for 7 days. slight liver injury was seen with the highest dose group (Wang et al. 2004). A. sinensis commonly substituted with A. acutiloba and A. gigas, which are mainly found in Japan and Korea, respectively. However, the chemical constituents in these three species vary considerably (Lao et al. 2004). Essential oil intake may prolonge prothrombin time and INR value. Root essential oil (0.4%-0.7%): alkylphtalides: e.g. ligustilide. Essential oil said to have abortifacient activity however studies could not confirm this.	OK but the amount of furocoumarins must be determined. If EO is used the amount of safrole must be determined.	2
Angelica sylvestris L	Apiaceae		leaves, root and seed		Furocoumarins: e.g. 5 and 8 methoxypsoralen		OK but the amount of furocoumarins must be determined	1
Angostura trifoliata (Willd.) T.S.Elias	Rutaceae	Cusparia officinalis Engl.; Cusparia trifoliata (Willd.) Engl.	bark	bark	Bark: Quinoline type alkaloids (40%): e.g. cusparine, cuspareine, allocuspareine, galipoline, galipoidine, galipidine, galipinine, galipine, quinaldine, 4-methoxyquinaldine, quinoline, 2-n-amyl-quinoline, candicine, etc.); angostura bitters 1 and 2 (3,5-dihydroxy-5-ethoxy-2-syringoyl-1-methyl-4-O-β-d-glucopyranosylcyclopentane and 3,5-dihydroxy-5-ethoxy-2-vanilloyl-1-methyl-4-O-β-d-glucopyranosylcyclopentane); sesquiterpenes: e.g. β-bisabolene, cadinol T, germacrene D, δ-curcumene	Used as bitter in drink production	OK but the amount of alkaloids must be determined	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Aniba rosaeodora Ducke	Lauraceae		wood; essential oil	wood	Essential oil:1,8 cineole	Essential oil (rosewood oil): linalool (70%), a-pinene, camphene, geraniol, neral, geranial, myrcene, limonene, 1,8-cineole, benzaldehyde, linalool oxides and a-terpineol.	OK but when the essential oil is used the amount of 1,8 cineole must be determined	1
Annona muricata L.	Annonaceae		whole plant	whole plant	Total alkaloids 0.65 g/kg in leaves, 19.7 g/kg in root bark, 2.5 g/kg in stem bark: 0.6 g/kg. Leaves, seed and bark: benzyltetrahydroisoquinolines e.g. reticuline ; Fruit: isoquinoline alkaloids: annonaine , nornuciferine, asimilobine; In leaf and fruit: acetogenins: e.g. annonacin	Annonacins induce atypical Parkinsonism. They are lipophilic inhibitors of complex I of the mitochondrial respiratory chain. Fruit and fruit juice are food. These acetogenins are not very well watersoluble. They are most abundant in the seeds	OK for fruit but not for the seeds neither other parts. The amount of acetogenins must be determined. When The EO is used the amount of 1,8 cineole must be determined;	1
Annona reticulata L.	Annonaceae		fruit	leaf, seed, fruit	Benzyl tetrahydroisoquinoline: e.g. reticuline; acetogenins: annoreticuin, annoreticuin-9-one, bullatacin, squamocin, cis-/trans-bullatacinone and cis-/trans-murisolinone ,	Atypical parkinsonism has been associated with the fruit and herbal teas of leaves from A. muricata, A. reticulata and A. squamosa (Caparros-Lefebvre & Elbaz 1999). These acetogenins are not very well watersoluble. They are most abundant in the seeds	OK for fruit but not for the seeds neither other parts. The amount of acetogenins must be determined. When The EO is used the amount of 1,8 cineole must be determined;	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Annona squamosa L.	Annonaceae		Fruit, leaf and root	leaf, seed, fruit	Leaves, seed and bark: benzyltetrahydroisoquinolines e.g. reticuline. Fruit: 1,8 cineole (1.4%), cyanogenic glycosides. Seeds: mono-tetrahydrofuran annonaceous acetogenins: squafosacins B, C, F, and G , squadiolins A-C , and cis-annotemoyin-1 , as well as eight known annonaceous acetogenins: glabranin, annotemoyins-1 and -2, bullatencin, cis-bullatencin, and uvariamicins-I, -II, and -III, phytosterols, amino acids, essential oil.	Atypical parkinsonism has been associated with the fruit and herbal teas of leaves from A. muricata, A. reticulata and A. squamosa (Caparros-Lefebvre & Elbaz 1999). The acetogenins are not very well watersoluble. They are most abundant in the seeds.	OK for fruit but not for the seeds neither other parts. The amount of acetogenins must be determined. When The EO is used the amount of 1,8 cineole must be determined;	1
Anogeissus latifolia (Roxb. ex DC.) Wall. ex Bedd.	Combretaceae		bark; gum			Tannins, flavonoids	OK	1
Anredera baselloides (Kunth) Baill.	Basellaceae		leaf, root			Baseloids are strongly hypoglycemic. Ancordin: tripsin inhibitory activity. Leaf and root are eaten. Cases of intoxication of cattle mentioned. In Australia suspected of killing cattle.	OK, leaf and root are eaten. However the strong hypoglycemic effect mentioned requires some caution.	1
Antennaria dioica (L.) Gaertn.	Compositae (Asteraceae)		aerial part	aerial part	Linear furocoumarins: e.g. b	Polyphenolic compounds: flavonoids. Flowers are non novel in novel food catalogue	OK but the amount of furocoumarins must be determined	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Anthemis cotula L.	Compositae		aerial part			Flower essential oil (1.8%): n-nonadecane (10.8%), cedrane (9.2%) and (E, E) - a -farnesene (6%). Leaf essential oil: 1-eicosane (11%), benzylsalicylate (8.9%) and aromadendrene (7.1%). Root: polyacetylenes , prenylated 4-hydroxyacetophenones. Contains a strong allergenic: anthecotulide (sesquiterpenelacton). Sometimes used to falsify Matricaria recutita.	OK	1
Anthemis tinctoria L.	Compositae		whole plant		Essential oil (0.3%): e.g. 1,8 c	flavonoids (7%). The anti trypanosoma effect is due to labdane sesquiterpenes and derivates.	OK but when the EO is used the amount of 1,8 cineole must be determined	1
Anthriscus cerefolium (L.) Hoffm.	Apiaceae (Umbelliferae)		flowering top; essential oil		Essential oil (0.3-0.9%): phenylpropanoids: methylchavicol (60-80%), monoterpene etheroxide: 1,8-cineole	Essential oil (0.3-0.9%): methylchavicol (60-80%), 1-allyl-2,4-dimethoxybenzene (16-30%), undecane (5-10%), 1,8-cineole, trans-anethole (traces); aerial part: polyphenolic compouds: flavonoids: appine. Seed: furocoumarines: e.g. apterine.	OK but when the EO is used the amount of methylchavicol and 1,8 cineole must bedetermined	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Anthriscus sylvestris (L.) Hoffm.	Apiaceae		aerial part			Root: high amounts of deoxypodophyllotoxin and related lignans. Leaf essential oil: b-phellandrene (39–45%), b-myrcene (17%), sabinene (6.2%), Z-b-ocimene (5.4%) and benzene acetaldehyde (4.1%). In the roots we found Z-b-ocimene (16.9%) and a-pinene (4.6%). In root : Z-b-ocimene (16.9%) and a-pinene (4.6%).	OK	1
Anthyllis vulneraria L.	Leguminosae (Fabaceae)		whole plant			Triterpene pentacyclic sapogenin: sojasapogenol B. Polyphenolic compounds: quercetol, apigenin...	OK	3
Antirrhinum majus L.	Plantaginaceae		aerial part			Iridoids: anthirrhinoside (1.5%), linaride, deoxycatalpol. Anthocyanidins; flavanes	OK	1
Aphanes arvensis L.	Rosaceae	Alchemilla arvensis (L.) Scop.	aerial part			Gallotannins	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Apium graveolens L.	Apiaceae (Umbelliferae)		whole plant , essential oil		Furocoumarins: psoralen, bergapten, xanthotoxin, and isopimpinellin.	Essential oil (2-3%) : monoterpenes eg. limonene (60%), selinene ((10%), butylphtalide, sedanolide(3%). C-prenylcoumarines: osthenol, apigravine, celerine. Furocoumarins amount depends whether the celery is healthy or diseased and may range from 1 ppm up to 10 ppm. Polyphenolic compounds: flavonoids.	OK but when using the EO the amount of furocoumarins must be determined	3
Arachis hypogaea L.	Leguminosae (Fabaceae)		seed, fatty oil			Fatty acids: palmitic, stearic (1.3-6.5%), oleic (35-72%), linoleic (13-43%). Erucic acid (les than O.5%). Sterols: beta sitosterol, campesterol, tocopherols	OK	3
Aralia racemosa L.	Araliaceae		rhizome and root			Polyynes: eg. falcarinon, falcarinolon; triterpene saponins: e.g. aralosides	OK	1
Arbutus unedo L.	Ericaceae		fruit and leaf	fruit and leaf	Leaf: phenolglycosides: arbutin (0.06%), piceoside (0.02%); fruit and leaf: rich in tannins		OK but warning when under anticoagulant therapy	1
Arctium lappa L.	Compositae (Asteraceae)		whole plant, essential oil			Laxative at high doses. Polyenes, polyines, polyphenolic compounds. Lignanes: arctigenine, arctiine. Inuline, mucilages. Essential oil (0.06 - 0.15%): pyrazines: e.g. methoxypyrazine, methylpyrazine; polyacetylenes	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Arctium minus (Hill) Bernh.	Compositae (Asteraceae)	Lappa minor Hill	whole plant, essential oil			Laxative at high doses. Polyenes, polyines, polyphenolic compounds. Lignanes: arctigenine, arctiine. Inuline, mucilages. Essential oil (0.06 - 0.15%): pyrazines: e.g. methoxypyrazine, methylpyrazine; polyacetylenes	OK	3
Arctium tomentosum Mill.	Compositae		whole plant			Sulphur containing polyacetylenes: e.g. arctinon, arctinol,; lignans: e.g. arctiin; Germacranolide sesquiterpenelacton: arctiopicrin (strong bitter taste)	OK	1
Argania spinosa (L.) Skeels	Sapotaceae		fruit, kernel oil			Steroidal and triterpene saponins. Saponins: water extract in mice (oral route:100-200mg/kg): blood sugar decreasing after 3 months.	OK	2
Armoracia rusticana P. Gaertn., B. Mey. et Scherb.	Brassicaceae		root, essential oil	root	Glucosinolates (0.2-0.6%): sinigrine, gluconasturtiine, glucobrassicanapine, glucobrassicine	Ascorbic acid. Flavonoids. Possible stomacal irritation . Not to be used when stomach ulcer .	OK but the amount of glucosinolates must be determined	3
Artemisia abrotanum L.	Compositae (Asteraceae)	Artemisia procera Willd.	aerial part	aerial part	Essential oil: bicyclic monoterpenes: e.g. alpha-thujone; monoterpene etheroxide: 1,8 cineole; phenylpropanoids: e.g. methyleugenol. Essential oil from leaf (1.4%): bicyclic monoterpenes: e.g. thujones (up to 70%); monoterpene etheroxide: 1,8 cineole (up to 60%).		OK but when EO is used the amount of thujones, methyleugenol and 1,8 cineole must be determined	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Artemisia absinthium L.	Compositae		aerial part	aerial part	Essential oil of (Z)-epoxy-ocimene chemotype: bicyclic monoterpenes: e.g. alpha-thujone (up to 0.30%), beta-thujone (up to 7.78%), camphor (0.19-9.30%). Essential oil of sabinyl acetate chemotype: alpha-thujone (0.12-0.2%), beta-thujone (0.58-0.71%), camphor (up to 0.31%). Essential oil of chrysantenyl acetate chemotype: alpha-thujone (1.32%), beta-thujone (18.72%), camphor (0.18%). Essential oil of beta-thujone chemotype: alpha-thujone (0.53-2.76%), beta-thujone (17.5-59.9%), camphor (0.10-0.16%). Essential oil of beta-thujone/epoxy ocimene mixed		OK but when the essential oil is used the amount of thujones and camphor must be determined	1
Artemisia capillaris Thunb.	Compositae		aerial part			Essential oil (0.8%): capillene (40.1%), a-pinene (2.4%) and p-cymene (2.5%) , γ-terpinene (24.6%) and eugenol (15.0%)	OK	1
Artemisia dracunculus L.	Compositae (Asteraceae)		aerial part		Essential oil (0.25-0.3.1%): phenylpropanoids: e.g. methylchavicol (50-80%)	Essential oil (0.25-0.3.1%): methylchavicol (50-80%) , trans-beta-ocimene (5-22%), cis-beta-ocimene (5-14%), anethole (10%), terpinene…Leaf: polyphenolic compounds : flavonoid glycosides: quercetine, patuletine. Hydroxycoumarines: herniarine. Isocoumarines: artemidine. Polyines: capillarine. Essential oil hepatotoxic. Presence of chemotypes.	OK but when the EO is used the amount of methylchavicol must be determined	3
Artemisia frigida Willd.	Compositae		aerial part	aerial part	Essential oil: bicyclic monoterpenes: e.g. beta-thujone (5%).		OK but the amount of thujones must be determined	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Artemisia genipi Weber ex Stechm.	Compositae (Asteraceae)		aerial part	aerial part	Essential oil: monoterpene etheroxide: 1,8-cineole; bicyclic monoterpenes: e.g. alpha (26%)- and beta (6.8%)-thujones.		OK but amount of thujones and 1,8 cineole must be determined	2
Artemisia glacialis L.	Compositae		aerial part		Essential oil : e.g. camphor, 1,8-cineole		OK but when the essential oil is used the amount of camphor and 1,8 cineole must be determined	1
Artemisia judaica L.	Compositae		aerial part		essential oil: piperitone (32.4%), camphor (20.6%) and (E)-Et cinnnamate (8.2%).		OK but when the essential oil is used tha amountof camphor must be determined	1
Artemisia pontica L.	Compositae		aerial part		Essential oil: 1.8-cineole (14.1%) and camphor (13.9%) are the main components. Sesquiterpenes lactones : artemin, 5-epi-artemin and 8a-hydroxytaurin, 5-hydroxyeudesmanolides		OK but when the essential oil is used the amount of 1,8 cineole and camphor must be determined	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Artemisia umbelliformis Lam.	Compositae		aerial part	aerial part	Essential oil: bicyclic monoterpenes: e.g. alpha-thujone (57.7%), beta-thujone (8.6%)		OK but when the essential oil is used the amount of thujones must be determined	1
Artemisia vallesiaca All.	Compositae		aerial part	aerial part	Essential oil: bicyclic monoterpene: e.g. camphor (33.3%); monoterpene etheroxide: 1,8-cineole (17%), phenylpropanoids: e.g. methylchavicol.		OK but when the essential oil is used the amount of camphor, 1,8 cineole and methylchavicol must be determined	1
Artemisia verlotiorum Lamotte	Compositae		aerial part	aerial part	Essential oil: a-thujone (46.7-57.2%), terpinen-4-ol (1.2-15.2%)and 1,8-cineole (5.1-9.8%) as major constituents. The minor constituents of the oil were borneol (0.2-6.9%) and camphor. Sesquiterpene lactones (1.2-2.1%).		OK but when the essential oil is used the amount of thujones, 1,8 cineole and camphor must be determined	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Artemisia vulgaris L.	Compositae		aerial part	aerial part	Essential oil: bicyclic monoterpenes: e.g. alpha-thujone (56.3%), beta-thujone (7.5%), camphor (20%); monoterpene etheroxide: 1,8-cineole (26.8%).		OK but when using the essential oil the amount of 1,8 cineole, camphor and thujones must be determined	3
Artocarpus altilis (Parkinson ex F.A.Zorn) Fosberg	Moraceae		fruit, seed, wood	leaf, seed, wood	Leaf and wood: prenylated flavonoids: e.g. artocarpin. Seed: lectin: jacalin	Breadfruit. Artocarpin decrease 5-alpha-reductase activity. The lectin is destroyed by heating. Leaf extract (IV) induces haemolysis.	OK	1
Ascophyllum nodosum (L.) Le Jolis	Fucaceae		thallus			Known to contain high levels of iodine (on average 482 µg/g dry weight)	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Asimina triloba (L.) Dunal	Annonaceae		fruit	bark, leaf, seed	Acetogenins: e.g. asimin, asiminacin, asiminecin	Annonacins induce atypical Parkinsonism. They are lipophilic inhibitors of complex I of the mitochondrial respiratory chain. These acetogenins are not very well watersoluble	OK	1
Aspalathus linearis (Burm. f.) R. Dahlgren	Leguminosae (Fabaceae)		aerial part			Volatile fraction: guaiacol, heptanone, heptadienone). Polyphenolic compounds: flavonoids, chalcones (aspalathine, nothofagine, orientine).	OK	3
Asparagus cochinchinensis (Lour.) Merr.	Asparagaceae		root			Spirostanic steroidal saponins: e.g. asparacoside. High doses may induce gastrointestinal disturbances	OK	2
Asparagus officinalis L.	Asparagaceae		root			Saponins: furostanol and spirostanol glycosides: asparagosides (sarsapogenin derivatives)	OK	3
Asparagus racemosus Willd.	Asparagaceae		whole plant	root	Isoflavone: 8-methoxy-5,6,4'-trihydroxyisoflavone 7-O-beta-D-glucopyranoside Isoflavone: 8-methoxy-5,6,4'-trihydroxyisoflavone 7-O-beta-D-glucopyranoside Isoflavone: 8-methoxy-5,6,4'-trihydroxyisoflavone 7-O-beta-D-glucopyranoside Isoflavone: 8-methoxy-5,6,4'-trihydroxyisoflavone 7-O-beta-D-glucopyranoside	Contains also: Polycyclic alkaloid : asparagamine A; Steroidal saponins: e.g. shatavarin I–IV (the glycosides of sarsasapogenin). Phytoestrogenic properties: roots are considered a uterine tonic and galactogogue.	OK	1
Asplenium adiantum-nigrum L.	Aspleniaceae		leaf, root			Fern. Triterpenoids: hopene; hydroxycinnamic acid derivatives; xanthones. Asplenium species said to provoque sterility in women	OK but absence of ptaquiloside. Warning not to take during pregnancy	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Asplenium ruta-muraria L.	Aspleniaceae		aerial part			Caffeic acid glycoside, 2-O-caffeoyl-β-D-fructofuranosyl-(2 → 1)-a-D-glucopyranoside and an (a,β)-isomeric pair of 2E-caffeoyl-D-glucopyranoside, together with kaempferol-3-O-β-D-[6-E-caffeoyl-β-D-glucopyranosyl-(1 → 2)glucopyranoside]-7-O-β-D-glucopyranoside, 1-O-caffeoyl glycoside, sucrose, diploptene and β-sitosterol. Some ferns contain carcinogens.	OK. Proof of absence of fern carcinogens	
Asplenium scolopendrium var. americanum (Fernald) Kartesz & Gandhi	Aspleniaceae	Phyllitis scolopendrium (L.) Newman				Terpenoids; kaempferol glycosides. Fern. Some ferns contain carcinogens.	OK. Proof of absence of fern carcinogens	
Asplenium trichomanes L.	Aspleniaceae		leaf, root			Fern. Flavonoids, sterols, triterpenoids (0.01%): hopene (100%). Emmenagogue and abortive effect described in traditional info.	OK but absence of ptaquiloside. Warning not to take during pregnancy	1
Astracantha adscendens (Boiss. & Hausskn.) Podlech	Leguminosae	Astragalus adscend	gum			Polysaccharides (gum tragacanth). Plant may accumulate toxic levels of Selenium. May produce toxic nitropropanolglycosides: e.g. miserotoxin ? May produce the alkaloid swainsonine? Gum for food use must be specially treated.	OK	1
Astracantha cretica (Lam.) Podlech	Leguminosae	Astragalus creticus	gum			Polysaccharides (gum tragacanth). Plant may accumulate toxic levels of Selenium. May produce toxic nitropropanolglycosides: e.g. miserotoxin ? May produce the alkaloid swainsonine? Gum for food use must be specially treated.	OK	1
Astracantha gummifera (Labill.) Podlech	Leguminosae	Astragalus gummife	gum from aerial part			Polysaccharides (gum tragacanth). May accumulate toxic levels of Selenium.	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Astracantha microcephala (Willd.) Podlech	Leguminosae	Astragalus microce	gum from aerial part			Polysaccharides (gum tragacanth). May accumulate toxic levels of Selenium.	OK	1
Astragalus membranaceus Moench	Leguminosae		root		Isoflavones: calycosine, formononetin	Triterpeneglycosides: e.g. astragalosidesMay concentrate selenium	OK but the amount of isoflavones must be determined	3
Astragalus verus Olivier	Leguminosae		root			Triterpene glycosides; saponins	OK but warning not to use when under anticoagulant treatment	1
Astrantia major L.	Apiaceae		aerial part			Triterpene saponins (0.1%-0.2%): e.g. hederagenin derivatives; Hydrocycinnamic acid derivatives: e.g. rosmarinic acid; Different chemotypes exist influencing the composition of the essential oil: sesquiterpenes: e.g. beta sinensal, beta sinensol	OK	1
Athamanta macedonica (L.) Spreng.	Apiaceae		fruit and leaf	fruit and leaf	Essential oil: sabinene (50.47%).	Sabinene is toxic and an abortifacient	OK but the amount of sabinene must be determined.	

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Atractylodes lancea (Thunb.) DC.	Compositae (Asteraceae)		rhizome, root			Root: sesquiterpenes: atractylenolide derivatives: e.g. atractylenolide III , atractylenolide II ; Polyacetylenes: e.g. 9-nor atractylodin, atractylodiol; Steroid glycoside : e.g. Daucosterol. Decoction of rhizomes increases prothrombine time in humans.	OK but warning when under anticoagulant treatment	2
Atractylodes macrocephala Koidz.	Compositae (Asteraceae)		rhizome			Aerial part: coumarin derivatives: e.g. 7-hydroxycoumarine and 6,8-dimethoxy-7 hydroxycoumarine. Rhizome: sesquiterpenes: atractylenolides more than 16 derivatives. Decoction of rhizomes increases prothrombine time in humans.	OK but warning when under anticoagulant treatment	2
Avena fatua L.	Poaceae		aerial part			Root: triterpenesaponins: avenacines	OK	1
Avena sativa L.	Poaceae		aerial part			Steroid saponins: e.g. avenacosides; flavonoids	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Averrhoa carambola L.	Oxalidaceae		aerial part	seed, leaf	Fruit: oxalic acid (1%);	Seed regarded as narcotic, anodyne, emetic and emmenagogue. Fruit is strong inhibitorof CYP3A4, CYP1A2, CYP2A6, CYP2C8, CYP2C9, CYP2D6, and CYP2E1. Therefore it is contraindicated in the case of medication intake like statins, benzodiazepins. Aqueous extract of the leaves strongly depresses the heart rate and the myocardial contractile force.	OK for fruit but the amount of oxalic acid must be determined. Warning: may not be taken when under medication.	1
Bacopa monnieri (L.) Wettst.	Plantaginaceae	Bacopa monnieri (L.) Pennell	whole plant			Saponins	OK	3
Bactris gasipaes Kunth	Arecaceae		fruit (mesocarp)			Carotenoids; proteins (1.8%-2.7%); lipids (3%-8%)	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Balanites aegyptiaca (L.) Delile	Zygophyllaceae		whole plant			Steroid saponins: e.g. diosgenin, yamogenin, balanitins	OK	1
Ballota nigra L.	Lamiaceae		aerial part			Phenylpropanoid glycosides: verbascoside, forsythoside B, arenarioside, and ballotetroside; diterpene: furan labdanic derivative 13- hydroxyballonigrolide. Botanical confusion possible with Teucrium chamaedrys and T. spp	OK	2
Ballota nigra subsp. foetida (Vis.) Hayek	Lamiaceae		whole plant			Labdane type diterpenes: e.g. ballotenol, ballotinone, preleosibirin; phenylpropanoids: e.g. forsythoside, verbascoside; Mild sedative due to the phenylpropanoids.	OK	1
Bambusa bambos (L.) Voss	Poaceae (Gramineae)	Bambusa arundinacea (Retz.) Willd.	shoot, stem	leaf, root, shoot	Root: cyanogenic glycosides and derivatives: e.g. taxiphyllin; Leaf: betaine	Fresh juice of the leaves: weak inducer of ecbolic activity (rapid labor) probably due to betaine ??; shoot: reduces male fertility	OK. Warning not to take during pregnancy	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Bambusa vulgaris Schrad.	Poaceae		shoot	leaf, shoot	Cyanogenic glycosides and derivatives: e.g. taxiphyllin (immature shoot tips: 8000 mg HCN/kg)		OK	1
Barbarea verna (Mill.) Asch.	Brassicaceae		aerial part	aerial part	Glucosinolates: e.g. gluconasturtiin	Known to accumulate lead and cadmium. Kidney problems mentioned.	OK but the amount of glucosinolates must be determined	1
Barbarea vulgaris R.Br.	Brassicaceae		aerial part	aerial part	Glucosinolates: according the chemotype: e.g. glucobarbarin (BAR-type) or by gluconasturtiin (NAS-type)	Known to accumulate lead and cadmium. Kidney problems mentioned.	OK but the amount of glucosinolates must be determined	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Bellis perennis L.	Compositae (Asteraceae)		aerial part			Oleanane triterpene saponins: perennisosides and deacylsaponins: besysaponin. Flavonoids: bayogenin, apigenin, kaempferol...	OK	3
Berberis aquifolium Pursh.	Berberidaceae	Mahonia aquifolium	root	root	Isoquinoline alkaloids: e.g. berberine, palmatine, jatrorrhizine, and bisbenzyltetrahydro-isoquinoline alkaloids: e.g. berbamine, oxyacanthine, isotetrandrine.		OK but the amount of alkaloids must be determined	1
Berberis aristata DC.	Berberidaceae		root	root	Isoquinoline alkaloids: e.g. berberine, palmatine, jatrorrhizine, and bisbenzyltetrahydro-isoquinoline alkaloids: e.g. berbamine, oxyacanthine, isotetrandrine.		OK but the amount of alkaloids must be determined	1
Berberis vulgaris L.	Berberidaceae		root	root	Isoquinoline alkaloids: e.g. berberine (0.5 - 6%), palmatine, jatrorrhizine, and bisbenzyltetrahydro-isoquinoline alkaloids: e.g. berbamine, oxyacanthine, isotetrandrine.		OK but the amount of alkaloids must be determined	1
Bergenia crassifolia (L.) Fritsch	Saxifragaceae		leaf	leaf	Hydroquinon: arbutin (11%-13%)		OK but the amount of arbutin must be determined	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Bertholletia excelsa Bonpl.	Lecythidaceae		nut	nut	Selenium	Brazil nut.High selenium content: 100 g nuts provide about 1917 µg of selenium. High consumption may lead to selenium toxicity.	OK but the amount of selenium must be determined.	1
Beta vulgaris L.	Amaranthaceae		whole plant	whole plant	Whole plant: betaine (0.2 5% -4.85%)	N,N,N trimethylglycine (betaine). Betaïne induces rapid labor (?)	OK. Warning not to take during pregnancy	2
Betula alleghaniensis Britton	Betulaceae		bark, leaf			Lupane triterpene derivatives e.g.betulinic acid… Cytotoxicity of betulinic acid in vitro and in vivoLupane triterpene derivatives e.g.betulinic acid… Cytotoxicity of betulinic acid in vitro and in vivo	OK	2
Betula lenta L.	Betulaceae		bark, leaf, sap	bark, leaf	Salicylate glycosides (1.5%-11%): e.g. salicin, salicortin, populin, fragilin, tremulacin.	Tannins (10%-20%)	OK but the amount of the salicylates must be determined	1
Betula pendula Roth	Betulaceae		bud, bark, leaf, juice, tar			Bark: methylsalicylates: e.g. monotropitine; proanthocyanidines and triterpenes: e.g. betulin. Leaf: flavonoids (3%); triterpenesaponins: e.g. betulafolientrenol (dammarane type saponins); essential oil (0.05%-0.1%): sesquiterpeneoxides. Buds: essential oil (4%-6%): sesquiterpenes: e.g. beta betulenol. Tear: phenols: e.g. cresol, pyrogallol. Juice: sugar (1%), acids, kalium (0.03%)	OK but the amount of the salicylates must be determined	3
Betula pubescens Ehrh.	Betulaceae		bud, bark, leaf, juice, tar			Probably same constituents	OK but the amount of the salicylates must be determined	3
Bixa orellana L.	Bixaceae		leaf, fruit, seed		Essential oil of the seed (0.25-0.85%): e.g. ishwarane (9%)	Seed: carotenoids: bixine, norbixine, methylbixine; diapocarotenoids, apocarotenoids. Colouring agent for food	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Blainvillea acmella (L.) Philipson	Compositae	Spilanthes acmella (L.) Murray; Acmella oleracea (L.) R. K. Jansen	aerial part	flower, leaf	N-alkylamides: e.g. spilanthol (1%)	Spilanthol: larvicidal and antimalarial effect. In some parts in Brazil the herb is eaten in case of anaemia.	OK but the amount of spilanthol must be determined	1
Borago officinalis L.	Boraginaceae		flower, seed	leaf, stem	Unsaturated pyrrolizidine alkaloids: e.g. lycopsamine, 7-acetyl-lycopsamine, amabiline, supinine.	Flower, seed and seed oil do not contain the pyrrolizidine alkaloids	OK but absence of pyrrolizidine alkaloids	3
Boronia megastigma Nees ex Bartlett	Rutaceae		aerial part			Flower essential oil (0.4%-0.8%): ionone and dodecylacetate as main compounds and typical for the flavour	OK	1
Boswellia sacra Flueck.	Burseraceae		bark	bark	Essential oil from the gum resin: phenylpropanoids: e.g. methylchavicol.	Pentacyclic triterpenes: e.g. boswellic acids, lupeolic acids	OK but when the essential oil is used the amount of methylchavicol must be determined	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Boswellia serrata Roxb. ex Colebr.	Burseraceae		oleoresin	oleoresin	Essential oil from the gum resin: phenylpropanoids (up to 11%): e.g. methylchavicol.	Pentacyclic triterpene acids: e.g.boswelic acids	OK but when the essential oil is used the amount of methylchavicol must be determined	3
Brassica cretica Lam.	Brassicaceae		aerial part	aerial part	Seed: high erucic acid (>45-50%). Aerial part: glucosinolates		OK but the amount of erucic acid and glucosinolates must be determined	1
Brassica napus L.	Brassicaceae	Brassica napus var. napobrassica (L.) Rchb.	root, seed	whole plant	Seed fixed oil: unsaturated fatty acids: e.g erucic acid (45%); whole plant: sulfur compounds: e.g. glucosinolates and derivatives	Absence of erucic acid in the cultivated varieties. High doses of glucosinolates may induce thyroidal hypertrophy	OK but amount of erucic acid and glucosinolates must be determined	2
Brassica napus subsp. napus	Brassicaceae		root, seed	whole plant	Sulfur compounds: glucosinolates and derivatives	High doses of glucosinolates may induce thyroidal hypertrophy	OK but amount of glucosinolates must be determined	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Brassica nigra (L.) K.Koch	Brassicaceae		aerial part		Glucosinolates (especially in the seed): e.g. sinigroside (= allylglucosinolate) (1-2%), allylisothiocyanate and derivatives: e.g. gluconapine, gluconasturtiine, gluco-isoberberine.		OK but the amount of glucosinolates must be determined	3
Brassica oleracea L.	Brassicaceae		aerial part	aerial part	Sulfur compounds: glucosinolates and derivatives	Edible (broccoli). Side effect: high doses of glucosinolates may induce thyroidal hypertrophy.	OK but amount of glucosinolates must be determined	2
Brassica rapa L.	Brassicaceae	Sinapis juncea L.	whole plant		Seed: glucosinolates: sinigrine (1-4%), gluconapine, glucobrassicanapine. Volatile compounds: isothiocyantes releasing with myrosinase.	Lipids: cultivars without erucic acid.	OK but the amount of glucosinolates must be determined	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Brassica rapa subsp. rapa	Brassicaceae		whole plant, sprout	whole plant	Sulfur compounds: glucosinolates and derivatives	High doses of glucosinolates may induce thyroidal hypertrophy	OK but amount of glucosinolates must be determined	2
Bupleurum chinense DC.	Apiaceae		root	root	Saikosaponins A and D = fuco-glycosides derived from saikogenins F and G (ethers of tri-hydroxylated-oleanane derivatives)	May increase blood sugar content: not to be used by diabetics. May increase bleeding time: not to be used when under treatment with anticoagulants. Corticoid type induction properties by IP in rats.	OK but warning when under anticoagulant treatment and/or taking antidiabetic medicines.	2
Bupleurum rotundifolium L.	Apiaceae					Oleanane type triterpene saponins: e.g. rotundiosides C, E, F	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Bursera tomentosa (Jacq.) Triana & Planch.	Burseraceae		fruit, bark	fruit, bark	Flavolignans: e.g. deoxypodophyllotoxins		OK	1
Caesalpinia bonduc (L.) Roxb.	Leguminosae		bark, seed			Cassane diterpenoids: e.g. caesaldekarin a; cassane furanoditerpenes: e.g. bonducellpins; triterpenoids: e.g. alpha-amyrin, beta-amyrin.	OK	1
Cakile maritima Scop.	Brassicaceae		leaf, root	seed	Leaf: glucosinolates: glucotropaeolin, 2-methyl butyl glucosinolate, ethyl glucosinolate and 4-pentyl glucosinolate. Seed oil: erucic acid	Saponins (4%); tannins (12%); indole alkaloids (2%) (undefined)	OK but the glucosinolates must be determined.	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Calendula arvensis (Vaill.) L.	Compositae		flower			Essential oil : sesquiterpenes with cadinene and cadinol as major components. Pizza C et al. Plant metabolites. Triterpenoid saponins from Calendula arvensis.] Nat Prod 1987; 50: 927-931. When taken in high doses, calendula can be toxic to the liver.	OK but warning in case of liver problems	1
Calendula officinalis L.	Compositae		aerial part			Hydro-alcoholic extract (1g/kg during 30 days in the rat): increase of urea and transaminases. Hydro-alcoholic extract did not affect male fertility nor had toxic effects in early and middle periods of pregnancy. However, the extract caused maternal toxicity when administered during the fetal period of pregnancy.	OK but not during pregnancy	3
Calluna vulgaris (L.) Hull	Ericaceae		aerial part		Glycosilated hydroquinones	arbutine, methylarbutine and hydroquinone in low quantity.In some studies on arbutin even not detectable. Polyphenolic compounds: proanthocyanidols, flavonoids. Hydroquinone: mutagenic and cancerogenic and toxic at high dosis (1g) with nausea, vomiting effect.	OK but the amount of arbutine and methylarbutine must be determined	3
Camelina sativa (L.) Crantz	Brassicaceae		seed	seed	Glucosinolates: glucosinolates: glucoarabin (9-(methylsulfinyl)nonyl-glucosinolate), glucocamelinin (10-(methylsulfinyl)decyl-glucosinolate), and 11-(methylsulfinyl)undecyl-glucosinolate	Seed oil: rich in alpha linolenic acid	OK but the amount of glucosinolates must be defined	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Camellia sinensis (L.) Kuntze	Theaceae		leaf	leaf	Methylated xanthine derivatives: caffeine (2-4%), theophylline (traces) and catechins: e.g. epigallocatechingallate (5-12%)	Reported cases of hepatotoxicity (green tea)	OK but the amount of catechines must be determined	3
Cananga odorata (Lam.) Hook.f. & Thomson	Annonaceae		flower; essential oil			Essential oil (known as Ylang-Ylang): e.g. (E,E)-farnesene, benzyl acetate, linalool, delta-cadinene, p-methylanisole, beta-caryophyllene, methyl benzoate, benzyl benzoate, geranyl acetate. Essential oil for external use. Can be used as flavouring agent in beverages. The fresh flower sometimes used as tea.	OK	1
Canarium acutifolium (DC.) Merr.	Burseraceae		flower, nut; oleoresin			Nut: soaked in water for several weeks to remove bitterness and toxicity but edible. Burseraceae: presence of macrocyclic diterpenes, steroids (pregnan derivatives),bicyclic triterpenes, diarylfuran lignans.	OK for nut	1
Cannabis sativa L.	Cannabaceae		seed	Flowering tops, resin	canabinoids (terpenophenolics): e.g. tetrahydrocannabinol (THC)		OK but absence of canabinoids	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Capparis spinosa L.	Capparaceae		aerial part		Glucosinolates : e.g. glucocapparin (methyl glucosinolate), methyl isothiocyanate; stachydrine (a pyridine alkaloid), and cadabicine (a 24-membered polyamine lactam alkaloid).		OK but the amount of glucosinolates must be determined	1
Capsella bursa-pastoris (L.) Medik.	Brassicaceae		aerial part		Oxalates;	Phenylethylamines: e.g. tyramine; oxalates	OK but not to take when under MAOI	3
Carex arenaria L.	Cyperaceae		leaf, rhizoma			Leaf: polyphenolic compounds: flavonoids eg. orientin, luteolin. Rhizome: saponins	OK	3
Carica papaya L.	Caricaceae		aerial part	leaf, seed	Leaf: piperidine alkaloid: carpaine (0.015%-0.4%). Seed: MCP 1, ECP 1 (code names). Glucosinolates in root, stem, leaf, seed: e.g. benzylgucosinolate.	Carpaine decreases the CNS and induces brachycardia. Seed induces reversible male infertility. Leaves contain saponins. Milky juice from the fruit contains proteases: e.g. papain	OK for fruit	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Carissa carandas L .	Apocynaceae		fruit (berry), leaf	root	Root: cardiac glycosides, alkaloids	Fruit: used as indian spices "karonda" with vitamine C. Presence of carissol and carissic acid. Leaf: triterpene derivatives	OK	1
Carlina acaulis L.	Compositae (Asteraceae)		root, essential oil	root	Essential oil (1 - 2%): polyacetylene: carlina oxide (80 -97%).	Tannins. Inuline	OK but when the EO is used the amount of carlina oxide must be determined	3
Carlina acaulis subsp. caulescens (Lam.) Schübl. & G.Martens	Compositae		root, essential oil	root	Essential oil (1%): polyacetylene: carlina oxide (80%-90%).	Carlina oxid is toxic and essential oil should not be used. Because the amount of carlina oxid is very low, the use of the root poses no problem.	OK but when EO is used the amount of carlina oxide must be determined	1
Carpinus betulus L.	Betulaceae		bud, leaf			Triterpenoids; leaf: pheophorbide (product of chlorophyll breakdown) with cytotoxic properties	OK	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Carthamus lanatus L.	Compositae		whole plant			Main components: alpha-bisabolol beta-D-fucopyranoside and luteolin 7-O-glucoside	OK	1
Carthamus tinctorius L.	Compositae		flower, seed			Quinochalcones: e.g. carthamine, safflor yellow A,B, safflomin C; flavonoids. Some concern on anti-implantation effect at high doses of the colorants. Others found no effect.	OK	3
Carum carvi L.	Apiaceae (Umbelliferae)		fruit, essential oil			Essential oil: monoterpene ketone: e.g. (S)-(+)-carvone (50-65%)	OK	3
Cassia fistula L.	Leguminosae (Fabaceae)		fruit	fruit, leaf, pod	Hydroxyanthracene glycosides and derivatives (1,8-dihydroxyanthraquinones)) : e.g. rhein, sennosides, sennidins, chrysophanol,	In mesocarp of fruits: 1% anthranoids. Leaf (0.09%- 0.63%). Cassia fistula pulpa is used in paedriatics; no toxicity by normal use	OK but the amount of anthraquinones must be determined	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Cassia italica (Mill.) Lam. ex F.W. Andrews	Leguminosae		whole plant	leaf, root	Anthraquinones: e.g. sennosides, aloe-emodin, emodin, chrysophanol, 1,5-dihydroxy-3-methyl anthraquinone	Used as substitute for senna	OK but the amount of anthraquinones must be determined	1
Castanea sativa Mill.	Fagaceae		bark, leaf, seed,			Bark: hamamelitannins, ellagitannins: e.g. vescalagin, castalagin, proanthocyanidines. Leaf: ellagitannins (6%-8%): e.g. tellimagrandines, potentillins, castalagin, vescalagin; flavonoids; ascorbic acid,	OK	3
Catalpa bignonioides Walter	Bignoniaceae		leaf			Iridoid glycosides e.g. catalposide and aglycones e.g. catalpol. Saponins. Steroids derivatives	OK	1
Ceanothus americanus L.	Rhamnaceae		leaf	root bark	Peptide alkaloids: e.g. ceanothines	Polyphenolic glycosides e.g. flavonols, flavanones, dihydroflavonols. Triterpene derivatives e.g. lupeol , betulinaldehyde , betulinic acid , 2-O-E-p-coumaroyl alphitolic acid , alphitolic acid , zizyberanalic acid , zizyberenalic acid and ceanothic acid . Named New Jersey tea.	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Cecropia peltata L.	Urticaceae		whole plant			Polyphenolic derivatives e.G. isoorientin, chlorogenic acid. Hypoglycemic mechanism of action of Cecropia could be by reducing hepatic glucose output, due to the inhibition of glucose 6 phosphatase by chlorogenic acid, which can simultaneously target gluconeogenesis and glycogenolysis. Also isoorientin seems to increase the effect of chlorogenic acid.	OK but warning when under antidiabetic treatment	1
Cedrus libani A. Rich.	Pinaceae		cone, leaf, wood; essential oil			Wood essential oil: e.g. himachalol (22.50%), beta-himachalene (21.90	OK	1
Ceiba pentandra (L.) Gaertn.	Malvaceae		bark, leaf, seed oil, wood			Leaf: plyphenolic derivatives e.g tannins. Bark: isoflavones e.g pentandrin and pentandrin glucoside. Wood: naphtoquinones. Oil: fatty acids and vitamines C and E.	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Centaurea behen L.	Compositae		whole plant			Sesquiterpenelactones (guaianolides): e.g. cynaropicrine	OK	1
Centaurea calcitrapa L.	Compositae		aerial part			Sesquiterpenes: e.g. cnicin (= centaurin)	OK	1
Centaurea centaurium L.	Compositae (Asteraceae)		flowering top.			Root: terpenoids: e.g. cypirene, a-zingiberene, β-farnesene, β-santalene, β-bisabolene, β-himachalene and azulene; lignans. Possible presence of neurotoxic diterpene derivatives as known for some species in the genus e.g.:neurotoxicity of C. solstitialis L. and C. repens L ??	OK	2
Centaurea cyanus L.	Compositae (Asteraceae)		inflorescence			Polyphenolic compouds: anthocyanins. Polyines, polysaccharides	OK	3
Centaurea jacea L.	Compositae		leaf			Flavone glycosides: e.g. centaurein, jacein, jaceoside, cnicin, glucose diesters,essential oil,	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Centaurea montana L.	Compositae		whole plant	seed	Dimeric indole alkaloid: montamine	Sesquiterpenelactones: guaianolides,	OK but the amount of montamine should be determined	1
Centaurium erythraea Rafn	Gentianaceae	Erythraea centaurium (L.) Pers.	aerial part			Secoiridoids glycosides eg. swertiamarine, gentiopicroside,centauroside. Polyphenolic compounds : flavonoids. Polymethoxylated xanthones: eustomine . Classical bitter taste	OK	3
Centella asiatica (L.) Urb.	Apiaceae (Umbelliferae)	Hydrocotyle asiatica L.	aerial part			Pentacyclic triterpene saponins eg. asiatic acid glycosides, asiaticosides, madecassoside. Polyphenolic compounds: favonoids. Essentail oil: traces.	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Centranthus ruber(L.) DC	Caprifoliaceae		root			Valepotriates: e.g. homoacevaltrate, desisovaleryl acetyl valtrate. Cytotoxicity of valepotriates.	OK	1
Cerasus mahaleb (L.) Mill.	Rosaceae		seed	air-dried flowers, leaves, stem-bark and wood	Bark essential oil: coumarin (main component 34.1%)		OK but the amount of coumarin should be determined	1
Cerasus vulgaris Mill.	Rosaceae	Prunus cerasus L.	seed, gum, pulp	seed	Cyanogenic glycosides	Pulp: anthocyanidins. Seed: oil with fatty acids : oleic acid, tocopherols.	OK	3
Ceratonia siliqua L.	Leguminosae (Fabaceae)		fruit, seed			Polymer of D-galacto-D-mannane (90-95%). Lipids (0.4-0.8%). Proteins (2.7-3%) . Cyclitols: pinitol	OK	3
Cercis siliquastrum L.	Leguminoseae		fruit, seed gum			Polymers of polysaccaharides, cyclitols e.g. pinitol, proteins (2.7-3%), tannins.	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Ceterach officinarum DC.	Aspleniaceae		whole plant			May be toxic and abortive. Ferns may contain ptaquiloside, a proven carcinogen. However, no information on the presence of the carcinogen found.	OK but absence of fern carcinogens (e.g. ptaquiloside)	1
Cetraria islandica (L.)	Parmeliaceae		lichen	lichen	Dibenzofurane derivatives: e.g. usnic acid	Usnic acid (pure) under scrutiny for possible heptatoxicity. C. islandica reported to concentrate heavy metalsUsnic acid (pure) under scrutiny for possible heptatoxicity. C. islandica reported to concentrate heavy metalsUsnic acid (pure) under scrutiny for possible heptatoxicity. C. islandica reported to concentrate heavy metalsUsnic acid (pure) under scrutiny for possible heptatoxicity. C. islandica reported to concentrate heavy metals	OK but the amount of usnic acid must be determined	3
Chaenomeles speciosa Nakai	Rosaceae		fruit	Seed	Seed : cyanogenic glycosides (300ppm HCN)		OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Chamaemelum nobile (L.) All.	Compositae (Asteraceae)	Anthemis nobilis L.	aerial part, essential oil			Essential oil (0.6 -2.4%): acid esters: angelic, methacrylic, tiglic. Pinocarveol, pinocarvone, chamazulene, bisabolol. Sesquiterpenic lactones: germacranolide, guaianolide, nobiline. Polyacetylenic derivatives, flavonoid glycosides.	OK	3
Chamaecrista nomame (Sieber) H.Ohashi		Cassia nomame (Sieber) Honda	aerial part	leaf, pod, stem	Anthraquinones: e.g. emodin		OK but the amount of anthraquinones must be determined	1
Chelone glabra L.	Plantaginaceae		aerial part			Iridoid glycosides and aglycones e.g. catalpol, aucubin. Bitter taste. No toxicity	OK	1
Chenopodium quinoa Willd.	Amaranthaceae		seed	seed		Quinoa = food	OK	1
Chenopodium vulvaria L.	Amaranthaceae		whole plant		Possible presence of ascari	No info on this species. Other species: C. ambrosioides essential oil (till 45%) : peroxidated monoterpene: ascaridole. Ascaridol is a neurotoxin	OK but absence of ascaridol	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Chimaphila umbellata (L.) Nutt.	Ericaceae	Chimaphila cymosa J.Presl & C.Presl	whole plant		Hydroquinone glycosides: e.g. isohomoarbutin. Naphtoquinones: e.g. chimaphilin	Tannins (4-5%). Not suitable for long-term use due to its hydroquinone glycoside content.	OK but the amount of quinones must be determined.	3
Chiococca alba (L.) Hitchc.	Rubiaceae		root			Iridoids and seco-iridoids e.g. albosides. Diterpenoids e.g. merilactone, ribenone. Saponins: chiococcasaponins. Two quinoline alkaloids. Purgative effect.	OK	1
Chionanthus virginicus L .	Oleaceae		root bark			Secoiridoids and lignans e.g. phillyrin derivatives, pinoresinol.	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Chlorella vulgaris Beijerinck	Chlorellaceae	Chlorella pyrenoidosa H. Chick, Chlorella communis Artari	single cell alga				OK	2
Chondrus crispus Stackhouse	Gigartinaceae		thallus			Official limits in iodine, heavy metals and microbiological standards	OK	2
Chrysanthellum americanum (L.) Vatke	Compositae		Flowering tops			Triterpenic saponins: e.g chrysanthellins	OK	1
Chrysanthellum indicum subsp. afroamericanum B.L. Turner	Asteraceae		aerial part			Polyphenolic compounds (flavonoids), saponins = chrysanthellines A and B (echinocystic acid and caulophyllogenine derivatives). No toxicity described	OK	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Chrysophyllum cainito L.	Sapotaceae		bark, fruit, leaf			Fruit edible: anthocyanins. No chemical and tox info on bark, leaf.	OK for fruit	1
Chrysopogon zizanioides (L.) Roberty	Poaceae		root; essential oil			Sesquiterpenes e.g.vetinones, khusimol. Flavoring agent (vetiver).	OK	1
Cibotium barometz (L.) J. Sm.	Dicksoniaceae		leaf, rhizome, root			Unusual sesquiterpenes with indanone nucleus. 24-methylenecycloartanol, (24R)-stigmast-4-ene-3-one , β-sitosterol, (3R)-des-O-methyl- lasiodiplodin, protocatechuic aldehyde, onitin, alternariol, daucosterol, cibotibaromeside, onitin-2'-O-β-D-glucopyranoside, n-butyl-β-D-fructopyranoside. Some ferns may contain carcinogens.	OK but absence of fern carcinogens (e.g. ptaquiloside)	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Cichorium endivia L.	Compositae		leaf, root, seed			Flavonoids; sesquiterpenelactones: e.g. eudesmanolides, guaianolides (lactucin-like)	OK	1
Cichorium intybus L.	Compositae		whole plant			Leaf and root: sesquiterpenelactones: e.g. lactucin, lactucopicrin (both in very small amounts), guajanolidglucosides: e.g. cichoriosides, eudesmanolid derivatieves: e.g. sonchuside C; flavonoids. Root: inuline	OK	3
Cinchona calisaya Wedd.	Rubiaceae	Cinchona ledgeriana (Howard) Bern.Moens ex Trimen	whole plant	bark from the branches	Total content alkaloids 4%-8% with over 50% quinoline alkaloids: e.g. quinidine, quinine		OK but the amount of the quinoline alkaloids must be determined	2
Cinchona lancifolia Mutis	Rubiaceae		bark		Quinoline alkaloids: e.g. quinine, quinidine, cinchonine, cinchonidine.		OK but the quinoline alkaloids must be determined.	1
Cinchona micrantha Ruiz & Pav.	Rubiaceae		bark		Quinoline alkaloids: e.g. quinine, quinidine, cinchonine, cinchonidine.	High doses of quinine are toxic.	OK but the amount of the quinoline alkaloids must be determined	1
Cinchona nitida Ruiz & Pav.	Rubiaceae		bark		Quinoline alkaloids: e.g. quinine, quinidine, cinchonine, cinchonidine.	High doses of quinine are toxic.	OK but the amount of the quinoline alkaloids must be determined	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Cinchona officinalis L.	Rubiaceae		bark, leaf	bark, leaf	Bark and leaf: monomeric indole alkaloids: e.g. chinamin, aricin; indole alkaloids; leaf: quasi-dimere indolalkaloids (cinchophyllamine type); china alkaloids: e.g. cinchonidin, cinchonin	Alkaloids (5%-15%): quinine content: 5%-7.5%. Tannins (3%-5%). Cinchona bark preparations are embryotoxic. Long term or hgh dose intake : double vision, headache, stomach and duodenum ulcers.	OK but the amount of the quinoline alkaloids must be determined	3
Cinchona pitayensis (Wedd.) Wedd.	Rubiaceae		bark		Quinoline alkaloids: e.g. quinine, quinidine, cinchonine, cinchonidine.	High doses of quinine are toxic.	OK but the amount of the quinoline alkaloids must be determined	1
Cinnamomum camphora (L.) J.Presl	Lauraceae		whole plant; essential oil		Essential oil: monoterpene etheroxide: 1,8 cineole (min.70%), bicyclic monoterpene: camphor, phenylpropanoid: safrole	EO: during hydrodistillation camphor is eliminated. Camphor content can go up to 70%.	OK but when using the essential oil the amount of 1,8 cineole, camphor and safrole must be determined	3
Cinnamomum cassia (Nees & T.Nees) J.Presl	Lauraceae		aerial part	aerial part	Essential oil from the bark (20ml/kg): coumarin (1.5-4.0 g/kg) Essential oil from the leaf and young stem: coumarin (1.5-4%).		OK but the amount of coumarin must be determined	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Cinnamomum verum J.Presl.	Lauraceae	Cinnamomum zeylanicum Blume, C. zeylanicum Nees	bark, leaf, essential oil	aerial part	Essential oil from the bark (0.6-1.3%): monoterpene etheroxide: 1,8-cineole (< 3%), bicyclic monoterpenes: e.g. camphor (traces); phenylpropanoids: e.g. cinnamaldehyde (32%) and safrole (<0.5%), methyleugenol (traces); coumarin (<0.5%), Essential oil from the leaf: 1,8-cineole (<1%), safrole (< 3%), coumarin (<1%), methyleugenol (0.01%)		OK but when using EO the amount of safrole, 1,8 cineole and methyleugenol must be determined.	2
Cistanche salsa (C.A. Mey.) G. Beck	Orobanchaceae		stem			Iridoid glycosides: e.g. boschnacosides. Phenylethanoid glycosides: e.g. acteoside, acetylacteoside. Sterols: daucosterol, sitosterol...	OK	3
Cistus creticus L.	Cistaceae	Cistus ladaniferus S	Fruit, leaf; resin (labda	essential oil, resin		Resin: labdane-type diterpenes and sequiterpenes. Leaf: polyphenolic compounds e.g.kaempferol and quercetin glycosides; coumarins: e.g. esculin.	OK but warning when under anti hypertensive treatment	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Cistus × incanus L.	Cistaceae		whole plant	aerial part	Labdane diterpene: e.g. sclareol	Polyphenolic compounds: catechins, gallic acid, rutin,.	OK but the amount of diterpenes must be determined	3
Cistus monspeliensis L.	Cistaceae		resin			Essential oil: monoterpenes e.g. pinenes, sesquiterpenes	OK but warning when under anti hypertensive treatment	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Citrullus lanatus (Thunb.) Matsum. & Nakai	Cucurbitaceae		fruit, seed			Seed: alkaloid had the highest concentration of about 1.23% whereas cyanogenic glycoside had the lowest of about 0.00237%.	OK	1
Citrus aurantiifolia (Christm.) Swingle	Rutaceae		fruit; essential oil	fruit peel (pericarp)	Furocoumarins: e.g. 5-geranyloxypsoralen, 5-geranyloxy-7-methoxycoumarin, 5,7-dimethoxycoumarin, 5-methoxypsoralen, 5,8-dimethoxypsoralen, 5,7-dimethoxycoumarin (15.79%), 3-methyl-1,2-cyclopentanedione (8.27%), 5,8-dimethoxypsoralen (6.08%)		OK but the amount of furocoumarins must be determined	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Citrus aurantium L.	Rutaceae	C. aurantium L. ssp. amara Engl., C. aurantium L. ssp. sinensis L., C. aurantium L. ssp. aurantium L, C. aurantium var. dulcis	flower, fruit, pericarp; essential oil	aerial part	Essential oil: furocoumarins: e.g. 5-methoxypsoralen (0.15-0.87%). Unripe whole fruit: hydroxyphenylethylamine: synephrine (2.28 mg/g) Pericarp: synephrine (3.27 mg/g).	Only para synephrine may be present. If meta-synephrine is present the compound has been added	OK but the amount of furocoumarins and synephrine must be determined. Absebce of meta-synephrine.	2
Citrus bergamia Risso & Poit.	Rutaceae	Citrus aurantium var. Bergamia		fruit peel (pericarp)	Furocoumarins: e.g. bergapten,		OK but the amount of furocoumarins must be determined	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Citrus limon (L.) Burm. f.	Rutaceae		aerial part	Fruit, leaf, peel and pulp	Peel: Phellopterin, 5- and 8-geranoxypsoralen. Essential oil from the peel: furocoumarins (psoralen, 5-methoxypsoralen (bergapten) 4-87 mg/kg, 8-methoxypsoralen (xanthotoxin), 5,8-dimethoxypsoralen (isopimpellin), imperatorin, oxypeucedanin 26-728 mg/kg.		OK but when using the essential oil the amount of furocoumarines must be determined	3
Citrus maxima (Burm.) Merr.	Rutaceae	Citrus grandis (L.) Osbeck; Citrus decumana L.	fruit, leaf seed			Leaf: polyphenolic compounds: hesperidin. Fruit essential oil (0.13%): e.g. limonene (72-80%), dodecylacrylate (7.2%-8%), nootkatone (1.6-2.5%).	OK	3
Citrus medica L.	Rutaceae		fruit, seed	aerial part	Furocoumarins: e.g. methoxypsoralen	Essential oil: limonene (60-80%) but high differences between the oils analyzed.	OK, but the amount of furocoumarins must be determined.	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Citrus myrtifolia Raf.	Rutaceae	Citrus aurantium var. myrtifolia Ker Gawl.	fruit, pericarp; essential oil	Fruit pericarp	Furocoumarins		OK, but the amount of furocoumarins must be determined.	2
Citrus nobilis Lour.	Rutaceae			fruit peel (pericarp)	Furocoumarins: e.g. bergapten,		OK but the amount of furocoumarins must be determined	1
Citrus paradisi Macfad.	Rutaceae		aerial part	Fruit, leaf, peel and pulp	Essential oil from the peel: furocoumarines: e.g. psoralen, 5-hydroxypsoralen (bergaptol), 5-methoxypsoralen (0.0005-0.013%), 5-geranylpsoralen (bergamottin)		OK but when using the essential oil the amount of furocoumarines must be determined	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Citrus reticulata Blanco	Rutaceae		aerial part	Bark and fruit	Essential oil: furocoumarins: e.g. 8-methoxypsoralen		OK but when using the essential oil the amount of furocoumarines must be determined	3
Citrus sinensis (L.) Osbeck	Rutaceae		flower, leaf; essential oil	Fruit pericarp	Furocoumarins	Some data states the furonocoumarins amount is lower than 0.005 mg/l.	OK, but the amount of furocoumarins must be determined.	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Cladonia rangiferina (L.) Weber ex F.H. Wigg.	Cladoniaceae		thallus	thallus	Dibenzofuran derivatives: e.g. usnic acid	Abietane diterpenoids: hanagokenols A with an ether linkage and B with gamma lactone; isopimarane diterpenoids. Usnic acid under scrutiny for hepatotoxicity	OK but the amount of usnic acid must be determined	1
Clematis chinensis Osbeck	Ranunculaceae		root	fresh herb	Sap: lactones: e.g. protoanemonins and ranunculin (precursor)	Protoanemonins and ranunculin (precursor) only in the fresh herb.	OK but absence of aristolochic acid	1
Clinopodium vulgare L.	Lamiaceae	Calamintha vulgaris (L.) Druce	aerial part; essential oil			Essential oil: phenols (thymol 38.9%), terpenes e.g. terpinene (29.6%), p-cymene (9.1%).	OK	2
Clitoria ternatea L.	Leguminosae		flower			Peptides: cliotides with antimicrobial effect. Acylated anthocyanins, to	OK but absence of aristolochic acid	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Cnicus benedictus L.	Compositae (Asteraceae)		aerial part, essential oil (small quantities)			Essential oil (0.03%): terpenes eg. fenchone, citral, cinnamic aldehyde. Sesquiterpenic lactones: cnicine, germacranolide, salonitenolide, artemisiifoline. Lignanes: trachelogenine, arctigenine. Polyphenolic compounds: flavonoids.	OK	3
Cochlearia officinalis L.	Brassicaceae		aerial part	leaf; essential oil	Essential oil: glucosinolates: glucocochlearine. Volatile compounds: butylisothiocyanates. Leaf: tropane alkaloids eg. cochlearine.	Ascorbic acid. Polyphenolic compounds: flavonoids.	OK but the amount of tropane alkaloids must be determined. When the EO is used the amount of glucosinolates must be determined.	3
Cocos nucifera L.	Arecaceae		seed, fatty oil			Oil: fatty acids lauric (40-50%), myristic (15-20%), caprylic (5-11%), stearic (1.5-5%), linoleic (1-3%)…No toxicity	OK	3
Codonopsis pilosula (Franch.) Nannf.	Campanulaceae		root			Saponin triterpenyl esters	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Coffea arabica L.	Rubiaceae		seed	seed (bean)	Methylated xanthine derivative: caffeine Green coffee bean: 0.8 - 1.4% caffeine on dry basis		OK but the amount of caffeine must be determined	3
Coffea canephora Pierre ex Froehner	Rubiaceae	Coffea robusta Lind. ex De Wild	seed	seed (bean)	Methylated xanthine derivative: caffeine Green coffee bean: 1.7-4.0% caffeine on dry basis	In general somewhat higher caffeine content (up to 50%) in Robusta coffee compared to Arabica. Methylxanthine content in plant is influenced by variety, geographical location of growth, climate and cultural practice. Robusta coffee is more tolerant than Arabica coffe, and is therefore cultivated in a wider range of conditions which may contribute to the higher caffeine content compared to Arabica coffee.	OK	2
Coix lacryma-jobi L.	Poaceae		seed				OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Coix lacryma-jobi var. ma-yuen (Rom.Caill.) Stapf	Poaceae (Gramineae)	Coix ma-yuen Rom. Caill.	seed, seed oil			Proteins (15%), lipids (5%), glucides (65%), fatty acids, sterols, coïxol (6-methoxybenzoxazolone), benzoxazinones. No toxicity described.	OK	2
Cola acuminata (P.Beauv.) Schott et Endl.	Malvaceae		seed	seed	Methylated xanthine derivatives: caffeine (2.4-2.6%), theobromine <0.1%.		OK but the amount of caffeine must be determined	3
Cola nitida (Vent.) Schott et Endl.	Malvaceae		seed	seed	Methylated xanthine derivatives: caffeine (1.5-3.5%) , theobromine 1%, theophylline.		OK but the amount of caffeine must be determined	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Combretum micranthum G.Don	combretaceae		leaf		Presence of flavan-piperidir	The alkaloids are used in diabetic treatment.	OK but the amount of the alkaloids must be determined. Warning when under antidiabetic treatment.	3
Combretum sundaicum Miq.	Combretaceae		leaf, stalk			pentacyclic triterpenoids. Plant used as opium antidote.	OK	1
Commiphora africana (A.Rich.) Endl.	Burseraceae		leaf, stem bark, resin			Seed: triterpene saponins: guggulsteroles; essential oil: e.g. alpha pinene, alpha thujene, para-cymene	OK	1
Commiphora habessinica (O.Berg) Engl.	Burseraceae		bark resin			Essential oil fraction: e.g. β-elemene (32.1 %), a-selinene (18.9 %), cadina-1,4-diene (7.5 %), germacrene B (3.6 %), a-copaene (3.5 %), t-muurolol (3.0 %) caryophyllene oxide (2.9 %) and a-cadinol (2.6%).	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Commiphora mukul Engl.	Burseraceae		oleo-gum-resin	Oleo-gum-resin from the trunk	Essential oil (0.4%) with phenylpropanoids: e.g. methylchavicol in unspecified quantities. □	Terpenoids: e.g. myrcene, dimyrcene, polymyrcene	OK but when the EO is used the amount of methylchavicol must be determined	3
Commiphora myrrha (Nees) Engl.	Burseraceae		oleo-gum-resin	Oleo-gum-resin from the trunk	Volatile fraction: furanosesquiterpenes: e.g. curzerenone, methoxy-furanodiene, furanoelemenes, furano-germacranes	Volatile fraction present only in the freshly collected oleogum resin Hepato-nephropathy described when doses above 2 gram ingested	OK but not during pregnancy.	3
Commiphora schimperi (O.Bergman) Engl.	Burseraceae		bark, leaf and stem bark resin			Essential oil (2%-10%): sesquiterpenes	OK but not during pregnancy.	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Conyza canadensis (L.) Cronquist	Compositae (Asteraceae)	Erigeron canadensis L.	whole plant			Aerial part: polyphenolic compounds: flavonoids eg. scutellarin, luteolin. Root: phenylpropanoyl esters; lanostane triterpenes: conyzagenins.	OK	3
Copaifera langsdorffii Desf.	Leguminosae		bark oleoresin	Seed	Presence of coumarin	Volatile fraction of the oleoresin: sesquiterpenes beta-caryophyllene and caryophyllene oxide. The main non-volatile components in the oleoresin: diterpene acids and derivatives: e.g. hardwiickic acid, kauranoic acid, ent-kaur-16-en-19-ol, ent-kaur-16-ene, ent-4-epi-agathic acid Me ester, ruilopeziol and ent-kaur-16-en-19-ol. In seeds: coumarin;	OK	1
Coptis japonica (Thunb.) Makino	Ranunculaceae		rhizome		Isoquinoline alkaloids: e.g. berberine, stylopine, coptisine		OK but the amount of the alkaloids must be determined	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Coptis teeta Wall.	Ranunculaceae		rhizome		Isoquinoline alkaloids: e.g. berberine, stylopine, coptisine		OK but the amount of the alkaloids must be determined	1
Coptis trifolia (L.) Salisb.	Ranunculaceae		rhizome		Isoquinoline alkaloids: e.g. berberine, stylopine, coptisine		OK but the amount of the alkaloids must be determined	1
Corallina officinalis L.	Corallinaceae		thallus			red seaweed with calciumcarbonate deposit. Polysaccharides: corallinans Used till the end of the eighteented century because of his vermifuge properties.	OK	1
Cordia myxa L.	Boraginaceae		fruit	fruit, leaf	May contain pyrrolizidine alkaloids		OK but absence of pyrrolizidine alkaloids	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Coriandrum sativum L.	Apiaceae		aerial part; essential oil	aerial part	Essential oil from the fruit: bicyclic monoterpene: camphor (3-9%)		OK but when using the essential oil the amount of camphor must be determined	3
Cormus domestica (L.) Spach	Rosaceae	Pyrus sorbus Gaertn.; Sorbus domestica L.	bud, fruit			flavonoids and hydroxycinnamoyl esters: aldose reductase inhibitors. Carotenoids, sugars, ascorbic acid, organic acids	OK but warning when under antidiabetic treatment	1
Cornus florida L.	Cornaceae		fruit, bark			Flower essential oil: 3-formylpyridine, beta ocimene, linalool, nonanal, ketoisophorone, decanal. Flower: anthocyans: e.g. cyanidin-3-glactoside. Bark extract was used formerly as antimalarial treatment (quinine substitute). Bark and wood: tannins (cornusiins)	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Cornus mas L.	Cornaceae		fruit			Flavonoids: e.g. aromadendrin , quercetin, kaempferol, anthocyans: delphinidin 3-galactoside, cyanidin 3-galactoside, cyanidin 3-rhamnosylgalactoside, pelargonidin 3-galactoside, and pelargonidin 3- rhamnosylgalactoside	OK	1
Cornus officinalis Siebold & Zucc.	Cornaceae		fruit			Gallic acids, ursolic and oleanolic acids. Antihepatotoxicity.	OK	2
Cornus sanguinea L.	Cornaceae		bud, fruit, leaf	fruit, leaf	Salicylates mentioned	Tannins, flavonoids and gallic acids, salycilic acid	OK but the amount of salicylates must be determined	1
Corrigiola telephiifolia Pourr.	Molluginaceae		root			Saponins , terpenes . Absence of alkaloids. Chemicals not identified.	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Corylus avellana L.	Betulaceae		leaf, fruit, seed			Leaf: polyphenolic compounds: proanthocyanidols, flavonoids eg. myricitrine. Tannins (2%). Seed: fatty acids: oleic (62-86%), linoleic (20-30%), palmitic (4-9%)…	OK	3
Corymbia citriodora (Hook.) K.D.Hill & L.A.S.Johnson	Myrtaceae	Eucalyptus citriodora Hook.	leaf, essential oil			Essential oil: mono terpene derivatives: para-menthane-3,8-diol, citronellal (83.50 %).	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Coscinium fenestratum (Goetgh.) Colebr.			root, stem	root, stem	Isoquinoline alkaloids: berberine, oxyberberine,canadine	Stem extract orally to rats in doses of 5, 10 and 20 mg/kg BW for 14 days: increased body weight and induced neurotixicity in the cerebral cortex, hippocampus and striatum.	OK but the amount of the alkaloids must be determined	1
Cotinus coggygria Scop.	Anacardiaceae		bark, flower, leaf			Polyphenolic constituents: flavanones e.g C-3/C-3'' dimer of butin (3',4',7-trihydroxyflavanone);profisetinidinse.g. fisetinidol;flavonols e.g.fisetin ;chalcone: butein and aurone sulfuretin. High content of tannins in leaf and bark.	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Crambe maritima L.	Brassicaceae		whole plant	whole plant	Seed: erucic acid. Young shoots: glucosinolates, of which more than 80% is represented by epi-progoitrin (5.4 and 7.3 µmol g−1 of fresh matter).		OK but the amount of glucosinolates and erucic acid must be determined	1
Crataegus azarolus L.	Rosaceae		aerial part			Oligomer procyanidins, flavonoids	OK	1
Crataegus curvisepala Lindm.	Rosaceae		aerial part			rutin, hyperoside and chlorogenic acid	OK	1
Crataegus laevigata (Poir.) DC.	Rosaceae	Crataegus oxyacar	leaf, flowering top, seed			Flavonoids (2.4%) : flavonol-O-glycosiden (rutine, hyperoside) and flavon-C glycosiden (vitexine and vitexine-2"-O-rhamnoside). Oligomere procyanides (OPC, 2.5%), 2 – 8 catechine and / or epicatechine-units).	OK	3
Crataegus monogyna Jacq.	Rosaceae		leaf, flowering top, seed			Flavonoids (0.5 – 1.5%) : flavonol-O-glycosiden (rutine, hyperoside) and flavon-C glycosiden (vitexine and vitexine-2"-O-rhamnoside). Oligomere procyanides (OPC, 2.4 – 3%, 2 – 8 catechine and / or epicatechine-units).	OK	3
Crataegus pentagyna Waldst. & Kit.	Rosaceae		aerial part			Flavonoids, sterol, triterpene glycosides	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Crithmum maritimum L.	Apiaceae		leaf	leaf	Essential oil: phenylpropanoids: e.g. methylchavicol (3,4%)		OK but when the EO is used the amount of methylchavicol must be determined	3
Crocus sativus L.	Iridaceae		flower			Cis- and trans-carotinoids: e.g. crocine. Essential oil (0.4%-1.3%): e.g. safranal; flavonoids. High doses of safranal may induce abortion.	OK but the amount of safranal must be determined. Warning when under antidepressant therapy. Not to be used during pregnancy.	3
Crossostephium chinense (A.Gray ex L.) Makino	Compositeae		aerial part			Sesquiterpenes: e.g.crossostephin. Coumarins: e.g.biscopoletin, artesin, tanacetin, scopoletin. Sterols: e.g. taraxeryl acetate, taraxerol	OK	1
Cruciata laevipes Opiz	Rubiaceae	Galium cruciata (L.) Scop.	aerial part	root	Anthraquinones: e.g. alizarin, lucidin, and naphtalene derivatives	Iridoid glucosides: e.g. asperuline	OK for aerial part	1
Cryptocarya agathophylla van der Werff	Lauraceae	Ravensara aromatica Sonn.; Agathophyllum aromaticum (Sonn.) Willd	**fruit**		(Essential oil from leaf and bark: e.g. methylchavicol, methyleugenol)		OK but when using the EO the amount of methylchavicol and methyleugenol must be determined	2
Cucumis melo L.	Cucurbitaceae		fruit, seed	stem	Oxygenated tetracyclic triterpenes: cucurbitacins B (1.4%) , E, D, isocucurbitacin B	In fruit and seed: phytosteroles; flavonoids	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Cucumis sativus L.Cucumis sativus L.	Cucurbitaceae		fruit	whole plant	Possible occurence of the oxygenated tetracyclic triterpenes: cucurbitacin C in leaf and fruit and of cucurbitacins C and B in root.	Cucumber	OK but the amount of cucurbitacins must be determined	1
Cucurbita maxima Duch.Cucurbita maxima Duch.	Cucurbitaceae		fruit	whole plant	Possible occurrence of oxygenated tetracyclic triterpenes: cucurbitacins B and C.		OK but the amount of cucurbitacins must be determined	1
Cuminum cyminum L.	Apiaceae		fruit	fruit	Essential oil from fruit: phenylpropanoids: e.g. methylchavicol (30ppm) and monoterpenes: monoterpene etheroxide: 1,8-cineole (0.2-0.4%).		OK but when the essential oil is used the amount of methylchavicol and 1,8 cineole must be determined	3
Cupressus sempervirens L.	Cupressaceae		bark, fruit, leaf, essential oil			Essential oil: e.g. alpha pinene, alpha terpineol, camphene	OK	3
Curcuma longa L.	Zingiberaceae	Curcuma domestica Val., Curcuma domestic Loir., Amomum curcuma Jacq	rhizome; essential oil	rhizome	Essential oil: monoterpene etheroxide: 1,8-cineole and bicyclic monoterpenes: e.g. camphor		OK but when the essential oil is used the amount of 1,8 cineole and camphor must be determined	3
Curcuma xanthorrhiza Roxb.Curcuma xanthorrhiza Roxb.	Zingiberaceae			rhizome	Essential oil (3-12%): monoterpenes: monoterpene etheroxide: 1,8-cineole (up to 40%), bicyclic monoterpenes: camphor (1%);		OK but when using the EO the amount of 1,8 cineole and camphor must be determined	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Curcuma zedoaria (Christm.) Roscoe	Zingiberaceae		rhizoma			Rhizoma: cucurminoids (3-6%): diaryl-hepatanoids. Dihydrocurcuminoids: diarylpentane derivatives. Peptides: turmerine. High doses: stomach hyperacidity, hepatic colic. Essential oil: sesquiterpene ketones (65%): turmerones, germacrone derivatives, zinziberene (25%), curcumene derivatives.	OK	3
Cuscuta chinensis Lam.	Convolvulaceae		seed			Polyphenolic compounds (flavonoids), furofuran lignans. No toxicity described. Ethanolic extract: acute toxicity in mice more than 20g/kg	OK	2
Cuscuta epithymum Murray	Convolvulaceae		aerial part			Parasytic plant. Contains saponins, tannins without further identification. In TCM the seeds are used. They are said to contain a resin and may have a laxative effect. No toxicity described.	OK	1
Cyamopsis tetragonoloba (L.) Taub.	Leguminosae (Fabaceae)		seed (endosperm) , gum			Polymers of D-galacto-D-mannane. No toxicity info. Some side effects: intestinal distensing	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Cyathula officinalis K.C. KuanCyathula officinalis K.C. Kuan	Amaranthaceae (Chenopodiaceae)		root	root	Coumarins: e.g. scoparone (6,7 dimethoxycoumarin)	The saponins (hederagenin- and gypsogmin -type saponins) are thought to stimulate uterus contraction and can lead to abortion, however scoparone is probably the causative agent.	OK but warning not to take during pregnancy.	2
Cyclanthera pedata (L.) Schrad.	Cucurbitaceae		fruit, leaf			Fruit: flavone glycosides eg. chrysin; triterpene saponins. Seed: trypsin inhibotors.	OK	3
Cydonia oblonga Mill.	Rosaceae	Cydonia vulgaris Pers.	fruit, seed		Seed: cyanogenic glycosides (300 ppm)	Seed is not eaten	Fruit OK, not seed	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Cymbopogon citratus (DC.) Stapf	Poaceae		aerial part	aerial part	Essential oil (0.2%-0.4%): bicyclic monoterpenes: alpha-thujone (up to 0.1%) and monoterpene etheroxide: 1,8-cineole (traces)		OK but when the essential oil is used the amount of thujones must be determined. Not to take during pregnancy.	3
Cymbopogon flexuosus (Nees ex Steud.) W.Watson	Poaceae	Cymbopogon flexuosus (Nees ex Steud.) Stapf	aerial part	aerial part	Essential oil : camphor (0.07), elemicin (3.75)	Essential oil : geraniol (20.08%), geranyl acetate (12.20%), -bisabolol (8.42%) and isointermedeol (24.97%) borneol (1.90%), camphor (0.07%), camphene (1.33%), geranial (0.45%), neral (0.43), caryophylleneoxide (0.36%), limonene (3.47%), elemicin (3.75%), piperitol (1.66%), carene-2 (1.02%), (2-E), farnesol (0.14%), (Z)-2-p-menthenol (0.06%).	OK but when EO is used the amount of camphor and elemicin must be determined	1
Cymbopogon jwarancusa subsp. olivieri (Boiss.) Soenarko	Poaceae	Cymbopogon laniger (Desf.) Duthie	leaf			Essential oil : e.g. piperitone (54%), a-phellandrene (38%)	OK	1
Cymbopogon martini (Roxb.) Will.Watson	Poaceae (Gramineae)		whole plant	whole plant	Essential oil: phenylpropanoids: e.g. methylchavicol (traces)		OK but when the EO is used the amount of methylchavicol must be determined	3
Cymbopogon nardus (L.) Rendle	Poaceae (Gramineae)		whole plant, essential oil	whole plant	Essential oil: phenylpropanoids: e.g. methyleugenol (51-204 ppm).		OK but when the EO is used the amount of methyleugenol must be determined	3
Cymbopogon schoenanthus (L.) Spreng.	Poaceae	Andropogon schoenanthus L.	leaf			Leaf: essential oil (0.2%-0.4%): citral (65%-86%), myrcene (12%-20%), ketones (0.2%-0.3%): e.g. methylheptenon	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Cymbopogon winterianus Jowitt ex Bor	Poaceae		whole plant, essential oil			Essential oil (0.2-0.5%): citrals (65-86%), geraniol (2-10%), linalol, nerol, citronellal. Essential oil: high doses can induce sleepiness, polyurie,diarrhoea.	OK	3
Cynara cardunculus L.	Compositae		head, leaf			Mono- and di-caffeoylquinic acids: e.g. chlorogenic acid, cynarin; sesquiterpenelactones (0%-4%): e.g. cynaropicrin	OK	3
Cynara cardunculus subsp. flavescens Wiklund	Compositae	Cynara scolymus L.	head, leaf			Mono- and di-caffeoylquinic acids: e.g. Chlorogenic acid, cynarin; sesquiterpenelactones (0%-4%): e.g. cynaropicrin. Cardoon	OK	3
Cyperus rotundus L.	Cyperaceae		rhizome	rhizome	Sesquiterpene pyridine alkaloids: rotundines A-C (0.21%-0.24%); cardiac glycosides: bufadienolide glycosides (0.62%-0,74%)		OK but the amount of the pyridine alkaloids and bufadienolides must be determined.	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Cytinus hypocistis (L.) L.	Cytinaceae		flower, sap			Yellow coloured ellagitannins: isoterchebin. Parasitic plant	OK	1
Daemonorops draco (Willd.) Blume	Arecaceae	Daemonorops propinqua Becc.; Calamus draco Willd.	fruit, resin			Red resin from the fruit: 5-hydroxy-7-methoxyflavan. No toxicity described. Sometimes the resin is sold as being a mild hallucinogenic but scientific references are lacking	OK	2
Dahlia pinnata Cav.	Compositae	Dahlia variabilis (Willd.) Desf.	flower, root			Traditionally root is cooked. Contains inuline.	OK	1
Daucus carota L.	Apiaceae		root, seed	seed	Seed essential oil (2.63%): e.g. phenylpropanoids: e.g. methyleugenol (1.7%), beta asarone (17%)	Root rich source of carotenoids.	OK but when the essential oil is uded the amount of methyleugenol and beta asarone must be determined	3
Dendranthema grandiflorum (Ramat.) Kitam.	Compositae		flower			Flowers and petals are eaten. They contain alpha carotene derivatives which explains their traditional use	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Descurainia sophia (L.) Webb ex Prantl	Brassicaceae		leaf, seed	leaf, seed	Glucosinolates: e.g. sinigrin		OK but the amount of glucosinolates must be determined	1
Dianthus caryophyllus L.	Caryophyllaceae		flower	aerial part	Triterpene saponins	Flowers: malylated anthocyans. Toxic to dogs. No further data.	OK	1
Dimocarpus longan Lour.	Sapindaceae	Euphoria longan (Lour.) Steud.	arilla, flower, fruit			Flower; polyphenolic compouds; flavonoids. Fruit and seed: longanolactone, ochratoxine, polysaccharides.	OK	3
Dioscorea alata L.	Dioscoreaceae		tuber	tuber	Tuber: pyrridinal alkaloids (0.9mg/100g): dioscorine, dihydrodioscorine; amylase/proteinase inhibitor	The alkaloids are water soluble and can be removed by proper processing. The proteinase inhibitor is quite heat stable. Purple yam	OK but absence of alkaloids	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Dioscorea composita Hemsl.	Dioscoreaceae		tuber	tuber	Steroidal saponins: e.g. diosgenin,	Formerly used as abortifacient, no further data	OK	1
Dioscorea oppositifolia L.	Dioscoreaceae	Dioscorea opposita Thunb.	root, rhizoma	root, rhizoma	Steroidal saponins: e.g. diosgenin,	polysaccharides. Saponins e.g. diosgenin (if presence in final product is not higher than 3.5%, then there is no estrogen or progesterone activity). Edible. No toxicity described. D. oppositifolia only occurs in India and the name is often misapplied to the American Dioscorea polystachia Turcz. , a different species.	OK	2
Dioscorea polystachya Turcz.	Dioscoreaceae	Dioscorea batatas Decne	Rhizome	Rhizome	Steroidal saponins: e.g. diosgenin,		OK	1
Dioscorea villosa L.	Dioscoreaceae		tuber	tuber	Steroid saponins (1%-2%): e.g: disogenin, dioscin, dioscorin; possible presence of pyrridinal alkaloids: e.g. dioscorine	Diosgenin said to have a possible estrogenic effect.	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Diospyros kaki Thunb.	Ebenaceae		fruit, leaf, seed			Leaf: polyphenolic compouds: voimifoliol, proanthocyanidins, glycosyl flavones, tannins. Fruit: polysacharides	OK	3
Diospyros virginiana L.	Ebenaceae		bark, fruit, wood			Naphtalene derivatives e.g. 4-hydroxy-5,6-dimethoxynaphthalene-2-carbaldehyde. Diverse compounds:12,13-didehydro-20,29-dihydrobetulin ,7-methyljuglone , diospyrin,, isodiospyrin,shinanolone, lupeol . Unripe fruit rich in tannins	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Diplotaxis tenuifolia (L.) DC	Brassicaceae		aerial part	aerial part	Glucosinolates: e.g. progoitrin, epiprogoitrin and dimeric glucosativin.	Polyphenolic constituents.	OK but the amount of glucosinolates must be determined	1
Dipsacus fullonum L.	Caprifoliaceae		root			The genus Dipsacus contains mainly triterpenes and iridoids. Some species contain alkaloids.	OK	1
Dipsacus inermis Wall.	Caprifoliaceae	Dipsacus asper Wa	root			The genus Dipsacus contains mainly triterpenes and iridoids. Some species contain alkaloids.	OK	1
Dipsacus japonicus Miq.	Caprifoliaceae		root			The genus Dipsacus contains mainly triterpenes and iridoids. Some species contain alkaloids.	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Dorstenia contrajerva L.	Moraceae		root	aerial part	Furocoumarins	Root is emetic.	OK but the amount of furocoumarins must be determined	1
Dracocephalum moldavica L.	Lamiaceae		leaf, seed			Terpenoids, flavonoids, hydroxybenzoic and hydroxycinnamic	OK	1
Drimys winteri J.R.Forst. & G.Forst.	Winteraceae		bark	leaf	Leaf essential oil: phenylpropane: safrole. Bark: sesquiterpenes: e.g. drimenol drimenin; sesquiterpenelacton: confertifoline (3.8%)	Toxicity not studied. Used as spice and aromaticum in liquors	OK but when the essential oil is used the amount of safrole must be determined	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Drosera anglica Huds.	Droseraceae		whole plant	whole plant	1,4 naphtoquinones (0.25%) : eg. ramentaceon, plumbagin		OK but the amount of the naphtoquinones must be determined	1
Drosera intermedia Hayne	Droseraceae		whole plant	whole plant	1,4 naphtoquinones : eg. ramentaceon, plumbagin		OK but the amount of the naphtoquinones must be determined	1
Drosera peltata Thunb.	Droseraceae		aerial part	aerial part	Naphthoquinone derivatives: e.g. isoshinanolone-glucoside, plumbagone, droserone.		OK but the amount of the naphtoquinones must be determined	2
Drosera ramentacea Burch ex DC	Droseraceae		whole plant	whole plant	1,4 naphtoquinones (0.14 - 0.22%) : eg. ramentaceon, plumbagin		OK but the amount of the naphtoquinones must be determined	1
Drosera rotundifolia L.	Droseraceae		aerial part	aerial part	1,4 naphtoquinone derivatives: e.g. plumbagin		OK but the amount of the naphtoquinones must be determined	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Dunaliella salina (Dunal) Teodoresco	Dunaliellaceae	Haematococcus salinus Dunal	unicellular alga			Carotenoids eg. beta-carotene…Phytosterols eg. ergosterol. No toxicity data (green alga)	OK	3
Durio zibethinus L.	Malvaceae		fruit	fruit	Sulfur compounds	Inhibition of aldehyde dehydrogenase. Adverse effects of cardiac episodes and deaths are reported when alcohol is combined with Durio extracts.	OK but warning not to use together with alcohol	1
Durvillea antartica (Chamisso) Hariot	Durvillaeaceae	Fucus antarticus Ch	thallus			Food	OK	1
Dysphania botrys (L.) Mosyakin & Clemants	Amaranthaceae	Chenopodium bot	flowering top		Essential oil: oxygenated sesquiterpenoids (90%): e.g. α- and β-chenopodiol (36%), eudesma-3, ll-dien-6α-ol (9.4%), botrydiol (9.0%), elemol (6.5%), elemol acetate (5.5%), γ-eudesmol (5.4%) and α- and β-eudesmol (3.7%), guaia-3, 9-dien-ll-ol (7.4%)	Essential oil said not to contain ascaridol. However the plant is used as an anthelminticum	OK but free of ascaridol.	1
Echinacea angustifolia DC.	Echinacea		root			Alkamides; caffeic acid derivatives	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Echinacea pallida (Nutt.) Nutt.	Compositae (Asteraceae)		whole plant			Polyacetylenes, polyenes e.g. echinacoside. Bauer ketones.	OK	2
Echinacea purpurea (L.) Moench	Compositae (Asteraceae)		whole plant			Cafeic acid derivatives, alkamides, polysaccharides		
Echium plantagineum L.	Boraginaceae		seed oil	aerial part	Pyrrolizidine alkaloids (0.3%-0.9 %): e.g. echiumine, echimidine, lycopsamine, intermidine	Purified oil from seeds: EU acceptation as food 2008/558/EC	OK for oil	1
Elaeis guineensis Jacq.	Arecaceae		leaf, kernel oil			(kernel = palm oil).	OK	1
Elettaria cardamomum (L.) Maton.	Zingiberaceae		seed; essential oil	seed	Essential oil : phenylpropanoids: e.g. methyleugenol (0.1%) and monoterpene etheroxide: 1,8-cineole (up to 51.3%)		OK but when using EO, the amount of methyleugenol and 1,8 cineole must be determined	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Eleutherococcus senticosus (Rupr. et Maxim.) Maxim	Araliaceae	Acanthopanax senticosus (Rupr. et Maxim.) Harms.	root			Phenylpropane derivatives: e.g. eleutheroside B; coumarins: e.g. eleutheroside B1; sterols: e.g. eleutheroside A; polysaccharides and glycans: e.g. eleutherans, …	OK	3
Elymus repens (L.) Gould	Poaceae	Agropyron repens (L.) P. Beauv.	rhizoma			Small quantities: polyphenolic compounds: flavonoids, saponins, tanins saccharides. Possible adulteration with chemotypes containing alkaloids (neurological troubles)	OK	3
Epilobium angustifolium L.	Onagraceae		aerial part			Macrocyclic ellagitannins: oenothein A and oenothein B, considered responsible for the activity-decrease of aromatase and 5-alpha-reductase present in prostate cells. Other compounds like flavonoids and sterols may contribute to the effect.	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Epilobium parviflorum Schreb.	Onagraceae		aerial part			Macrocyclic ellagitannins: oenothein A and oenothein B, considered responsible for the activity-decrease of aromatase and 5-alpha-reductase present in prostate cells. Other compounds like flavonoids and sterols may contribute to the effect.	OK	3
Equisetum arvense L.	Equisetaceae		aerial part			Anorganic compounds: e.g. silicon (10%); Flavonoids (0.2%-0.9%): e.g. caempherol, quercetin; Alkaloid traces: nicotin, methoxypyrridin;	OK	3
Equisetum fluviatile L.	Equisetaceae		aerial part	aerial part	Thiaminase. Alkaloids: nicotine, palustrine.	Thiaminase splits thiamine and makes the B vitamine inactive. Horses are very sensitive, ruminants less.	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Equisetum hyemale L.	Equisetaceae		aerial part	aerial part	Thiaminase. Alkaloids: nicotine, palustrine (low content).	Thiaminase splits thiamine and makes the B vitamine inactive. Horses are very sensitive, ruminants less.	OK	1
Equisetum telmateia Ehrh.	Equisetaceae		aerial part	aerial part	Thiaminase. Alkaloids: nicotine, palustrine (low content).	Thiaminase splits thiamine and makes the B vitamine inactive. Horses are very sensitive, ruminants less.	OK	1
Erica cinerea L.	Ericaceae		inflorescence			Absence of arbutin and hydroquinone. Presence of polyphenolic compounds: proanthocyanidols, flavonoids.	OK	3
Erica tetralix L.	Ericaceae		flower			Triterpenoids with ursolic acid as the main compound.	OK	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Eriobotrya japonica (Thunb.) Lin	Rosaceae		leaf, seed		Cyanogenic glycoside: amygdalin (0.06%)		OK	3
Eriodictyon californicum (Hook. et Arn.) Torr.	Boraginaceae		aerial part			Polyphenolic compouds: flavanones eg. eriodictyol, homoeriodictyol, sterubine. Bisprenylated benzoic acid derivatives: erionic acids.	OK	3
Erodium cicutarium L 'Hérit.	Geraniaceae		whole plant			Polyphenolic acids and depsides e.g. brevifolin carboxylic acid, brevifolin, ellagic acid, methyl gallate, gallic acid and protocatechuic acid .	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Eruca vesicaria L. Cav.	Brassicaceae	Eruca sativa Mill.	aerial part	aerial part	Glucosinolates and degradation products e.g. isothiocyanates. Sulforaphane. Seed:glucoerucin.		OK but the amount of glucosinolates must be determined	1
Eryngium campestre L.	Apiaceae		aerial part	aerial part	Essential oil from fresh herb (0.09%): furocoumarins: e.g. bergapten (0.014% in fruit). Polyines from falcarinontype: e.g. falcarinon, falcarinolon		OK but when the essential oil is used the amount of furocoumarins must be determined	3
Eschscholtzia californica Cham.	Papaveraceae		aerial part	aerial part	Isoquinoline alkaloids (0.29 to 0.38% of dry herb) with as main alkaloid californidine (0.19% - 0.23%)		OK but the amount of the alkaloids must be determined	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Eucalyptus dives Schauer	Myrtaceae		leaf, twig	leaf, twig	Essential oil: 1,8 cineole (7%)	Two notable chemotypes: piperitone and cineole. Cineole content highly variable.	OK but when using EO the amount of 1,8 cineole must be determined.	2
Eucalyptus globulus Labill.	Myrtaceae		bark, fruit, leaf, essential oil	leaf and branch tip	Leaf essential oil: monoterpene etheroxide: 1,8 cineole (62.4-82.2%).	1,8-cineole: lethal doses as low as 0.05 ml have been reported in humans. (Bruneton, 1996). Leaf essential oil from subspecies maldenii F.Muell: monoterpene etheroxide: 1,8 cineole 68.9-80.2%.	OK but when EO is used the amount of 1,8 cineole must be determined	3
Eucalyptus odorata Behr	Myrtaceae		leaf, leaf (essential oil)	leaf (essential oil)	Leaf essential oil : 1,8 cineole	Essential oil often falsified with cheap extracts resulting in high camphor or beta phellandrene compounds. About 6 chemotypes of the oil exist.	OK but the amount of 1,8 cineole must be determined	1
Eucalyptus radiata Sieber ex DC.	Myrtaceae		leaf	leaf	Chemotype cineole essential oil: 1,8 cineole (74%)	7 different chemotypes	OK but when using EO the amount of 1,8 cineole must be determined.	2
Eucalyptus smithii R.T.Baker	Myrtaceae		bark, fruit, leaf, essential oil	leaf, branch tip	Leaf essential oil (1.2% - 2.2%): monoterpene etheroxide: 1,8-cineole (70%-77%)		OK but when EO is used the amount of 1,8 cineole must be determined	3
Eucheuma horridum J. Agardh	Solieriaceae		algae			Source of carrageenan. Used as food	OK	1
Eucheuma spinosum J. Agardh.	Solieriaceae		algae			Source of carrageenan. Used as food	OK	1
Eucommia ulmoides Oliv.	Eucommiaceae		bark			Polyphenolic constituents: tannins eg. Epicatechin, catechin. Chlorogenic acid. Iridoids: asperuloside, scandoside, aucubin. No toxicity.	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Eugenia uniflora L.	Myrtaceae		bark, flower, fruit, leaf			Leaf essential oil: sesquiterpens eg. atractylone (26.8%), curzerene (17.9%), furanoeudesmene. Seed: lectin.	OK	3
Euphrasia rostkoviana Hayne	Orobanchaceae	Euphrasia officinalis L.	aerial part			Iridoid glycosides e.g. aucubin, catalpol ,erastoside etc; gallotannins,	OK	2
Euphrasia stricta D. Wolff ex J.F. Lehm.	Orobanchaceae		aerial part				OK	1
Euterpe oleracea Mart.	Arecaceae		fruit, seed			Fatty acids: oleic (56.2%), palmitic (24.1%), linoleic (12.5%). Sterols : beta-sitosterol (78-91%). Polyphenolic constituents: flavones, methoxyflavones, proanthocyanidines 12.89mg/kg), fiber.	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Evernia prunastri (L.) Ach.	Parmeliaceae		lichen	lichen	Essential oil : bicyclic monoterpenes: e.g. alpha and beta thujones (about 10%), camphor		OK but when using EO the amount of thujones and camphor must be determined	2
Exostema caribaeum (Jacq.) Schult.	Rubiaceae		bark			Methoxylated and hydroxy-4-phenylcoumarins.	OK but warning when under antidiabetic treatment	1
Fabiana imbricata Ruiz & Pav	Solanaceae		whole plant			Essential oil (0.7%). Polyphenolic glycosides and aglycones e.g. p-hydroxyacetophenone, scopoletin and quercetin .Presence of sesquiterpenes.	OK	1
Fagopyrum esculentum Moench	Polygonaceae	Polygonum fagopyrum L.	aerial part			Polyphenolic compounds: flavonoids e.g. rutine, hyperoside, quercitroside. Naphtodianthrones: e.g. fagopyrine (traces).	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Fagus sylvatica L.	Fagaceae		bark, fruit, wood	bark, fruit	Bark: tannins (3%-4%); fruit: oxalic acid (2.9%)	Wood dust possibly mutagenic activity.	OK	1
Fallopia japonica (Houtt.) Ronse Dec.	Polygonaceae	Polygonum cuspidatum Siebold & Zucc.	whole plant	rhizome	Rhizome:anthraquinones: e.g. emodine	High doses of anthraquinones may have a purgative effect	OK, but the amount of anthraquinones must be determined	2
Fallopia multiflora (Thunb.) K. Haraldson	Polygonaceae	Polygonum multiflorum Thunb.	root, stem, seed	root	Anthracene derivatives: eg: emodin, physcion, torachrysone. Hydroxychromones. Stilbene glycosides.		OK but the amount of anthraquinones and stilbenes must be determined. Warning not to use during pregnancy.	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Ferula assa-foetida L.	Apiaceae (Umbelliferae)		root, gum resin			Oleo gum resin: sesquiterpene coumarins: e.g. asacoumarin A, B. One case of methaemoglobinaemia described in an infant. Essential oil (5%-20%): e.g. di- and polysulfides. Asa foetida extracts may decrease male fertility in mice.	OK	3
Ficus benghalensis L.	Moraceae		bark, fruit, latex		Lectin (Ficus benghalensis agglutinin FBA)	Sterols, flavanoids, tiglic acid glycosides, saponins and tannins. Bark extract shows hypoglycemic effect in normoglycemic rats (possibly induced by dimethoxy ether of leucopelargonidin-3-O-'ALFA'-L-rhamnoside, present in the bark). Latex contains a proteolytic enzyme, ficin, which is highly irritating and toxic by oral intake.	OK for bark and fruit. Warning when under antidiabetic treatment.	1
Ficus carica L.	Moraceae		whole plant	whole plant	Furanocoumarins from latex: e.g. psoralen and bergapten		OK but the amount of furocoumarins must be determined	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Ficus elastica Roxb. ex Hornem.	Moraceae		latex, root	leaf	Essential oil: e.g. 1,8 cineole (8.2%)	essential oil : The main compds. identified in the leaf oil of Ficus elastica Roxb. ex Hornem. (Moraceae) were 6,10,14-trimethyl-2-pentadecanone (25.9%), geranyl acetone (9.9%), heneicosene (8.4%) and 1,8-cineole (8.2%).	more info needed on root	1
Ficus religiosa L.	Moraceae		bark, fruit, leaf	whole plant	Furocoumarines: e.g. bergapten, bergaptol	Bark extract shows hypoglycemic effect in normoglycemic rats (possibly induced by dimethoxy ether of leucopelargonidin-3-O-'ALFA'-L-rhamnoside, present in the bark). Resin contains a proteolytic enzyme, ficin, which is highly irritating and toxic by oral intake.	OK but the amount of furocoumarines must be determined. Warning when under antidiabetic treatment.	1
Filipendula ulmaria (L.) Maxim		Spirea ulmaria L.	aerial part	aerial part	Flower: essential oil (0.2%) : salicylates : e.g. salicylaldehyde (75%), methyl salicylate (1.3%). Leaf: salicylates: ethylsalicylate, methylsalicylate		OK but the amount of salicylates must be determined	3
Filipendula vulgaris Moench.	Rosaceae		whole plant	whole plant	Essential oil (0.2%): salicylates: e.g. salicine, gaultherin, spiraeine	Differs from F. ulmaria in higher amount of tannins	OK but the amount of salicylates must be defined. Warning when under taking anticoagulants.	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Foeniculum vulgare Mill.	Apiaceae		aerial part	aerial part	Essential oil from the aerial part: phenylpropanoids, e.g. trans-anethole, methylchavicol (2.3-4.9%). Essential oil from the unripe seed: methylchavicol (11.9-56.1%). Essential oil from ripe seed: methylchavicol (61.8%).		OK but when the essential oil is used the amount of mehtylchavicol must be determined	3
Forsythia suspensa (Thunb.) Vahl	Oleaceae		fruit, leaf, root			Lignans, phenol glycosides, phenylethanoid glycoside, ursolic and caffeic acid; lignans with (weak) anti PAF effect	OK	2
Fragaria × ananassa (Weston) Duchesne	Rosaceae		whole plant			Leaf and root: ellagitannins, cathechins	OK	1
Fragaria vesca L.	Rosaceae		fruit, leaf	leaf	Leaf: salicylates (traces)	Leaf and root: ellagitannins, cathechins (12%); chlorogenic acid, rutin and hyperoside	OK	2
Fragaria viridis Weston	Rosaceae		whole plant	leaf	Leaf: salicylates (traces)	Chlorogenic acid, rutin and Hyperoside	OK	2
Frangula dodonei Ard.	Rhamnaceae	Frangula alnus Mill. ; Rhamnus frangula L.	bark		Hydroxyanthracene derivatives (4%-6%): e.g. glucofrangulins		OK but the amount of anthraquinones must be determined	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Frangula purshiana Cooper	Rhamnaceae	Rhamnus purshiana DC.	bark		Hydroxyanthracene derivatives (4%-6%): e.g. anthraquinone-O-glucosides: e.g. aloeemodin, chrysophanol, emodin,; 10-C-glucosylanthrones: e.g. aloins		OK but the amount of anthraquinones must be determined	3
Fraxinus excelsior L.	Oleaceae		aerial part			Coumaringlycosides: e.g. isofraxidin, aesculin, fraxin	OK	3
Fraxinus ornus L.	Oleaceae		leaf, manna			Coumaringlycosides: e.g. isofraxidin, aesculin; manna: 70%-90% mannitol,fructose (2.5%),	OK	3
Fucus serratus L.	Fucaceae		thallus			Polysaccharides: e.g. laminarin (19%), sulfated fucanes (fucoidans); polar lipids: mono- and polyesterglucosylsulfates. Fucoidans have antithrombotic effect.	OK but fucoidans may not be used when under anticoagulant therapy	3
Fucus vesiculosus L.	Fucaceae		thallus			Polysaccharides: e.g. laminarin (7%), sulfated fucanes (fucoidans); polar lipids: e.g. mono- and polyesterglucosylsulfates; carotenoids; sterols. Fucoidans have antithrombotic effect.	OK but fucoidans may not be used when under anticoagulant therapy	3
Fumaria officinalis L.	Papaveraceae		aerial part		Benzylisoquinoline alkaloids (protoberberines): e.g. protopine (38%), sinactine, cryptopine, fumaritine and sanguinarine		OK but the amount of alkaloids must be determined	3
Galega officinalis L	Leguminosae		aerial part	aerial part	Guanidine derivatives: e.g. galegine (in herb 0.1%-0-3%; in seed up to 0.5%), peganine	Galegine and peganine have a hypoglycemic activity	OK but the amount of galegine and peganine must be determined. Warning in case of antidiabetic treatment	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Galeopsis segetum Neck.	Lamiaceae	Galeopsis ochroleuca Lam.	aerial part			Tannins (5%), saponins	OK	3
Galium aparine L.	Rubiaceae		aerial parts	aerial part	Coumarin (up to 1%)		OK but the amount of coumarin must be defined	1
Galium mollugo L.	Rubiaceae		aerial parts	aerial part, root	Aerial part: coumarin; root: alizarin type anthraquinonglycoside: galiosine		OK but the amount of coumarin must be defined	1
Galium odoratum (L.) Scop.	Rubiaceae	Asperula odorata L.	aerial part	aerial part	Coumarins: e.g. coumarinic acid glucoside, coumarin	Iridoids: e.g. asperulosid, monotropein; phenols: e.g. gallic acid, caffeic acid. From coumarinic acid the toxic coumarin is formed	OK but the amount of coumarin must be determined	3
Galium verum L.	Rubiaceae		aerial part			Iridoidglycosides: e.g. asperuloside, monotropeine	OK	3
Garcinia × mangostana L.	Clusiaceae		fruit	pericarp		Pericarp: catecholtannins (5%-6%); polyhydroxyxanthones: e.g. mangostin	OK	3
Garcinia gummi-gutta (L.) Roxb..	Clusiaceae	Garcinia cambogia (Gaernt) Desr.	gum resin	pericarp	Pericarp: hydroxycitric acid (30% compared to dried weight)	In rats: diets containing 102 mmol HCA/kg diet and higher (778 and 1244 mg HCA/kg BW/d, respectively) caused potent testicular atrophy and toxicity, whereas diets containing 51 mmol HCA/kg diet (389 mg HCA/kg BW/d) or less did not. Accordingly, 51 mmol HCA/kg diet (389 mg HCA/kg BW/d) was deemed to be the no observed adverse effect level (NOAEL).	OK but amount of hydroxycitric acid must be determined	3
Gardenia jasminoides J. Ellis	Rubiaceae	Gardenia augusta (L.) Merr.	whole plant	fruit	Iridoid glycosides: e.g. geniposide	Known toxicity to dogs, cats, rats. Geniposide at dose of 574 mg kg(-1) or more could cause hepatic toxicity in rats and the hepatotoxicity often appeared at 24-48 h after the oral administration. The hepatotoxicity was associated with oxidative stress with decrease of total superoxide dismutase activity and increase of malondialdehyde concentration in rats' livers. Subchronic toxicity study showed geniposide did not cause hepatotoxicity at the doses of 24.3 and 72.9 mg kg(-1) orally for 90 days in rats. Thus, acute hepatotoxicity of geniposide at high doses was likely to be linked to oxidative stress, while geniposide at normal dose of 24.3 mg kg(-1) or less did not cause hepatotoxicity even in the repeated dosing study.	OK but the amount of geniposide must be determined	3
Gastrodia elata Blume	Orchidaceae		whole plant			4-hydroxybenzaldehyde; polyphenols (gastrodine, gastodigenin), vanillin,	OK	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Gaultheria procumbens L.	Ericaceae		aerial parts	aerial part	Free and bound salicylate derivatives (10mg/g); Essential oil from leaf: methyl salicylate (98%)	Gaultherine: a disacharide conjugate with methylsalicylate and the precursor of methylsalicylate and salicylic acid	OK but the amount of the salicylates must be determined	1
Gelidium amansii J.V. Lamouroux	Gelidiaceae		thallus			Agar-Agar	OK	1
Gelidium sesquipedale (Clemente) Thuret	Gelidiaceae		thallus			agar source	OK	2
Gentiana lutea L.	Gentianaceae		rhizome, root	rhizome, root	Xanthones (1%): e.g. gentisine, isogentisine	Bitter substances 2%-8%) in root bark: secoiridoidglycosides: e.g. gentiopicroside (bitterness value: 12000), amarogentin (bitterness value: 58.000.000). Mutagenic potential of some 2 hydroxyxanthones (gentisine and isogentisine) described	OK but the amount of xanthones to be determined	3
Geranium maculatum L.	Geraniaceae		whole plant			Rhizome: gallotannins + condensed tannins (10%-28%); aerial part: gallotannins up to 30%. Geranium oil comes from Pelargonium species. There is a lot of confusion. Genus and species must be well defind. Geraniin is the main hydrolysable tannin but remarkably lacks the adstringent effect of these type of tannins.	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Geranium pratense L.	Geraniaceae		whole plant			Rhizome: tannins (32%). Geranium oil comes from Pelargonium species. There is a lot of confusion. Genus and species must be well defind. Geraniin is the main hydrolysable tannin but remarkably lacks the adstringent effect of these type of tannins.	OK	1
Geranium robertianum L.	Geraniaceae		aerial part			In root: tannins (23%-29%). In leaves: ellagitannins (5% - 14%): e.g. geraniin	OK	3
Geranium sanguineum L.	Geraniaceae		whole plant			Leaf: tannins (10%-20%). Geranium oil comes from Pelargonium species. There is a lot of confusion. Genus and species must be well defind. Geraniin is the main hydrolysable tannin but remarkably lacks the adstringent effect of these type of tannins.	OK	1
Geum rivale L.	Rosaceae		whole plant			Aerial part: gallo and ellagitannins (7% - 17%); root: tannins (16%); rhizome: tannins (27%). Essential oil contains eugenol as lead component	OK	1
Geum urbanum L.	Rosaceae		whole plant			Gallo and ellagitannins. leaf: tannins (20%), stem: tannins (4%), root: tannins (18%), rhizomes (29%)	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Ginkgo biloba L.	Ginkgoaceae		leaf	leaf, seed (ovule)	Leaf: alkylphenols: ginkgolic acids: e.g. bilabol, cardanols, cardols and ginkgol, ginkgotoxin.	Leaf: Sesquiterpene lactones: bilobalide... Diterpene lactones: 0.06-0.23% ginkgolides. Ovule: human intoxication reported in Japan with some lethal outcomes. Canned and boiled seeds contain only 1% of the content in fresh seeds. Also roasted seeds contain gingotoxin. Symptoms of intoxication with the seeds: vomiting, seizures and unconsciousness	OK but not when under antidepressant treatment.	3
Glycine Max (L.) Merr.	Leguminosae		seed	seed	Soybean agglutinin (N-acetylgalactosamine-specific lectin), proteinase inhibitors and other toxic proteins. Total Isoflavones 945-4208 µg/g a.o. 67-516 µg/g daidzin, 91-1079 µg/g genistin, 12-177 µg/g glycitin, 217-768 µg/g malonyldaidzin, 43-158 µg/g malonylglycitin, 64-2446 malonylgenistin, 4.3-265 µg/g genistein		OK but the amount of isoflavones must be determined	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Glycyrrhiza glabra L.	Leguminosae		root	root	Phenylpropanoids: e.g. methylchavicol in unspecified quantities. Triterpene saponins with glycyrrhizin (potassium and calcium salts of glycyrrhizic acids) as major components.	Glycyrrhizic acid may induce mineralocorticoid effect.	OK but the amount of glycyrrhizic acid must be determined	3
Glycyrrhiza uralensis Fisch. ex DC.	Leguminosae (Fabaceae)		root, rhizome, stolon	root, rhizome, stolon	Triterpene saponins with glycyrrhizin (potassium and calcium salts of glycyrrhizic acids) as major components .	Glycyrrhizic acid might induce a mineralocorticoid effect with hypertension as a consequence.	OK, but the amount of glycyrrhizic acid must be determined	2
Gossypium herbaceum L.	Malvaceae		pilus, root, seed	whole plant	Gossypol, a triterpenoid aldehyde, is found in all Gossypium species	Human data on oral ingestion of gossypol as an male antifertility drug showed irreversible sterility in some of the treated men and hypokalaemia was another finding. There are cultivars without gossypol in the seeds	OK but the amount of gossypol must be determined	2
Gracilaria gracilis (Stackhouse) M. Steentoft, L.M. Irvine & W.F. Farnham	Gracilariaceae		thallus			Food	OK	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Griffonia simplicifolia (DC.) Baill.	Leguminosae		whole plant	seed; root	Seed: 5-hydroxytryptophan; root: cyanoglycoside: lithospermoside	Used as weight loss supplement	OK but not when under antidepressant treatment.	1
Grindelia camporum Greene	Compositae (Asteraceae)		aerial part			Resin with diterpenic acids (grindelic acid), flavonoids, triterpenoid saponins, tannins (5%)	OK	2
Grindelia hirsutula Hook. & Arn.	Compositae	Grindelia humilis Hook & Ar.	aerial part			Resin with tricyclic labdane diterpenes: grindelane diterpenoids: e.g. grindelic acid. Same properties as G. camporum and G. robusta. Official monogr Komission E and in France.	OK	1
Grindelia robusta Nutt.	Compositae		aerial part	aerial part	Essential oil (0.3%): e.g. cam	Grindelanetype diterpenoid acids: e.g. grindelic acid (90%); acetylenes: e.g. matricarianol.	OK but when EO is used the amount of camphor and methyleugenol must be determined	3
Grindelia squarrosa (Pursh) Dun.	Compositae		aerial part			One study reported sheep mortality after grazing G. squarrosa. Further study showed that the plant concentrates selenium from the soil, up to toxic levels.	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Guaiacum officinale L.	Zygophyllaceae		bark, wood	resin	Resin (gum) from the bark: 15% petroleum ether soluble compounds: lignans (-)-guajaretic acid, meso-dihydroguajaretic acid and meso-nordihydroguajaretic acid. 70% ether soluble compounds: other lignans such as dehydrogjajaretic acid, guaiacin, isoguaiacin, furoguajacin,alpha-guajaconic acid and its 4'-methyl ether, various tetrahydrofurans	Bark and wood: triterpenesaponins: e.g. larreagenin A, officigenin; srerins: e.g.sitosterin	OK but the amount of lignans must be determined	3
Guaiacum sanctum L.	Zygophyllaceae		bark, wood	resin	Resin (gum) from the bark: 15% petroleum ether soluble compounds: lignans (-)-guajaretic acid, meso-dihydroguajaretic acid and meso-nordihydroguajaretic acid. 70% ether soluble compounds: other lignans such as dehydrogjajaretic acid, guaiacin, isoguaiacin, furoguajacin,alpha-guajaconic acid and its 4'-methyl ether, various tetrahydrofurans	Bark and wood: triterpenesaponins: e.g. larreagenin A, officigenin; srerins: e.g.sitosterin	OK but the amount of lignans must be determined	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Guazuma ulmifolia Lamk.	Malvaceae		aerial part	seed	Cyanogenic glycoside: (2R)-taxiphyllin; Caffeine (0.14%)	Contents: caffeine (0.14%) , caryophyllene, catechins, epicatechins, farnesol, friedelin, kaurenoic acid, precocene I, procyanidin B-2, procyanidin B-5, procyanidin C-1, sitosterol, terpenes. Bark: oligo and polymeric proanthocyanidines.	OK but warning when under antidiabetic treatment.	1
Gynostemma pentafillum (Thunb.) Makino	Cucurbitaceae		leaf			Dammarane type saponins: gypenosides.	OK. Warning when under anticoagulants or antidiabetic treatment. Not to use during pregnancy	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Gypsophila paniculata L.	Caryophyllaceae		root		Triterpenoid saponins (up to 10%): gypsosides, saponarosides,	Root extract shows a-glucosidase inhibitor activity.	OK	1
Haematococcus pluvialis Flotow	Haematococcaceae		unicellular alga			Sweet water algae, high in astaxanthine	OK	3
Haematoxylum campechianum L.	Leguminosae		unfermented heartwood			Homoisoflavanes (neoflavane derivatives); tannins (10%)	OK but hydrolysable tannins used at high doses over long periods may have a negative impact on liver function.	2
Hamamelis virginiana L.	Hamamelidaceae		bark, leaf	leaf	Essential oil from the fresh leaf: (0.01 - 0.05%): phenylpropanoid: e.g. safrole (content max 0.2% of the volatile oil).	Leaf and bark up to 10% tannins.	OK but when the essential oil is used the amount of safrole must be determined	3
Haplopappus baylahuen Remy	Compositae		aerial part			Resin (17%): flavonoids, low amounts of coumarins,.. Different species are called bailahu´en and used as subsitutes. Chemical identification is not always adequate due to the use of substitutes.	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Harpagophytum procumbens (I	Pedaliaceae		secondary tuber			Iridoïdglycosides (1.3%-2.5%): e.g. harpagoside, isoharpagoside, harpagide en procumbide.	OK. Warning when stomach or duodenum ulcers or bile stones.	3
Harpagophytum zeyheri Decne.	Pedaliaceae		root, tuber			Iridoids: e.g. harpagoside, harpagide,	OK. Warning when stomach or duodenum ulcers or bile stones.	2
Hebanthe eriantha (Poir.) Pedersen	Amaranthaceae	Pfaffia paniculata (Mart.) Kuntze	root			Saponins (11%): pfaffosides, pfaffic acids; Sterol glucosides: ecdysterones. May have estrogenic effect. Used as substitute for ginseng.	OK	1
Hedeoma pulegioides (L.) Pers.	Lamiaceae		aerial part	aerial part	Essential oil: monocyclic monoterpene ketone: e.g. pulegone 30-80%, bicyclic monoterpenes: e.g. menthofuran and monoterpene etheroxide: 1,8-cineole.		OK but when the essential oil is used the amount of pulegone, menthofuran and 1,8 cineole must be determined	3
Hedera helix L .	Araliaceae		leaf	leaf, fruit	Triterpenoid saponins (2.5%-5.7%): e.g. alpha-hederin,	Intoxication caused by the fruits ('berries') .	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Hedychium coronarium J. Koenig	Zingiberaceae		flower, rhizome	rhizome	Rhizome essential oil: 1,8-cineole (fresh: 41.42%, dried: 37.44%),	Rhizome essential oil:e.g. β-pinene (10.39%, 17.4%) and α-terpineol (8.8%, 6.7%). Rhizome: farnesanetype sesquiterpenes and labdane-type diterpenes: e.g. coronarins	OK but when the essential oil is used the amount of 1,8 cineole must be determined.	1
Helianthus annuus L.	Compositae		aerial part			Leaves and stem: germacranolide type sesquiterpenelactones (furanoheliangolide); flower: kauran, trachyloban and atisan type diterpenes;	OK	3
Helianthus tuberosus L.	Compositae		tuber			Topinambur	OK	3
Helichrysum arenarium (L.) Moench.	Compositae		aerial part				OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Helichrysum italicum (Roth.) G. Don.	Compositae		aerial part	aerial part	Essential oil from flower: monoterpene etheroxide: 1,8-cineole (0.3 to 1%)		OK but when the essential oil is used the amount of 1,8 cineole must be determined.	1
Helichrysum stoechas (L.) Moench	Compositae		aerial part			Antinociceptive effect in rats described	OK	3
Heracleum sphondylium L.	Apiaceae (Umbelliferae)		whole plant	whole plant	Furocoumarins: e.g. bergapten, isopimpinellin, imperatorin		OK but the amount of furocoumarins must be determined	2
Herniaria glabra L.	Caryophyllaceae		whole plant			Herb: 3-9% triterpene saponins. A lyophylised aqueous extract of the whole plant were p.o. administered to group of Wistar rats (5 males and 5 females/group) in doses of 0, 1, 2, 4 g/kg bw. day for 90 days. Suppression on body weight gain between dosed group and controls after 90 days (> 20% in all dosed groups vs. controls). Histopathological study of liver and kidneys only revealed toxic effects in the highest dosed group. Oral LD50 of an aqueous extract in mice was 8.5 g/kg bw. (Rhiouani et al. 2008).	OK but the amount of triterpene saponins must be determined	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Herniaria hirsuta L.	Caryophyllaceae		aerial part			Monodesmodic saponins (3%-9%): herniaria saponins (aglycones: medicagenic acid and 16-hydroxy-medicagenic acid); coumarins (0.1%-0.4%): e.g. umbelliferone, herniarin	OK	1
Hesperis matronalis L.	Brassicaceae		aerial part	aerial part	Glucosinolates: e.g. hesperin	Seed: benzoic acid derivative : hesperaline. Found in many Brassicaceae.	OK but the amount of glucosinolates must be determined	1
Hibiscus sabdariffa L.	Malvaceae		branch, flower, leaf, seed	calyx	Oxalic acid (0.55%)	Oxalic acid proven to induce reproductive toxicity. Decreased epididymal sperm count observed in rats with an aqueous extract of calices. Histological changes of the testicular structure. Orally dosing of an hydro-alcoholic extract of the calyces to rats showed increased levels of some enzymes that may indicate liver injury. Water and alcoholic extracts of the calyces in doses of 300 or 2000 mg/kg body weight/day orally to rats for 90 days caused up to 80% death in some groups. □	OK	2
Hieracium pilosella L.	Compositae		aerial part			Flavonoids: e.g. isoetin glucopyranoside	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Hierochloe odorata (L.) Beauv.	Poaceae	Hierochloe odorata (L.) Wahl.	aerial part				OK	3
Himanthalia elongata (L.) S.F. Gray	Himanthaliaceae		thallus			CNS depressant activity described in mice with a protein fraction at high doses.	OK	3
Hippophae rhamnoides L.	Eleagnaceae		fruit (berry oil)			Carotenoids, tocopherols, sterols, flavonoids, lipids, ascorbic acid, and tannins. Berry oil : anti platelet aggregation effect similar to aspirin.	OK but warning when under anticoagulant therapy	3
Hizikia fusiformis (Harvey) Okamura	Sargassaceae		thallus		Accumulates high amounts of inorganic arsenic	Brown alga	OK but the amount of arsenic must be strictly controlled	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Hordeum vulgare L.	Poaceae (Gramineae)		seed, root, sprout	stalk	Hydroxycoumarins	Polysaccharides e.g. starch, fructans; mono- oligosaccharides, proteins, prolamines, glutelins, albumins and globulins, fatty oil, vitamins, hydroxycoumarins (only in the stalks), amynes.	OK	2
Houttuynia cordata Thunb.	Saururaceae		whole plant	root and leaf	Isoquinoline alkaloids (dioxoaporphines) : e.g.norcepharadione B, and aristolactam type alkaloids: e.g. cepharanone B, aristolactam B, piperolactam,	Leaf and root are food in eastern countries	OK but the amount of alkaloids must be determined	2
Humulus lupulus L.	Cannabaceae		inflorescence	inflorescence	Flavanone: 8-prenylnaringenin	The flavanone is not present in fresh plant but is produced on drying. Strong estrogenic effect.	OK but the amount of 8 prenylnaringenin must be determined	3
Hydrangea arborescens L.	Hydrangeaceae		leaf,root	root	Quinazoline alkaloids (0.1%): e.g. febrifugin (beta-dichroine), isofebrifugin (alpha-dichroine) and gamma-dichroine. Also dichroidine, 4-quinazolone, umbeliferone (dichrin A,7-hydroxycoumarin) and dichrin B.	Genus in which some species contain coumarins and isocoumarins e.g. hydrangenol, iridoid glycosides, cyanogenic glycosides and quinazolidinic alkaloids e.g.febrifugine. Allergenicity.	OK but the amount of alkaloids must be determined. Warning when under antidiabetic treatment. Not to be used during pregnancy	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Hygrophila auriculata (Schumach.) Heine	Acanthaceae		leaf, root, seed	leaf, root, seed	Alkaloids: asteracanthine and asteracanthicine in udefined amount	Triterpenes: lupeol, hentricotane, betulin, luteolin, luteolin-7 - 0 –retinosides	OK	1
Hymenaea courbaril L.	Leguminoseae		bark,fruit, leaf, seed; re	bark, seed	Bark, seed: diterpenoids ent-halimane type e.g.(13R)-13-hydroxy-1(10),14-ent-halimadien-18-oic acid and clerodane type diterpenes.	fruit (peel): essential oil: sesquiterpenes alpha-copaene (11.1%), spathulenol (10.1%) and beta-selinene (8.2%), while germacrene-D (31.9%), beta-caryophyllene (27.1%) and bicyclogermacrene (6.5%). Lef: polyphenolic derivatives	OK but the amount of clerodane diterpenes must be determined.	1
Hypericum perforatum L.	Hyperaceae		aerial part	aerial part	Dianthrones and derivatives: e.g. hypericin, pseudo-hypericin; prenylated phloroglucinol derivative: e.g. hyperforin; xanthone derivatives.		OK but the amount of hypericine and hyperforin must be determined	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Hyssopus officinalis L.	Lamiaceae		aerial part	aerial part	Essential oil from aerial part: phenylpropanoids: e.g. methyleugenol (0.09-3.8%), methylchavicol (4.8%); monoterpenes: e.g. monoterpene etheroxide: 1,8-cineole; biclyclic monoterpenes: e.g. pinocamphone (40%), iso-pinocamphone (30%), thujones (traces)		OK but when using the essential oil the amount of methyleugenol, methylchavicol, pinocamphones and thujones must be determined	3
Ilex paraguariensis A. St.-Hil.	Aquifoliaceae		leaf	leaf	Methylated xanthine derivatives: e.g. caffeine (0.2-2.0%), theobromine (0.1-0.2%), theophylline (0.05%)		OK but the amount of the xanthines must be determined	3
Illicium verum Hook. f.	Schisandraceae		bark, fruit	bark, fruit	Essential oil (0.6-6%): phenylpropanoids: e.g. transanethole (75-90%), methylchavicol (0.34-5.04%), safrole (0.14%)		OK but when the essential oil is used the amount of methylchavicol and safrole must be determined	3
Indigofera tinctoria L.	Leguminosae		leaf			Contents (undefined): Alkaloids, amino acids. Considered safe in traditional use. In the Genus Indigofera some species contain the toxic non- proteinogenic amino acid: indospicin a strong hepato-toxin. In different studies on components some find amino acids others not.	OK but absence of indospicin	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Inula britannica L.	Compositae (Asteraceae)		aerial part	aerial part	Sesquiterpenes lactones: e.g. ergolide		OK	2
Inula helenium L.	Compositae		leaf, rhizome, root			Essential oil (1%-3%) from root with sesquiterpenelactones: e.g. alantolacton, isoalantolacton. Root: inulin (44%).	OK	3
Ipomoea batatas (L.) Poir	Convolvulaceae		tuber			Sweet potato	OK	3
Isatis tinctoria L.	Brassicaceae		aerial part; juice	aerial part	Quinoline alkaloids: e.g. tryptanthrin. Indole alkaloids: e.g.isatans A and B, 1-6., 3'-hydroxyepiglucoisatisine, epiglucoisatisine. Glucosinolates: e.g.progoitrine, epi-progoitrine, gluconapine, glucobrassicine. □	No side effects mentioned with aerial parts. Root contains idirubin which causes poisoning.	OK but the amount of alkaloids and glucosinolates must be determined. Absence of idirubin	1
Jasminum grandiflorum L.	Oleaceae		flower			Steroids, sugars, alkaloids, phenolic compounds and tannins from fruits. Secoiridoids. Triterpenoid saponins.	OK	2
Jasminum officinale L.	Oleaceae		flower	floral bud	Triterpenoid saponins	The water extract of floral buds at oral doses of 250 and 500 mg/kg in rats produced a dose dependent antiimplantation effect but not complete infertility, no significant abortifacient activity, no significant change in the weight and length of the fetuses, no abnormalities in the organs of the offspring. The extract produced a significant decrease in serum progesterone levels on day 5 of pregnancy which may be responsible for the antiimplantation effect observed in this study.	OK but not during pregnancy	3
Jateorhiza palmata (Lam.) Miers	Menispermaceae	Menispermum palmatum Lam.	root	root	Isoquinoline alkaloids: e.g. berberine, jatrorrhizine, palmatine, bisjatrorrhizine		OK, but the amount of isoquinoline alkaloids must be determined	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Juglans cinerea L.	Juglandaceae		bark, leaf, nut	whole plant	Naphtoquinones: juglone, juglandin, juglandinic acid.	Contains hydrojuglone. Probably also chrysophanic acid. Traditionally used to improve defecation. Side effects described: necrosis and difficulty to move. Mutagenicity. Nut is food	OK for nut	1
Juglans regia L.	Juglandaceae		aerial part	Fruit, husk and leaf	Naphthoquinones in fruit, husk and leaf: e.g. juglone	Juglone is found in 29.8% of the surface waxes of the fruit (pericarp) and 28.6% of the surface waxes of the leaves.	OK	2
Jumellea fragrans (Thouars) Schltr.	Orchidaceae		leaf	leaf	Essential oil: e.g; coumarin, dihydrocoumarine. Diterpenes e.g. kaurenes	Odour develops during drying process. Traditionnally used in Europe as replacement for Chinese tea.	OK but the amount of coumarin must be determined	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Juniperus communis L.	Cupressaceae		fruit, leaf, wood	leaf	Essential oil from leaf: bicyclic monoterpenes: e.g. beta-thujone (0.29%), sabinene (40%); fruit essential oil: e.g. sabinene (1.5%-12% depending whether ripe or unripe)	J. communis var. communis leaf essential oil contained from 0-0.4% α-thujone and from 0-0.4% β-thujone. Contraindications with severe renal disease. From preclinical investigations some concluded that Juniperus communis extract has anti-fertility and abortifacient effect. However, the abortifacient compound is sabinylacetate which is absent in the ripe berries.	OK but when using the essential oil the amount of thujones must be determined. Warning not to use during pregnancy	3
Justicia adhatoda L.Justicia adhatoda L.	Achanthaceae	Adhatoda vasica Nees	whole plant	leaf	Quinoline alkaloids (leaf: 0.3-2.1% on dry weight basis): e.g. vasicine (1.8%)		OK but the amount of alkaloids must be determined	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Justicia pectoralis Jacq.	Acanthaceae		aerial part	leaf	Low amounts of quinoline alkaloids: e.g.vasicine. Presence of coumarins: e.g. coumarin, umbelliferone.	Estrogenic, progestagenic, and anti-inflammatory effects, explaining the plant's traditional use in menopause and PMS therapies.	OK but the amount of alkaloids and coumarin must be determined	1
Kaempferia galanga L.	Zingiberaceae		rhizome	leaf	Leaf, root: decoction vague traditional description of possible hallucinogenic and aphrodisiac effect in New Guinea. Compound not known. Root essential oil: e.g. 1,8 cineole	Rhizome essential oil: 1,8 cineole, borneol, 3-carene, camphene, kaempferol, kaempferide, cinnamaldehyde, p-methoxycinnamic acid, ethyl cinnamate and ethyl p-methoxycinnamate. The last two compounds are responsible for the sedative effect. When using a lipophilic extract caution should be given to the possible sedative effect.	OK	1
Kavalama urens (Roxb.) Raf.	Malvaceae	Sterculia urens Roxb.	gum			Polysaccharides as bulk laxative not absorbed by the gut	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Kickxia spuria (L.) Dumort.	Plantaginaceae		aerial part			Iridoids: e.g. kickxioside	OK	1
Knautia arvensis (L.) Coult.	Caprifoliaceae		aerial part			Iridoids: e.g. dipsacan; triterpenesaponins (1%-1.7%) and tannins	OK	1
Krameria lappacea (Dombey) Burdet & B.B. Simpson	Krameriaceae		root			Root: 8-18% ratanhia-proanthocyanidins, root bark 18-42% ratanhia-proanthocyanidins.	OK	3
Lactuca indica L.	Compositae		aerial part	root (milky juice)	Lactucarium: mixture of lactucin, lactucopicrin	Lactucarium has sedative porperties and is also called lettuce opium. flavonoids, terpenoids, sesquiterpenelactones: lactucain A (1), B (2), and C (3); furofuran lignan: lactucaside	OK	1
Lactuca sativa L.	Compositae		aerial part	root (milky juice)	Lactucarium: mixture of lactucin, lactucopicrin	Lactucarium has sedative porperties and is also called lettuce opium. The amount produced by the plant is low.	OK	1
Lagerstroemia speciosa (L.) Pers.	Lythraceae		leaf			Gallotannins: e.g. penta-O-galloyl-glucopyranose	OK	3
Laminaria digitata (Hudson) J.V. Lam.	Laminariaceae		thallus			iodine	OK	3
Laminaria hyperborea (Gun.) Foslie	Laminariaceae		thallus			Salts of alginic acid (laminaric acid, 25%), Iodine, Reserve carbohydrates: laminarin (47%), mannitol (5-6%), fucoidin, mannitol glucoside.	OK	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Laminaria japonica J.E. Areschoug	Laminariaceae		thallus				OK	2
Laminaria palmata Bory de St.Vincent	Laminariaceae		thallus				OK	2
Lamium album L.	Lamiaceae		aerial part			Tannins: flower (5%), leaf (14%). Iridoidglycosides: e.g. lamalbide (0.25%)	OK	3
Larix decidua Mill.	Pinaceae		aerial part, resin	aerial part	Essential oil from needle: 1,8-cineole (0.01%). Essential oil from bark: monoterpene etheroxide: 1,8-cineole (2.09%)		OK but when using the EO the amount of 1,8 cineole must be determined	3
Larix occidentalis Nutt.	Pinaceae		whole plant	bark	Resin (distillation delivers turpentine)	Bark delivers arabinogalactan by extraction.	OK	2
Laurus nobilis L.	Lauraceae		fruit, leaf	fruit, leaf	Essential oil from leaf: phenylpropanoids: e.g. methyleugenol (1.7-11.8%) and monoterpene etheroxide: 1,8-cineole (34-53%)		OK but when using the essential oil the amount of methyleugenol, and 1,8 cineole must be determined	3
Lavandula × intermedia Emeric ex Loisel.	Lamiaceae		aerial part	aerial part	Essential oil: e.g. bicyclic monoterpene: camphor (5%-10%), monoterpene etheroxide: 1,8 cineole (3%-8%)	Lavandin	OK but when using EO the amount of camphor and 1,8 cineole must be determined	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Lavandula angustifolia Mill.	Lamiaceae (Labiatae)		flowering top	aerial part	Essential oil from aerial part: bicyclic monoterpenes: e.g. thujones, camphor (0.59%) and monoterpene etheroxide: 1,8 cineole (3.32-30%) Essential oil from fresh flower: bicyclic monoterpenes: e.g. camphor (13.32%) and monoterpene etheroxide: 1,8 cineole (5.81%)		OK but the amount of thujones, 1,8 cineole and camphor must be determined	2
Lavandula angustifolia subsp. angustifolia	Lamiaceae	Lavandula vera DC., Lavandula officinalis Chaix	aerial part		L. angustifolia Mill. Essential oil (1%-3%): traces of monoterpene etheroxide: 1,8 cineole and bicyclic monoterpenes: camphor	L. spica is a synonym. Better to refer to L. angustifolia Mill instead of the subsp.	OK	1
Lavandula latifolia Medik	Lamiaceae		aerial part; essential oil		Essential oil: 1,8 cineole (20%-35%), camphor (1%-20%)	Flowering tops induce a hypoglycemic effect in normoglycemic rats by oral gavage	OK but when essential oil is used the amount of 1?8 cineole and camphor must be determined. Warning when under antidiabetic treatment.	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Lavandula stoechas L.	Lamiaceae (Labiatae)		aerial part	aerial part	Essential oil from leaf (1.5%): bicyclic monoterpenes: e.g. fenchone (39-53%), camphor (6-24%) and monoterpene etheroxide: 1,8-cineole (4%) Essential oil from flower: bicyclic monoterpenes: e.g. fenchone (21-66%), camphor (up to 26%)	Fenchone has the Gras status.	OK but when using EO the amount of camphor and 1,8 cineole must be determined	1
Lawsonia inermis L.	Lythraceae		leaf		Naphtoquinones: e.g. lawsone (2%);	Henna. Lawsone: induction of acute hemolysis in G6PD-deficient patients after cutaneous exposure or ingestion.	OK	1
Ledum palustre L.	Ericaceae		aerial part	aerial part	Essential oil (0.3%-2.5%): sesquiterpene alcohols: ledol and palustrol	High doses of ledol may paralyse the CNS. Diterpenes: e.g. acetylandromedol only in old publications. Recent work could not prove the presence of diterpenes.	OK but when using the EO the amount of ledol and palustrol must be determined	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Lens culinaris Medik.	Leguminosae		seed			Phenolic compounds (benzoic acids and aldehydes, hydroxycinnamic acids and derivatives, flavan-3-ols and procyanidins)	OK	2
Leonurus cardiaca L.	Lamiaceae (Labiatae)		aerial part	aerial part	Pyrrolidine alkaloids: e.g. stachydrine (0.5-1.5%), and cyclic peptide: cycloleonurinine. The fresh herb may contain up to 4 mg/g of labdane diterpenes (e.g. leosibiricin)	Also guanidine alkaloid: leonurine (0.007%) (uterotonic)	OK but amount of alkaloids must be determined. Warning when under treatment for hypertension	3
Leonurus japonicus Houtt.	Lamiaceae		aerial part		Pyrrolidine alkaloids: e.g. stachydrine (0.1-0.2%). Cyclic peptide: cycloleonurinine. Labdane-type diterpenes : 3 alpha-acetoxy-15-O-methylleopersin C, leosibirinone A	Contains: flavonoids, monoterpene glucosides, coumarins, leonurenosides I and II, alkaloids, iridoid, lignan and phenolic compounds	Okbut the amount of alkaloids must be determined. Warning when under treatment for hypertension.	1
Lepidium campestre (L.) R. Br.	Brassicaceae		aerial parts	aerial part	Glucosinolates: e.g. sinalbin; seed: erucic acid	Sinalbin not very stable. Glucosinolates decrease iodine uptake in thyroid gland. Breakdown products of glucosinolates include nitriles, isothiocyanates, thiocyanates, epithionitriles and vinyl oxazolidinethiones. Seed oil may contain erucic acid which intake should be limited.	OK but the amount of glucosinolates and when seed used the amount of erucic acid must be determined. Warning when under thyroid medication.	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Lepidium coronopus (L.) Al-Shehbaz	Brassicaceae		aerial parts	aerial part	Glucosinolates: benzylglucosinolates and derivatives		OK but the amount of glucosinolates must be determined. Warning when under thyroid medication.	1
Lepidium latifolium L.	Brassicaceae		aerial parts	aerial part	Glucosinolates: benzylglucosinolates and derivatives	Leaves are cooked and soaked for 2 days before they are eaten	OK but the amount of glucosinolates must be determined. Warning when under thyroid medication.	1
Lepidium meyenii Walp.	Brassicaceae	Lepidium peruvianum G. Chacón de Popovici	root	root	Imidazole alkaloids (0.0016-0.0123% in the dried root): e.g. lepidiline A, B and C	Discussion whether the alkaloids are present or not	OK	3
Lepidium sativum L.	Brassicaceae		whole plant	whole plant	Glucosinolates: e.g. glucotropaeolin	Glucosinolates may interfere with iodine uptake in the thyroid	OK but the amount of glucosinolates must be determined	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Leptospermum petersonii subsp. Petersonii.	Myrtaceae	Leptospermum citr	flowering tops			Essential oil: geranial (29.91%), neral (22.83%), citronellal (16.72%), isopu	OK	1
Leptospermum scoparium J.R.Forst. & G.Forst.	Myrtaceae		bark, leaf; essential oil			Essential oil: sesquiterpene hydrocarbons (60%): elemene, farnesene, selinene, calamenene and cadinene skeletons. Oxygenated sesquiterpenes and triketones (30%). Dihydroxyacetone (DHA) and methylglyoxal (MGO)	OK but not to be used during pregnancy	1
Lespedeza capitata Michx.	Leguminosae		aerial part			Flavonoids: e.g. homoorientine, saponaretine, rutine	OK	3
Leucanthemum vulgare (Vaill.) Lam.	Compositae		aerial part; bud			Essential oil: sesquiterpene alcohols: nerolidol, alpha bisabolol 15.5%), farnesol and sesquiterpene hydrocarbon: farnesene (38%).	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Levisticum officinale W.D.J. Koch	Apiaceae		whole plant	whole plant	Furocoumarins in root and seeds: e.g. iperatoerin (12.82 mg/kg), 5-methoxypsoralen (6.38 mg/kg), psoralen (3.8 mg/kg), 8-methoxypsoralen (0.5 mg/kg); Furocoumarin in leaf: e.g. 5-methoxypsoralen; In stem: monoterpenes: bicyclic monoterpenes: e.g. alpha and beta thujones, and monoterpene etheroxide: 1,8-cineole		OK but the amount of furocoumarins must be determined. When using the essential oil the amount of thujones and 1,8 cineole must be determined.	3
Ligusticum striatum DC.	Apiaceae	Ligusticum chuanxiong S.H.Qiu, Y.Q.Zeng, K.Y.Pan, Y.C.Tang & J.M.Xu. Ligusticum wallichii Franch.	root	root	Beta carboline alkaloids: e.g. perlolyrine. Essential oil from the root: two progestins: 3,8-dihydro-diligustilide and riligustilde	Essential oil has a progestogenic effect. According the dose, progestogens may have androgenic and/or oestrogenic or anti-androgenic and/or anti-oestrogenic effects.	OK but the amount of alkaloids must be determined. When using the essential oil the amount of progestogens must be determined.	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Linaria vulgaris Mill.	Plantaginaceae		leaf	leaf	Tricyclic quinazoline alkaloids: e.g. vasicine (syn. peganin) (0.8% of dry weight of leaves), vasicinone and deoxyvasicinone;	iridoid glycosides: eg antirhinoside. No human toxicity. Attention for abortifacient properties of (pure) vasicine when administered at 2.5 - 10 mg/kg.	OK but the amount of the alkaloids must be determined.	1
Lindera aggregata (Sims) Kosterm.	Lauraceae		root	root	Isoquinoline alkaloids: e.g. boldine, norboldine, reticuline, linderegatine	Leaf: flavonoids (quercetin), Sesquiterpenoids from root tubers, essential oil from stem.	OK but the amount of isoquinoline alkaloids must be determined	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Linum usitatissimum L.	Linaceae		seed	seed	Cyanogenic glycosides: e.g. diglucosides linostatin and neolinostatin (2.6 resp. 3.5 mg/kg) and traces of linamarin monoglucoside. Lignan: pinoresinoldiglucosid		OK	3
Liquidambar styraciflua L.	Altingiaceae		bark, exudate	exudate	Essential oil from balsam (extract from exudate): 31% styrene	International Agency for Research on Cancer has evaluated that styrene is possible carcinogenic to humans (Group 2 B)	OK but the amount of styrene must be determined	2
Litchi chinensis Sonn.	Sapindaceae		fruit, leaf, seed				OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Lithothamnion calcareum (Pallas) Areschoug	Hapalidiaceae		thallus			Red marine alga	OK	2
Litsea cubeba (Lour.) Pers.	Lauraceae		bark, fruit, stem	bark, stem	Isoquinoline alkaloids (phenanthrene type): e.g. litebamine	Fruit essential oil: 75% citral, used in perfumery.	OK for fruit. When other parts used the amount of the alkaloids must be determined.	1
Lobaria pulmonaria (L.) Hoffm.	Lobariaceae		thallus	thallus	Usnic acid	Lichen. Usnic acid under scrutiny for hepatotoxicity.	OK but the amount of usnic acid must be determined	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Lonicera japonica Thunb.	Caprifoliaceae		flower, stem		Flower buds contain pyridinium alkaloid-coupled secoiridoids. Triterpenoid saponins	High amounts are emetic and considered toxic.	OK but the alkaloids must be determined	1
Lotus cornicolatus L.	Leguminosae		whole plant	flowers	Flowers: cyanogenic glycosides	isoflavones present at 15µg/g	OK	1
Lotus corniculatus subsp. corniculatus L.	Leguminosae		aerial part			Proanthocyanidins, tannins	OK	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Luma chequen (Molina) A.Gray	Myrtaceae	Eugenia chequen M	bark, flower, leaf	leaf	Leaf essential oil: monoterpenic hydrocarbons (68.8 %): monoterpene etheroxide: 1,8 cineol (7.5 %)	Leaf essential oil: monoterpenic hydrocarbons (68.8 %), containing a-pinene (57.3 %) and β-pinene (6.2 %) oxygenated hydrocarbons (18.9 %), emphasizing 1,8 cineol (7.5 %), linalool (3.7 %), and trans-verbenol (2.2 %), sesquiterpenes (3.0 %), with β-selinene (1.3%) and β-cariofilene oxide (0.9%), and a non terpenic fraction (3.0%).	OK but when essential oil is used the amount of 1,8 cineole must be determined	1
Lycium barbarum L.	Solanaceae	Lycium halimifolium Mill.	fruit, leaf, root bark	root	Root: cyclic peptides, licyumins A–D. Spermine alkaloids kukoamines A and B polydroxylated piperidine alkaloids, fagomine (62) and 6-deoxyfagomine. Anthraquinones: physcion, emodin, 1,3,6-trihydroxy-2-methylanthraquinone.	Fruit: polysaccharides, carotenoids, vitamine C, non-proteinogenic amino acids: taurine and γ-aminobutyric acid, betaine (trimethylglycine). Traces of atropine (19 ppb w/w)	OK for fruit	3
Lycium chinense Mill.	Solanaceae		fruit	root	Spermine alkaloid in root. Polyhydroxy alkaloids (calystegines) in the root	Fruit is food	OK	1
Lycopersicon esculentum Mill.	Solanaceae	Solanum lycopersicum L., Lycopersicon lycopersicum (L.) H. Karst.	fruit	unripe fruit, leaf	Steroidal alkaloid glycosides: e.g. licoperosides F-H	Tomato	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Lycopodium clavatum L.	Lycopodiaceae		aerial part, spore	whole plant	Lycopodium alkaloids (0.1-0.4%): e.g. lycopodine, clavatine, clavatoxine	Lycopodine considered to be a central nerval system depressant. Spores do not contain the alkaloids	OK but the amount of alkaloids must be determined	3
Lycopus europaeus L.	Lamiaceae	L. mollis A.Kern., Lycopus menthifolius Mabille	aerial part	aerial part	In a herb from Uzbekistan undefined alkaloids (0.24%). In same herb coumarines (0.12%) but not found in European species. Essential oil (0.2%) of aerial parts contains camphor however quantity not specified.	Tannins (10%). Studies on rats show reduction in levels of thyroid hormones when unoxidized hot water extract is used. Oxidation renders the extract inactive.	OK but not to be used in case of hypothyroidism or struma.	3
Lycopus virginicus Michx.	Lamiaceae		aerial part			Antithyrotropic. It also lowers prolactin level, when this is elevated. The antithyrotropic effect is attributed to the ester-like derivatives of caffeic and hydroxycinnamic acids.	Not to use when under thyroid therapy. Not to use during pregnancy and lactation	1
Lysimachia vulgaris L.	Primulaceae		aerial part			Chemical info scarce. No toxicity described	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Lythrum salicaria L.	Lythraceae		summitas			Tannins (3%-6%). Hypoglycemic activity on rats with ether extract of flowering tops.	OK but not when under antidiabetic treatment.	3
Macadamia ternifolia F. Muell	Proteaceae		fruit, seed	seed	Cyanogenic glycosides	Only the seeds of M. integrifolia and M. tetraphylla are free of cyanogenic glycosides. Macadamia seeds have a strong allergenic potential.	OK	3
Macrocystis pyrifera (L.) C.Ag.	Marasmiaceae (Laminariaceae)		thallus	thallus		May contain high levels of iodine. Depending on growth conditions and environment, the algae may concentrate heavy metals (e.g. Pb, Cd)	OK	3
Magnolia champaca (L.) Baill. ex Pierre	Magnoliaceae	Michelia champaca L.	flower; essential oil	bark, leaf, root	Possible presence of isoquinoline alkaloids: magnocurarine, magnoflorine	Essential oil : e.g. β-elemene, β-caryophyllene, a-humulene, β-selinene, and a-cadinol. Essential oil used in perfumery. Plant used as contraceptive, and abortifacient.	OK for flower and essential oil	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Magnolia officinalis Rehder & Wilson	Magnoliaceae		bark, flower	bark	Isoquinoline alkaloids: e.g. magnocurarine	Bark: lignans: honokiol 28.7-37.3 mg/g, magnolol: 33.0-60.6 mg/g. The lignans may inhibit platelet aggregation.Sedative effect; To avoid in pregnancy (cytotoxicity).	OK but the amount of the alkaloid magnocurarine must be determined. Warning in case of intake of anticoagulants. Not to be used during pregnancy	3
Malpighia glabra L.	Malpighiaceae	Malpighia punicifolia L.	fructus			Acerola	OK	3
Malus domestica Borkh.	Rosaceae	Malus sylvestris (L.) Mill. var. domestica (Borkh.) Mansf	whole plant	seed	Seed: cyanogenic glycoside: amygdalin		OK	2
Malus pumila Mill.	Rosaceae		bud, flower, fruit, leaf	seed	Seed: cyanogenic glycoside: amygdalin		OK	2
Malus sylvestris (L.) Mill. subsp. sylvestris	Rosaceae		bud, flower, fruit, leaf	seed, leaf	Cyanogenic glycosides		OK	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Malva sylvestris L.	Malvaceae		aerial part			Mucilages (leaf: 6%-10%). Flavonoids: anthocyans: e.g. malvin	OK	3
Mammea americana L.	Calophyllaceae		flower,fruit,leaf, resin	bark	Bark and latex: isoprenylated coumarins: e.g. mammeas	Mammea E/BB coumarins. Isoprenylated dihydroxycoumarins. The acetoxy substituted coumarins show high insecticidal property. Seeds are toxic to mammals.	OK for fruit, flower, leaf	1
Mangifera indica L.	Anacardiaceae		whole plant			Bark: gum-resin; tannins (16%-20%). Gum resin is a skin irritant. Very high doses of bark extract might impair liver function in Wistar rats. Bark contains up to 20% tannins.	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Manihot esculenta Crantz	Eupharbiaceae		root	root	Cyanogenic glycosides from root: e.g. linamarin, lotaustralin		OK	1
Manilkara zapota (L.) P.Royen	Sapotaceae	Achras sapota L.	bark, flower, fruit, leaf	bark, seed	Leaf and bark: alkaloids (not defined); Saponins: e.g. saponitin; Seed: cyanogenic glycosides (?)	Seed causes abdominal complaints. Fruit is food and rich in proanthocyanidins	OK for flower, fruit	1
Maranta arundinacea L.	Marantaceae		bulb, rhizome			Arrow root	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Marchantia polymorpha L.	Marchantiaceae		thallose	thallose	Macrocyclic bisbibenzylethers: e.g. riccardin C, marcanthins	For these bisbibenzyls antifungal, antimicrobial, antimalarial, anticancer properties are described.	OK	1
Marrubium vulgare L.	Lamiaceae		aerial part	aerial part	Labdane diterpene: e.g. marrubiin (0.3%-1%)	Marrubiin is possibly an artefact produced when isolating premarubbiin. Marrubiin is a weak sedative. Very high doses of marrubiin might induce arrythmia (?).	OK but the amount of marrubiin must be determined	3
Marsdenia cundurango Rchb.f.	Apocynaceae (Asclepiadaceae)	Marsdenia reichenbachii Triana	bark	bark	Bark: mixture of steroidal glycosides : condurango-glycosides (A…E); Essential oil: benzopyrone: e.g. coumarin		OK but when using the EO the amount of coumarin must be defined	3
Marsdenia sylvestris (Retz.) P.I.Forst.	Apocynaceae	Gymnema sylvestre (Retz) R.Br.	leaf	leaf	Acid soluble polyol-polyhydroxy cyclic compound: conduritol A; triterpene saponins: gymnemic acids.	The compounds are proven to normalize blood sugar concentrations.	OK but warning when under diabetes treatment.	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Matricaria chamomilla L.	Compositae	Matricaria recutita L. ; Chamomilla recutita (L.) Rauschert	aerial part; essential oil			Essential oil (0,3– 1,5%): a-bisabolol, bisabololoxiden A, B und C, bisabolonoxid. Sesquiterpenlactones (Guajanolides): e.g. matricin (0.03-0,2%)	OK	3
Medicago sativa L.	Leguminosae (Fabaceae)		aerial part	aerial part	Pyrrolidine alkaloids in the seeds: e.g. stachydrine (0.18%), homostachydrine; and aromatic nitro-derivatives: e.g. trigonelline (0.36%)	Contains coumestan derivatives: e.g. 4'-0-methylcoumestrol, 3'-methoxycoumestrol,	OK but the amount of the alkaloids and coumestans must be determined	3
Melaleuca alternifolia (Maiden & Betche) Cheel	Myrtaceae		aerial part, essential oil	leaf	Essential oil of leaves: monoterpene etheroxide: 1,8 cineole (10-60%).	Essential oil: only traces of methyleugenol. Essential oil should not be taken internally (ataxia and coma). Only as flavouring.	Essential oil not for internal use. Only as flavouring.	3
Melaleuca cajuputi Powell	Myrtaceae		leaf, twig	leaf, twig	Essential oil from fresh leaves and twigs: 1,8 cineole (3%-60%).	Essential oil should not be taken internally (ataxia and coma). Only as flavouring.	Essential oil not for internal use. Only as flavouring.	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Melaleuca leucadendra (L.) L.	Myrtaceae	Melaleuca leucadendron (L.) L.	leaf	leaf	Essential oil: e.g. methyleugenol (96%), isomethyleugenol	Essential oil should not be taken internally (ataxia and coma). Only as	Essential oil not for internal use. Only as flavouring.	3
Melaleuca linariifolia Sm.	Myrtaceae		leaf		Essential oil: e.g. 1,8 cineole. Main component terpinen-4-ol (30%)	There are 4 chemotypes. Essential oil: antiandrogen effect. Should not be taken internally (ataxia and coma). Only as flavouring.	Essential oil not for internal use. Only as flavouring.	1
Melaleuca quinquenervia (Cav.) S.T. Blake	Myrtaceae		leaf, twig	leaf, twig	Essential oil: 1,8 cineole (up to 50%)	Several chemotypes basing on different composition of essential oil. Essential oil should not be taken internally (ataxia and coma). Only as flavouring.	Essential oil not for internal use. Only as flavouring.	2
Melaleuca viridiflora Sol. ex Gaertn.	Myrtaceae		leaf, twig	leaf, twig	Essential oil: 1,8 cineole (40%-70%)	Essential oil should not be taken internally (ataxia and coma). Only as flavouring.	Essential oil not for internal use. Only as flavouring.	2
Melilotus altissimus Thuill.	Leguminosae		aerial part	aerial part	Presence of free coumarin possible	Contains coumarin derivatives	OK but the amount of coumarin must be determined	2
Melilotus officinalis (L.) Lam.	Fabaceae		flowering top	flowering top	Coumaric and melilotic acid	Coumarin may be formed from melilotoside upon drying. Coumarin may be livertoxic	OK but the amount of coumarin must be defined. Warning not to use during pregnancy	1
Melissa officinalis L.	Lamiaceae		aerial part, essential oil			Dried herb contains only 0.02 - 0.2% of essential oil. The EO has sedative properties. From 2g EO on, the heart rate decreases and there is a hypotensive effect.	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Melittis melissophyllum L.	Lamiaceae		aerial part		Coumarin (2,6-7,0 g/kg in fresh leaves and 0,3-2,5 g/kg in dry leaves)		OK but the amount of coumarin must be defined. Warning not to use during pregnancy	1
Mentha aquatica L.	Lamiaceae		whole plant	whole plant essential oil	Essential oil: monocyclic monoterpene ketone: pulegone and bicyclic monoterpene: menthofuran		OK but when using the EO the amount of pulegone and menthofuran must be determined	1
Mentha arvensis L.	Lamiaceae		aerial part, essential oil	aerial part	Essential oil (1%-1.6%): menthol (25%-40%), menthon (15%-30%), menthofuran (>1%) and pulegone (0.2% - 3.5%)	Leaves of M. arvensis possess reversible antifertility property without adverse toxicity in male mice.	OK but when using the EO the amount of menthol, menthon, menthofuran and 1,8 cineole must be determined	3
Mentha spicata L.	Lamiaceae		aerial part	aerial part	Essential oil: monocyclic monoterpene ketone: e.g. pulegone (1.7-1.9%) and monoterpene etheroxide: 1,8-cineole (6-6.8%). Essential oil chemotype carvone: 1,8-cineole (0.5%). Essential oil chemotype dihydrocarvyl acetate: 1,8-cineole (2.2%)		OK but when using the essential oil the amount of pulegone and 1,8 cineole must be determined	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Mentha x piperita L.	Lamiaceae		aerial part	aerial part	Essential oil (0.5%-4%): monoterpene etheroxide: 1,8-cineole (2.4-18.5%); monocyclic monoterpene ketones: e.g. pulegone (0.1-5.4%); bicyclic monoterpene: menthofuran (0.1-7.4%);	Essential oil main components: 50% - 70% of the oil : menthol, menthon, menthylacetate. Essential oil often adulterated with added menthofuran and menthol.	OK but when using the essential oil the amount of 1,8 cineole, pulegone and menthofuran must be determined.	3
Mentzelia cordifolia Dombey ex Urb. & Gilg	Losaceae	Mentzelia scabra K	whole plant			Hetero-oligomeric iridoids: e.g. tricoloroside methyl ester, acerifolioside	OK	1
Menyanthes trifoliata L.	Menyanthaceae		leaf	leaf	Anthraquinones: e.g. emodin, aloe-emodin, chrysophanol; Coumarins: e.g. coumarin, scopoletin		OK but the amount of anthraquinones and coumarin must be determined	3
Mesembryanthemum crystallinum L.	Aizoaceae	Gasoul crystallinum (L.) Rothm.; Cryophytum crystallinum (L.) N.E.Br.	leaf	whole plant	Oxalic acid	Possible presence of alkaloids, but not confirmed	OK	2
Mespilus germanica L.	Rosaceae		whole plant	seed	Cyanogenic glycosides		OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Mikania amara (Vahl.) Willd.	Compositae		bark, leaf		Coumarin (11%)	May potentiate anticoagulant effect	OK but the amount of coumarin must be determined. Warning when under anticoagulant therapy	1
Myrica cerifera L.	Myricaceae		root			Flavonoids: e.g. myricetin, myricitrin. Taraxerane-type triterpene: e.g. taraxerol, taraxerone. Rich in tannins. Antiandrogenic effects: The aqueous ethanol extract of the bark of Myrica rubra has shown 5-alpha-reductase inhibitory activity in vitro and anti-androgenic activity in vivo in animal study. These effects were attributed to three constituents: myricanone, myricanol, and myricetin. Myrica cerifera contains the same molecules. M. cerifolia also demonstrated a high level (>80%) of antithrombin activity.	OK but the amount of antiandrogenic compounds must be determined. Warning when un der anticoagulant treatment	1
Mitchella repens L.	Rubiaceae		aerial part		Alkaloids (unspecified), saponins, tannins	Plant: Mitchella is reputed to promote an easy labour by aiding contraction of the womb during childbirth. Berries are eaten but are tasteless. Considered safe .	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Momordica balsamina L.	Cucurbitaceae		fruit, leaf	seed, root	Cucurbitane triterpenoids: momordicosides and momordicines. Seeds: a lectin: momodin.	Leaves are rich source of proteins and are eaten cooked.	OK for fruit and leaf	1
Momordica charantia L.	Cucurbitaceae		fruit, leaf	seed, root	Cucurbitane triterpenoids: momordicosides and momordicines. Seeds: a lectin: momodin.	Seed: antispermatogenic and androgenic activities. Seed extract: induces abortion	OK for fruit and leaf	1
Monarda didyma L.	Lamiaceae		aerial part			Essential oil: thymol	OK	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Monarda punctata L.	Lamiaceae		aerial part			Essential oil : thymol (20%); not to be used during pregnancy	OK but when using EO a warning must be added not to be used during pregnancy	1
Morinda citrifolia L.	Rubiaceae		fruit	fruit and leaf	Iridoid glycosides: e.g. morindacin; anthraquinones: e.g. 1, 3-dimethoxy-anthraquinone, 1, 2-dihydroxy-anthraquinone	Some reports on hepatotoxicity of Noni juice. However more recent studies revealed no danger.	OK	2
Morinda officinalis F.C. How	Rubiaceae		whole plant	root	Anthraquinones: e.g. 1,6-dihydroxy-2,4-dimethoxyanthraquinone, 1,6-dihydroxy-2-methoxyanthraquinone, methylisoalizarin.	Terpenoids: e.g. asperuloside tetraacetate,	OK but the amount of anthraquinones must be determined.	3
Moringa oleifera Lam.	Moringaceae		whole plant	whole plant	Benzylamines (0.1%): e.g. moringine, moringinine; glucosinolates: e.g. niazinin A , niazinin B, niazimicin and niaziminin A and B	Antifertility described. Intake of 600mg/kg BW of an aqueous leaf extract shows some antifertility effect (decreased implantation of the eggs) in rats. Decreased implantation effect also described for root extract.	OK but the amount of benzylamines and glucosinolates must be determined. Not to be used during pregnancy	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Morus alba L.	Moraceae		fruit, leaf	leaf, unripe fruit, root	Polyhydroxylated piperidine alkaloids (0.8%) : e.g. 1-deoxynojirimycin	leaf extract: antidopaminergic activity. 1-Deoxynojirimycin (DNJ) is a potent a-glycosidase inhibitor and is abundant in Morus spp. (mulberry trees) leaves and roots. The alkaloid can induce hallucination. However, high amounts are needed. In the ripe fruits the alkaloid is absent.	OK but the amount of the alkaloids must be determined. Warning not to take when under antidiabetic treatment.	3
Morus nigra L.	Moraceae		bud, stem bark, fruit, leaf,			Sugars, organic acids, pectin	OK	3
Murraya koenigii (L.) Spreng.	Rutaceae		bark, leaf, root d'un buisson adulte.	leaf, seed	Seed: carbazole alkaloids: e.g. koenimbine, kurryam; Leaf: indole alkaloids: e.g. mahanine, mahanibine;	Leaves are used as spice (curry)	OK but the amount of the alkaloids must be determined	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Musa x paradisiaca L. (pro sp.)	Musaceae	Musa x sapientum L.	fruit, leaf, root			In leaf and stem: tannins (5%-10%)	OK	3
Myrciaria dubia (H.B.K.) McVaugh	Myrtaceae	Psidium dubium H.B.K.	fruit			fruit: camu-camu fruit has the highest vitamin C content of known plants vit C: 2.5%-3%). Leaf: aldose reductase inhibiting activity due to the ellagitannins.	OK	3
Myrica gale L.			aerial part	essential oil	Essential oil: e.g. 1,8 cineole.	Volatile oil (0.4-0.7%): e.g. alpha-pinene, delta-cadinene. gamma-cadinene, limonene, beta-myrcene, alpha-phellandrene, beta-phellandrene, 1.8-cineole, nerolidol, p-cymene. alpha-copaene, beta-caryophyllene. Rich in tannins.	OK but the amount of 1,8 cineole must be determined.Warning not during pregnancy	1
Myristica fragrans Houtt.	Myristicaceae		mace, seed	mace, seed	Essential oil from seed: phenylpropanoids: e.g. elimicin (up to 7.5%), myristicin (1.3% in the seed and 2.7% in mace), safrole		OK but when the essential oil is used the amount of elimicin, myristicin and safrole must be determined.	3
Myroxylon balsamum var. balsamum (L.) Harms	Leguminosae		trunk bark	tolu	resin (tolu balsam): benzoic and cinnamic acid and their esters.	volatile compounds of the balsam used topically and in very small amounts internally against cough. Varieties with analogue composition: Myroxylon balsamum var. balsamum (L.) Harms and Myroxylon balsamum var. pereirae (Royle) Harms. In tolu balsam there is free benzoic acid, known as an antiseptic.	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Myroxylon balsamum var. pereirae (Royle) Harms	Leguminosae		trunk bark		resin (peru balsam): benzoic and cinnamic acid and their esters.	volatile compounds of the balsam used topically and in very small amounts internally against cough. Varieties with analogue composition: Myroxylon balsamum var. balsamum (L.) Harms and Myroxylon balsamum var. pereirae (Royle) Harms. In tolu balsam there is free benzoic acid, known as an antiseptic.	OK	1
Myrtus communis L.	Myrtaceae		aerial part	aerial part	Essential oil: phenylpropanoids: methylchavicol (58-88 ppm), methyleugenol (0.2%-6%)		OK but when the essential oil is used the amount of camphor must be determined.	3
Nardostachys jatamansi (D. Don) DC.	Caprifoliaceae	Nardostachys grandiflora DC.	whole plant			Root: sesquiterpenes: e.g. valeranone (0.1%-1.2%), jatamansone; essential oil (0.3%-0.4%): e.g. nardosinone	OK	3
Nasturtium officinale R. Brown	Brassicaceae		aerial part		Glucosinolates: unstable gluconasturtines for 90% converting in phenylethyl isothiocyanate. Volatile constituents of the dried leaves: 2-phenylethyl isothiocyanate (72.9%), pulegone (8.0%), heptyl isothiocyanate (4.9%) and 4-phenylbutyl isothiocyanate (3.2%); the main volatile constituents of the stems: 2-phenylethyl isothiocyanate (83.5%), 4-phenylbutyl isothiocyanate (6.9%), pulegone (2.2%) and sec-butyl isothiocyanate (1.9%).	Glucosinolates might interfere with iodine uptake in the thyroid	OK but the amount of glucosinolates and pulegone must be determined	3
Nelumbo nucifera Gaertn.	Nelumbonaceae		whole plant	seed	Seed: bisbenzylisoquinoline alkaloids: e.g; liensinine, isoliensinine, neferine. Leaves contain the aporphine alkaloids nuciferine, reomerine and nerenyuferine	The alkaloids show antihypertensive and antiarrythmic effect. Neferine has antiplatelet aggregation effect.	OK but the amount of alkaloids must be determined. Warning when under anticoagulant therapy.	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Nepeta cataria L.	Lamiaceae		aerial part	aerial part	Essential oil : bicyclic monoterpenes: e.g. camphor	Essential oil main compounds: nepetalactones	OK but when the essential oil is used the amount of camphor must be determined.	3
Nepeta tenuifolia Benth.	Lamiaceae		leaf	leaf	Essential oil (0.2%-0.7%): e.g. pulegone		OK but the amount of pulegone must be determined	2
Nephelium lappaceum L.	Sapindaceae		fruit				OK	1
Nigella sativa L.	Ranunculaceae		seed	seed	Isoquinoline alkaloids: e.g. nigellimine	Essential oil of seeds (0,5%-1,5%): e.g. thymoquinone (3,8 %)	OK but the amount of the alkaloids must be determined	2
Ocimum basilicum L.	Lamiaceae		aerial part	aerial part	Essential oil from leaf and flowering top: phenylpropanoids: e.g. methylchavicol (20-50%), methyleugenol (2%), safrole; monoterpenes: monoterpene etheroxide: 1,8-cineole (7.7- 10%) and bicyclic monoterpenes: e.g. camphor (1%), alpha- and beta-thujones		OK but when the essential oil is used the amount of methylchavicol, methyleugenol, safrole, 1,8 cineole, camphor and thujones must be determined.	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Ocimum gratissimum L.	Lamiaceae		aerial parts	aerial part	Essential oil from the bud: phenylpropanoids: e.g. methylchavicol, methyleugenol (9.835ppm) Essential oil from the bud: phenylpropanoids: e.g. methylchavicol, methyleugenol (9.835ppm) Essential oil from the bud: phenylpropanoids: e.g. methylchavicol, methyleugenol (9.835ppm) Essential oil from the bud: phenylpropanoids: e.g. methylchavicol, methyleugenol (9.835ppm) Essential oil from the bud:	Shows mutagenic and carcinogenic effects in rodents. Main compounds in this species: essential oil (0.15%): thymol (48%) and eugenol (25%)	OK but when using the EO the amount of methylchavicol and methyleugenol must be determined.	1
Ocimum tenuiflorum L.	Lamiaceae (Labiatae)	Ocimum sanctum L.	whole plant	whole plant	Essential oil : phenylpropanoids: methylchavicol (39.950 ppm in leaf), methyleugenol (15-100 ppm in plant and 50ppm in leaf)		OK but when using the EO the amount of methylchavicol and methyleugenol must be determined	2
Oenothera biennis L.	Onagraceae		seed			Seed oil: major constituents are linoleic acid (cis-linoleic acid) (65–80%), g-linolenic acid (cis-g-linolenic acid) (8–14%), oleic acid (6–11%), palmitic acid (7–10%) and stearic acid (1.5–3.5%).	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Olea europaea L.	Oleaceae		bud, fruit, leaf; essential oil			Secoiridoid: oleuropein (6%-9%) of dry weight of leaves	OK	2
Olea europaea L. subsp. europaea	Oleaceae					see Olea europea L.	OK	1
Ononis spinosa L.	Leguminosae	Ononis vulgaris "Rouy, p.p.C"	whole plant	root	Isoflavones: e.g. formononetin (3mg - 6mg/100g dry weight), genistein (1.7 mg - 3.8mg/100 g dry weight),		OK but the amount of isoflavones must be determined	3
Ononis spinosa subsp. hircina (Jacq.) Gams	Leguminosae	Ononis arvensis L.	root	root	Isoflavones: e.g. formononetin (3mg - 6mg/100g dry weight), genistein (1.7 mg - 3.8mg/100 g dry weight),		OK but the amount of isoflavones must be determined	3
Onopordon acanthium L.	Compositae		aerial part			Sesquiterpene lactones: e.g. onopordopicrin. Polyines	OK	1
Ophioglossum vulgatum L.	Ophioglossaceae		aerial part	aerial part	Thiaminase. Possible presence of ptaquiloside	Used externally. Juice of the leaves drunk against internal bleeding. Glycosylated and acylated flavonols. Galactosyldiacylglycerol derivatives. Thiaminase destroyed by cooking. Some ferns contain carcinogens (e.g. ptaquiloside). No reports of toxicity for this species but caution	OK but absence of fern carcinogens	1
Ophiopogon japonicus (Thunb.) Ker Gawl.	Asparagaceae		tuber			Steroidal saponins: e.g. ruscogenin and ophiopogonins; homoisoflavonoids: e.g. ophiopogonanones	OK but warning when under anticoagulant therapy	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Opopanax chironius (L.) W.D.J.Koch	Apiaceae		whole plant; gum resin	whole plant; gum resin	Furocoumarins and dihydrofurocoumarins: e.g.heraclenin, imperatorin		OK but the amount of furocoumarins must be determined	3
Opuntia ficus-indica (L.) Mill.	Cactaceae		whole plant			Food	OK	3
Orchis mascula L.	Orchidaceae		tuber			Most Orchids contain hydroxylated phenanthrene and 9,19 dihydrophenanthrene derivatives. Tuber contains mucilages and is used in case of diarrhoea. Endangered species.	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Origanum compactum Bentham	Lamiaceae		aerial part			Essential oil: carvacrol (36.46%), thymol (29.74%),p-cymene (24.31%)	OK	2
Origanum dictamnus L.	Lamiaceae		aerial part			Essential oil: thymol, cymene, carvacrol	OK	1
Origanum majorana L.	Lamiaceae	Majorana hortensis	aerial part	aerial part	Essential oil: bicyclic monoterpenes: e.g. camphor (2%) and phenylpropanoids: e.g. methylchavicol (96-550 ppm).		OK but when the essential oil is used the amount of camphor and methylchavicol must be determined.	3
Origanum vulgare L.	Lamiaceae		aerial part	aerial part	Essential oil: bicyclic monoterpene: beta-thujone (0-0.6%), monoterpene etheroxide: 1,8-cineole (0-6.5%)		OK but when the essential oil is used the amount of thujones and 1,8 cineole must be determined.	3
Orthosiphon aristatus (Blume) Miq.	Lamiaceae		leaf				OK	2
Orthosiphon aristatus var. aristatus	Lamiaceae		aerial part			Used as O. staminaeus. Prolonged use of high doses should be avoided as it reduces serum sodium levels.	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Oryza sativa L.	Poaceae		seed, root,			Rice bran extract (study LEE Seung-HO): cyanidine-3-O-b -glucopyranoside, peonidine-3-O-b -glucopyranoside, pelargonidine-3-O-b -glucopyranoside, protocatechuic acid and ferulic acid were contained 1.49%, 0.30%, 0.30%, 0.47% and 0.24%, respectively.	OK	3
Oxalis acetosella L.	Oxalidaceae		aerial part	leaf	Oxalic acid	Cooking decreases the oxalic acid amount. Contraindicated in case of gout, arthritis, kidney stones	OK	1
Pachira aquatica Aubl.	Malvaceae		leaf, seed		Naphtoquinones: e.g. aquatidial	Cooked young leaves and seeds are eaten. No further chemical information	OK	1
Pachira insignis (SW.) Savigny	Malvaceae		seed		Bark contains alkaloids (undefined)no good info on the bark.	Guiana chestnut. Seeds are eaten	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Padus avium var. avium	Rosaceae	Prunus padus L.	bark	whole plant	Cyanogenic glycosides (0.1%-2%): prunasin, prulaurasin		OK	1
Paeonia lactiflora Pall.	Paeoniaceae	Paeonia albiflora Pall., Paeonia chinensis L. Vilmorin	flower, root, seed			Root: paeoniflorin (3%-9%); paeonol (0.03%); benzoylpaeoniflorin (0.04%). According traditional use, the root has abortifacient activity.	OK but not during pregnancy	3
Paeonia officinalis L.	Paeoniaceae		flower, root			Root: e.g. paeoniflorine, paeonol, paeonine, albiflorine	OK	1
Paeonia x suffruticosa Andrews	Paeoniaceae		root			May interact with antidiabetic medicines (?)	OK	2
Palmaria palmata (Linnaeus) Weber & Mohr	Palmariaceae	Fucus palmatus L., Rhodymenia palmata (L.) Greville	thallus			iodine (70µg/g)	OK	1
Panax ginseng C.A. Mey.	Araliaceae		root, leaf, berry			Triterpene saponins: ginsenosides; Antidiabetic effect probably due to the polysaccharides. Their amount is much higher in the berries with a more potent effect as a result.	OK. Warning when under antidiabetic treatment.	3
Panax notoginseng (Burkill) F.H. Chen.	Araliaceae		leaf, root, seed			Triterpene saponins: ginsenosides	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Panax pseudoginseng Wall.	Araliaceae		leaf, root, seed			Interchangable with notoginseng?	OK	1
Panax quinquefolius L.	Araliaceae		root, leaf, seed			Triterpene saponins: ginsenosides; Antidiabetic affect probably due to the polysaccharides. Their amount is much higher in the berries with a more potent effect as a result.	OK. Warning when under antidiabetic treatment	3
Panicum miliaceum L.	Poaceae		flower, fruit			Common millet	OK	3
Panzerina lanata (L.) Soják	Leguminosae	Panzeria lanata (L.) Bunge.	aerial part	aerial part	Essential oil : monoterpenes: e.g. camphor (12%), 1,8 cineole (2.4%)		OK but when the essential oil is used the amount of camphor and 1,8 cineole must be deteremined.	1
Papaver rhoeas L.	Papaveraceae		flower			Alkaloids (0.1%): e.g. rhoeadine(0.06%). Alkaloids present in the whole plant. Flowers have a mild sedative effect. P. rhoeas does not contain morphine or codeine.	OK but the amount of the alkaloids must be determined.	3
Parietaria officinalis L.	Urticaceae		aerial part			Flavonoids: e.g. kaempferol-, quercetin- and isorhamnetin-3-glucosides, -3-sophoroside, -3-rutinosides, -3-neohesperidosides. The pollen are highly allergenic.	OK	3
Parmelia saxatilis (L.) Ach.	Parmeliaceae		thallus		Usnic acid	Usnic acid under scrutiny for hepatotoxicity. Lichen	OK but the amount of usnic acid must be determined	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Parthenium hysterophorus L.	Compositae		aerial part	aerial part	anthraquinones,	Steroids, saponins, reducing sugars and tannins. The methanolic extract of Partenium hysterphorus at a dose of 3 and 5 mg/kg shows highly significant skeletal muscle relaxant activity up to 30min of duration in animals.	OK	1
Parthenocissus tricuspidata (Siebold et Zucc.) Planch.	Vitaceae	Ampelopsis tricuspidata Siebold et Zucc.	aerial part, bud	leaf, berry	oxalic acid	Antimalarial activity of the stilbenes present (piceid, resveratrol, longistylins). Leaf and berry are toxic causing stomach irritation and kidney damage. Possible cause may be the presence of oxalic acid.	OK	1
Passiflora incarnata L.	Passifloraceae		aerial part		In some samples were found indole alkaloids (0.01-0.09%), mainly harman, harmaline, harmine; cyanogenic glycosides (gynocardin);	Harmane alkaloids were found in samples from cultivation in green houses but not when cultivated in open air.	OK	3
Pastinaca sativa L.	Apiaceae		root	whole plant	Whole plant essential oil: furocoumarins: e.g. psoralen, angelicin, bergapten, imperatorin, xanthotoxol	Root is food	OK but the amount of furocoumarins must be determined	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Paullinia cupana Kunth	Sapindaceae		seed	seed	Methylated xanthine derivatives: e.g. caffeine (3.0-4.8% dry weight). Essential oil: phenylpropanoids: e.g. methylchavicol, anethole.		OK but the amount of caffeine must be determined. When the essential oil is used the amount of methylchavicol and anethole must be determined	3
Pedalium murex L.	Pedaliaceae		aerial part			Flavanoids: e.g. pedalitin, pedalin, diosmetin, dinatin. Triterpenoids: e.g. a-amyrin acetate, rubusic acid, ursolic acid, and lupeol acetate. Steroids: e.g. β-sitosterol. Sapogenins: e.g: diosgenin	OK	1
Pelargonium graveolens L'Herit	Geraniaceae		aerial part	aerial part	Aliphatic alkaloid: methylhexaneamine (MHA)	MHA is also known as DMAA (1,3 dimethylamylamine) en is considered a party drug. It is NOT present in P. graveolens and when present it has been added. Oil should be checked to be MHA free	OK but the essential oil free of MHA	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Pelargonium radens H.E. Moore	Geraniaceae	Pelargonium radula (Cav.) L'Hér.	aerial part			Citronellol and menthone are the main compounds in the essential oil.	OK	1
Pelargonium sidoides DC.	Geraniaceae		whole plant	root	Essential oil: phenylpropanoids: e.g. methyleugenol (4.3%) and elemicin (3.6%)		OK but when using the EO the amount of methyleugenol and elemicin must be determined	2
Perilla frutescens (L.) Britton	Lamiaceae		leaf, seed	leaf, seed	Essential oil depends on the chemotype. Perilla ketone chemotype contains the toxic perilla ketone.	Perilla aldehyde chemotype and Perilla ketone chemotype. Perilla aldehyde may be mutagenic.	OK but when using the essential oil the amount of perilla ketone must be determined. Warning not to use during pregnancy.	3
Persea americana Mill.	Lauraceae		leaf		Essential oil: phenylpropanoids: e.g. methyleugenol (3-85%)		OK but when the essential oil is used the amount of methyleugenol must be determined	3
Persicaria bistorta (L.) Samp.	Polygonaceae	Polygonum bistorta L.	rhizome			Rhizome: tannins (21%); cycloartane type tritepenoids: e.g. friedelin, 5-glutinen-3-one and friedelinol.	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Persicaria maculosa Gray	Polygonaceae	Polygonum persicaria L.	aerial part			Tannins, flavonoids, triterpenes	OK	3
Petiveria alliacea L.	Phytolaccaceae		leaf, root			Root: benzaldehyde, benzoic acid, coumarin, isoarborinol,. Leaf: benzyl-2-hydroxyethyl-trisulfide, polyphenols, isothiocyanates. Tannins. Abortifacient.	OK but warning not to use during pregnancy	1
Petroselinum crispum (Mill.) Nyman ex A.W. Hill	Apiaceae		whole plant	whole plant	Furocoumarins in leaf: e.g. psoralen (3.2-10.5%), bergapten (6.4-14.7%), 8-methoxypsoralen (0.53-5.3%), isopimpinellin (1.6-8.0%). Parsley leaf oil: phenylpropanoids: e.g. myristicin (1.5-14%), apiole (0.9-8.1%). Common parsley seed oil: phenylpropanoids: e.g. myristicin (2.4-37%), elemicin (8.8%), apiole (11-67%) . Italian parsley seed oil: phenylpropanoids: e.g. myristicin (0.7-40%), elemicin (0-2%), apiole (30-68%). Curly parsley seed oil: phenylpropanoids: myristicin (45-62%), elemicin (0-12.2%), apiole (0-7.2%) .		OK but the amount of furocoumarins must be determined. When using the seed oil the amount of elemicin and apiole must be determined.	3
Peucedanum ostruthium (L.) W. Koch	Apiaceae		whole plant	root	Furocoumarins in root: e.g. pucedanin, imperatorin, oxypeucedanin		OK but the amount of furocoumarins must be determined	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Peumus boldus Molina	Monimiaceae		leaf	leaf	Isoquinoline alkaloids: e.g. boldine, ; leaf essential oil (2%-4%): monoterpene peroxide: ascaridole (16-38%), monoterpene etheroxide: 1,8-cineole (11-39%)		OK but the alkaloids must be determined. The essential oil may not be used.	3
Phaseolus vulgaris L.	Leguminosae		seed	seed	Cyanogenic glycoside: linamarin (20 mg/kg). Lectins		OK	3
Phellodendron amurense Rupr.	Rutaceae		bark	bark	Isoquinoline alkaloids: e.g. berberine (major alkaloid, up to 8%), palmitine		OK but the amount of alkaloids must be determined	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Phillyrea latifolia L.	Oleaceae		leaf			Rich source of oleuropeoside. Phenylpropanoid glycosides: e.g.salidroside, syringin and coniferin and lignans: e.g. phillyrin	OK	1
Phlebodium aureum (L.) J. Sm.	Polypodiaceae	Polypodium leucatomos Poir.	leaf, rhizome			Lectins (no agglutinizing effect), flavonoids, phytoecdysones,	OK	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Phoenix dactylifera L.	Arecaceae		fruit, seed, pollen				OK	1
Photinia melanocarpa (Michx.) K.R. Robertson & J.B. Phipps	Rosaceae	Aronia melanocarpa (Michaux.) S. Elliott	fruit			Anthocyans	OK	3
Phyla scaberrima (Juss. ex Pers.) Moldenke	Verbenaceae	Lippia dulcis Trev.	aerial part			Leaf essential oil: β-caryophyllene (10.56%), 6-methyl-5-hepten-2-one (9.19%), bicyclogermacrene (9.00%) and δ-cadinene (8.65%). The sesquiterpene hernaducin is responsable for the sweet taste.	OK	1
Phyllanthus amarus Schumach. & Thonn.	Phyllanthaceae		flowering top	aerial part	Indolizidine alkaloids: e.g. securinine, norsecurinine, epibubbialine and isobubbialine. Seed: cyanogenic glycosides	Hydrolisable tannins: amariin, amariinic acid, amarulone, corilagin, elaeocarpusin, furosin, geraniin, geraniinic acid B, glucopyranose and glucopyranoside derivatives (phyllanthusiin D and repandusinic acid). Major lignans: e.g. phyllanthin, hypophyllanthin	OK but the amount of alkaloids must be determined. Warning not to take during pregnancy	1
Phyllanthus emblica L.	Phyllanthaceae	Emblica officinalis Gaertn.	aerial part			polyphenols: e.g. tannins: gallic acid, ellagic acid; benzopyran tannins: e.g. chebulagininc acid	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Phyllanthus niruri L.	Phyllanthaceae		whole plant	whole plant	Lignans: e.g. phyllanthin, niranthin	Antifertility effect seen in rats at high doses of water extract of whole plant. No adverse effects up to 100mg/Kg of the aquous extract in rats. Antifertility effects often seen in plants having an antimalarial effect. The lignans are phytoestrogens.	OK but warning not to use during pregnancy	1
Phymatolithon calcareum (Pallas) W.H.Adey & D.L.McKibbin	Hapalidiaceae		thallus			Former name: Lithothamnium calcareum	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Physalis alkekengi L.	Solanaceae		fruit	fruit, root	Tropane alkaloids in root (0.09-0.1%): e.g. 3-alpha-tigloyloxyytropane, phygrine, cuscohygrine	Anti-estrogen activity of fruit. Decreased sperm count in rats. Could be due to the steroids (physalins)? Dose used 150mg/KG BW of ethanolic extract. Extract not defined.	OK but the amount of alkaloids must be determined.	3
Physalis peruviana L.	Solanaceae		whole plant	unripe fruit, root	unripe fruit: solanine ; root: secotropane alkaloids: eg physoperuvine, tigloidine	Fruits are food. Unripe fruit said to contain solanine in quantities to cause gastroenteritis and diarrhoea. Aerial parts: withanolides with 4-beta- hydroxywithanolide present (0.8 mg/g) having chemoprotective properties.	OK	1
Picea abies (L.) Karst.	Pinaceae		needle, branch tip	needle, cone	Essential oil : 1,8 cineole	Oil: bornyl acetate, limonene, camphene, alpha-pinene	OK but when the EO is used the amount of 1,8 cineole must be determined	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Picramnia antidesma Sw.	Picramniaceae		bark	bark	Anthraquinones and anthroneglycosides: e.g. mayoside, saroside, aloe-emodin		OK but the amount of anthraquinones and anthrones must be determined	1
Pimenta dioica (L.) Merr.	Myrtaceae	Pimenta officinalis Lindl.	berry; essential oil	essential oil	Berry: monoterpene etheroxide: 1,8 cineole, phenylpropanoid: methyleugenol; Leaf: methyleugenol	Berry: galoylglycosides	OK but when EO is used the amount of 1,8 cineole and methyleugenol must be determined	3
Pimenta racemosa (Mill.) J.W.Moore	Myrtaceae		leaf	leaf	Essential oil: phenylpropanoids: methylchavicol (30- 10.745 ppm), methyleugenol (4.31-14.65 ppm)		OK but when the essential oil is used the amount of methylchavicol and methyleugenol must be determined.	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Pimpinella anisum L.	Apiaceae		seed	seed	Furocoumarins in traces. Essential oil: phenylpropanoids: e.g. methylchavicol (1-5%).		OK but when the essential oil is used the amount of methylchavicol must be determined	3
Pimpinella major (L.) Huds.	Apiaceae		root	root	Furocoumarins: e.g. pimpinellin, sphondin		OK but the amount of furocoumarins must be determined	3
Pimpinella saxifraga L.Pimpinella saxifraga L.	Apiaceae (Umbelliferae)		whole plant	root	Furocoumarins in root (0.025%): e.g. angelicin, pimpinellin, sphondin, imperatoin, bergapten, isobergapten, isopimpinellin, peucedanin, scopoletin, umbelliferon, umbelliprenin, xanthotoxin		OK but when EO is used the amount of furocoumarins must be determined	3
Pinus koraiensis Siebold & Zucc.	Pinaceae		needle; oleo resin			Seed oil: increase satiety hormone production	OK	1
Pinus massoniana Lamb.	Pinaceae		needle; oleo resin			Bark contains proanthocyanidines. Essential oil: e.g. alpha and beta pinene, myrcene, camphene, limonene,…	OK	1
Pinus mugo Turra	Pinaceae	Pinus montana Mill.	bud (cone), needle, sprout; essential oil			Essential oil: monoterpenes: e.g. d-limonene, 3-carene, alpha and beta pinene also esters and aldehydes. Used as flavouring ingredient at level of 0.001%.	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Pinus pinaster Ait.	Pinaceae	Pinus maritima Lam.	bark, seed, leaf, bud (cone); essential oil			Bark: catechines, proanthocyanidins; needle: essential oil (0.2%): e.g. beta pinene (32%-50%), germacrene (14%), camphene (2%-9%), alpha pinene (8%), alpha terpineol (5%); cone: essential oil (0.2%-0.5%): e.g. bornylacetate, cadinene, alpha pinene	OK	3
Pinus pinea L.	Pinaceae		cone, needle, seed; oleo resin			essential oil: e.g. alpha and beta pinene, myrcene, camphene, limonene,…	OK	1
Pinus sylvestris L.	Pinaceae		bark, bud, fruit, leaf, shoot; essential oil			Essential oil (needle) : alpha pinene (10%-50%), camphene (12%)	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Piper aduncum L.	Piperaceae	Piper angustifolium Ruiz & Pav.	aerial part	leaf	Essential oil (leaf): phenylpropanoids: e.g. dill-apiole (35-90%)	Formerly used as an abortifacient	OK but when the EO is used the amount of dillapiole must be determined and a warning must be added not to use the EO during pregnancy.	3
Piper longum L.	Piperaceae		fruit	fruit, leaf	Fruit: piperidine alkaloids: e.g. piperine, pipernonaline	Leaf extract reported to display central nervous system depression however the responsible molecules are still unknown.	OK but the amount of alkaloids must be determined.	3
Piper nigrum L.	Piperaceae		fruit, oleoresin, oil	fruit, oil	Piperidine alkaloids: e.g. piperine, piperidine piperdine;		OK but the amount of alkaloids must be determined.	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Pistacia lentiscus L.	Anacardiaceae	Lentiscus vulgaris Fourr. , Terebinthus lentiscus (L.) Moench	leaf, resin, twig			Resin: e.g. α- pinene, β- pinene, limonene, terpene-4-ol and terpeneol7. Essential oil from leaves: e.g. β- caryophylline (31%), germacrene (12%) and γ-cadinene(6%).	OK	3
Pistacia terebinthus L.	Anacardiaceae		bark, gall, leaf			Bark: tannins (14%-25%); gall: tannins (50%-60%); leaf: tannins (9%-10%); Leaf essential oil: e.g. α-pinene (19.97%), sabinene (15.43%), β-pinene (8.57%) , terpinen-4-ol (9.65%),…	OK	1
Pistacia vera L.	Anacardiaceae		bark resin, seed			Resin: triterpene acids: e.g. masticadienolic acid; triterpenes: e.g. beta amyron, dammarendiol; bark and leaf: tannins (up to 50%); seed (nut): polymeric proanthocyanidines	OK	1
Pisum sativum L.	Leguminosae		pod, seed			Lectins in crude plant, destroyed by heating	OK	2
Plantago afra L.	Plantaginaceae	Plantago psyllium L.	husk, seed			Concomitant intake of medicines should be avoided	OK but warning : no concomitant intake of medicines	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Plantago arenaria Waldst. et Kit.	Plantaginaceae		seed	seed		Iridoid glycoside; mucilages	OK	3
Plantago lanceolata L.	Plantaginaceae		aerial part			Iridoid monoterpenes, mucilages, flavonoids, caffeic acid esters, tannins, hydrocoumarins, saponins, silicic acid	OK	3
Plantago major L.	Plantaginaceae		aerial part			Polysaccharides, lipids, caffeic acid derivatives, flavonoids, iridoid glycosides and terpenoids.	OK	3
Plantago media L.	Plantaginaceae		whole plant			Iridoids: e.g. aucibin (root, leaf (0.19%), seed: (0.13%)); flavonoids: e.g. luteolin	OK	1
Plantago orbignyana Steinh. ex Decne.	Plantaginaceae	Plantago ovata Phil.	seed			Mucilage, fatty oil	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Plectranthus barbatus Andrews	Lamiaceae	Coleus barbatus (Andrews) Benth	leaf, root, tuber	root	Bicyclic diterpene with cyclic ether and lactone: forskolin	Not clear whether forskoline present. Forskoline is badly soluble in water	OK but the amount of forskolin must be determined. Warning when under heart mediciation and/or anticoagulant therapy.	3
Pogostemon cablin (Blanco) Benth.	Lamiaceae		leaf			Patchouli	OK	2
Polygala vulgaris L.	Polygalaceae	Polygala comosa Schkuhr	aerial part			Bidesmosidic saponins (aucuparine derivatives) and xanthones. Prolonged use or high doses may lead to gastro-intestinal irritation.	OK	1
Polygala tenuifolia Willd.	Polygalaceae		root			Triterpenoid saponins: e.g. onjisaponins A, E, F, and G. Similar composition to P.senega. Prolonged use or high doses may lead to gastro-intestinal irritation.	OK	2
Polygonatum odoratum (Mill.) Druce	Lilliaceae		rhizome			Steroidal saponines; chelidonic acid. No cardiac glycosides present as in older literature stated	OK	1
Polygonum aviculare L.	Asparagaceae		aerial part			Flavonoids: e.g. avicularine, hyperoside; gallotannins (3.6%);	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Populus alba L.	Salicaceae		bark,bud, leaf	bark	Salicylates: salicin glycosides;	Bud and leaf: polyphenolic compounds e.g. 7- 0 - methylaromadendrin	OK but the amount of salicylates must be determined	1
Populus balsamifera L.	Salicaceae		bark,bud, leaf	bark	Salicylates: salicin glycoside;	Bud: sesquiterpenes, n-alkanes, aliphatic acids, cinnamic esters; leaf: phenolic derivatives	OK but the amount of salicylates must be determined	1
Populus nigra L.	Salicaceae		bark, bud			Buds : benzoylsalicin. Bark: salicylalcohol glycoside: salicin (2.4%), salicortin and their benzoyl derivatives: e.g. populin, tremulodin	OK but the amount of salycilates must be determined	3
Populus tremula L.	Salicaceae		bark, bud			Buds : benzoylsalicin Bark: salicylalcohol glycoside: salicin (2.4%), salicortin and their benzoyl derivatives: e.g. populin, tremulodin. Might interfere with anticoagulants.	OK but the amount of salicins must be determined	2
Populus tremuloides Michx.	Salicaceae		bark, bud			Buds : benzoylsalicin. Bark: salicylalcohol glycoside: salicin (2.4%), salicortin and their benzoyl derivatives: e.g. populin, tremulodin	OK but the amount of salycilates must be determined	3
Porphyra umbilicalis Kützing	Bangiaceae		thallus			High content of proteins and vitamines. Food. Iodine content to be controlled.	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Portulaca oleracea L.	Portulacaceae		aerial part	aerial part	Oxalic acid (1.7%)	Betalaine alkaloids (300 ppm): betanidine, betanine, oleracine I, II. Biogenic amines : e.g. dopa, dopamine, noradrenalin (2.5mg/g fresh herb). Fatty oil: omega 3. Mucilages. Vitamins.	OK	3
Potentilla anserina L.	Rosaceae		whole plant			Rich in tannins (1% to 5%)	OK	3
Potentilla argentea L.	Rosaceae		whole plant			Aerial part: tannins, proanthocyanidins, flavonoids e.g. quercetin. Rhizoma: tannins: ellagic (10-15% e.g. agrimoniine, pedunculagine, levigatines) and condensed: catechins polymers(15-20%); triterpenic acids (ursolic, tormentillic derivatives). Hypoglycaemic activity. Human DNA topoisomerase inhibitors and cytotoxic effect.	OK but warning when under antidiabetic treatment	1
Potentilla erecta (L.) Raeusch.	Rosaceae		whole plant			Rich in tannins (15 to 20%)	OK	3
Potentilla reptans L.	Rosaceae		rhizoma			Tannins: ellagic (10-15% e.g. agrimoniine, pedunculagine, levigatines) and condensed: catechins polymers (15-20%); triterpenic acids (ursolic, tormentillic)	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Prangos pabularia Lindl.	Apiaceae		fruit	fruit	Coumarins: e.g. osthol, isoimperatorin. Furanocoumarins : e.g. xanthotoxin, aviprin	Fruit essential oil (2%)	OK but the amount of furocoumarins must be determined	1
Primula elatior Hill	Primulaceae		flower, root			Flower: polyphenolic derivatives (flavonoids) . Flower and root: triterpenic saponins (type oleane:2- 10%) e.g. primulic acid, primacrosaponine, priverosaponins	OK	1
Primula officinalis (L.) Hill.	Primulaceae		leaf			Root: triterpenic saponins (5%-10%): e.g. primulic acid, acetylpriverogenins. Aerial part: benzoquinone: primine (2-methoxy-6-n-pentyl-p-benzoquinone). Primine is responsible for contact dermatitis.	OK	1
Primula veris L.	Primulaceae		flower, root			Triterpenesaponins (4 - 10%), amount during spring twice as high as in autumn. No harm when dose respected. Prolonged use or high doses may lead to gastro-intestinal irritation.	OK	2
Protium guianense (Aubl.) Marchand	Burseraceae		oleo resin	oleo resin	Essential oil: e.g. dill apiole (	Rich in alpha pinene. Some oils contain up to 25% dill apiole which is an abortifacient. Used as incense. Smoke is inhaled as analgesic.	OK but when the essential oil is used the amount od dill apiole must be determined	1
Protium heptaphyllum (Aubl.) Marchand	Burseraceae		oleo resin, wood	oleo resin	Essential oil: e.g. dill apiole (	Rich in alpha pinene. Some oils contain up to 25% dill apiole which is an abortifacient. used as incense. Smoke is inhaled as analgesic. Wood formerly used to treat syphilis	OK but when the essential oil is used the amount od dill apiole must be determined	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Protium icicariba (DC.) Marchand	Burseraceae		oleo resin	oleo resin	Essential oil: e.g. dill apiole (	Rich in alpha pinene. Some oils contain up to 25% dill apiole which is an abortifacient. Used as incense. Smoke is inhaled as analgesic	OK but when the essential oil is used the amount od dill apiole must be determined	1
Prunella vulgaris L.	Lamiaceae (Labiatae)		aerial part			Antioestrogenic activity probably by activating the aryl hydrocarbon receptor inducing a faster breakdown of estrogen. Compounds not identified.	OK but warning when taking contraceptives.	3
Prunus africana (Hook. f.) kalkman	Rosaceae	Pygeum africanum Hook. f.	bark	bark, leaf, fruit	Cyanogenic glycosides : e.g. amygdalin	Sterols (sitosterols) and triterpenes (ursolic cid); on cites list; not to take by pregnant women, children and adolescents and children belos 12 y	OK	2
Prunus amygdalus Batsch.	Rosaceae	Prunus dulcis (Mill.) D. A. Webb	seed, oil	seed	Cyanogenic glycosides: e.g. prunasin (300-3400 mg HCN/kg)		OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Prunus armeniaca L.	Rosaceae		fruit, leaf, seed	seed	Cyanogenic glucoside: e.g. amygdalin (up to 6.5%)		OK	3
Prunus avium (L.) L.	Rosaceae		fruit, stalk	seed	Cyanogenic glycosides : e.g. amygdalin		OK	2
Prunus domestica L.	Rosaceae		bark, bud, flower, fruit, leaf	seed	Cyanogenic diglucoside : (R)-amygdalin and monoglucoside: (R)-prunasin		OK	3
Prunus dulcis (Mill.) D. A. Webb	Rosaceae	Amygdalus communis L.				Almond	OK	1
Prunus laurocerasus L.	Rosaceae		leaf	leaf, fruit	Cyanogenic glycosides,: prunasin (0.5-2.5%), 50-210 mg HCN/100 gm)		OK	1
Prunus persica (L.) Stokes	Rosaceae		fruit, leaf, seed	seed	Cyanogenic glycosides: e.g. prunasin (470 mg HCN/Kg)		OK	3
Prunus serotina Ehrh.	Rosaceae		bark, leaf	bark, leaf, seed	Cyanogenic glycosides: (R)-amygdalin (seeds) and (R)-prunasin (leaves). levels of cyanide in the leaves as high as 1600-2120 ppm have been detected) .	Teratogenic effects of Prunus serotina (leaves and bark) have been reported in swine. Compound(s) not defined but may be due to cyanogenic glycosides.	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Prunus spinosa L.	Rosaceae		aerial part			Flavonol heterosides, coumarins, proanthoyanidins, traces of cyanogenic glycosides	OK	3
Psidium guajava L.	Myrtaceae		bark, fruit, leaf, root			Leaf, bar, root : tannins (10%-30%). In some publications stem bark is said to contain anthraquinones in others not.	OK	3
Psidium guineense Sw.	Myrtaceae	Psidium araca Rad	fruit, leaf			Tannins; proanthocyanidines No more info on compounds found. Traditionally used for digestive tract	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Pterocarpus erinaceus Poir.	Leguminosae		sap			Flavonoids; isoflavones: e.g. formononetin; No toxicity by oral use of ethanolic stem bark extract.	OK	1
Pterocarpus indicus Willd.	Leguminosae		wood (sap)			Pterocarpanes: e.g. pterocarpin, pterocarpol, pterostilben, pterofuran. Pterostilben possibly responsible for hypoglycemic properties.	OK but warning when under antidiabetic treatment.	1
Pterocarpus marsupium Roxb.	Fabaceae		flower, heart wood, leaf, gum-resin	bark exsudate	Kino tannins in gum-resin	Heartwood rich in flavonoids: e.g. marsupsin, pterosupsin,	OK	2
Pterocarpus officinalis Jacq.	Leguminosae	Pterocarpus draco	resin	seed	Indole alkaloids: e.g. hypophorin	Tannin content of the resin: 34%	OK	1
Pterocarpus santalinus L. f.	Leguminosae		wood			Benzoxantenone derivatives (red pigments): e.g. santalins A and B (red), santalin Y (yellow); Isoflavonoids: e.g.santal, pterocarpine, homopterocarpine ; Stilbene derivatives: e.g.pterostilbene; Volatile oil (traces): e.g. cedrol (cedar camphor (up to 50%), pterocarpol, isopterocarpol, eudesmol	OK	3
Pueraria montana var. lobata (Willd.) Sanjappa & Pradeep	Leguminosae		Flower and root	Root	Isoflavones: e.g. puerarin (60%), daidzein, daidzin	Also malonylesters of the isoflavones are present.	OK but the amount of isoflavones must be determined.	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Pueraria tuberosa (Willd.) DC.	Leguminosae = Fabaceae		flower, root	root	Stem: isoflavones; root: pterocarpans: e.g. tuberosin	Root claimed to have contraceptive properties	OK but the amount of isoflavones and pterocarpanes must be determined	1
Pulmonaria officinalis L.	Boraginaceae		root	whole plant	Pyrrolizidine alkaloids: intermedine, lycopsamine, symphitine		OK but the amount of pyrrolizidine alkaloids must be determined	3
Punica granatum L.	Lythraceae (Punicaceae)		flower, fruit, seed	bark, root bark, pericarp	Pericarp: tannins (25% to 28%): gallotannins: e.g. punicalin (granatine D), punicalagin (granatine C), granatines A –B Bark, root: piperidine alkaloids (rind: 0.4% , root bark: 0.8%): e.g. isopelletierine,N-methylisopelletierine, pseudopelletierine Pericarp: tannins (25% to 28%): gallotannins: e.g. punicalin (granatine D), punicalagin (granatine C), granatines A –B	The press juice of leaves of young plants of Pomegranate contains an alkaloid having a structure similar to that of γ-coniceine (2-n-propyl-Δ1-piperideine), one of the major alkaloids of Hemlock (Conium maculatum L.). The pericarp hydroalcoholic extract is genotoxic in vitro and in vivo.	OK but not for pericarp	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Pyrola rotundifolia L.	Ericaceae		leaf	aerial part	Naphtoquinones: e.g. arbutin, homoarbutin,		OK but the amount of the naphtoquinones must be determined	1
Pyropia tenera (Kjellman) N.Kikuchi & M.Miyata, M.S. Hwang & H.G.Choi	Bangiaceae	Porphyra tenera Kjellman	thallus			Nori (alga)	OK	2
Pyrus communis L.	Rosaceae		bark, fruit, leaf	leaf	Leaf: hydroxyquinone: arbu	Bark: friedelins	OK but the amount of arbitin must be determined	3
Quercus alba L.	Fagaceae		bark, fruit (nut or gland), leaf			Tannins: dehydro and deoxy-ellagitanins, ellagic acids, flavan polymers eg. epicatechol, epigallocatechol	OK	1
Quercus coccifera L.	Fagaceae		bark, fruit (gland), leaf			Tannins: ellagic derivatives (cocciferins, pedunculagin, castalagin, acutissimin) flavan polymers eg. epicatechol, epigallocatechol	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Quercus ilex L.	Fagaceae		bark, fruit (nutgall), leaf			Tannins: ellagic derivatives, flavan polymers eg. epicatechol, epigallocatechol, proanthocyanidin polymers	OK	1
Quercus infectoria G. Olivier	Fagaceae		bark, fruit (nutgall), leaf			Tannins: ellagic, flavan polymers eg. epicatechol, epigallocatechol. Possible CNS depressant effect.	OK	1
Quercus petraea (Matt.) Liebl.	Fagaceae		bark, fruit (gland), leaf			Ellagitannins e.g. pedunculagin, vescalagin, castalagin, acutissimius. Triterpene saponins glycosides: type oleanane	OK	1
Quercus pubescens Willd.	Fagaceae		bark, fruit (nutgall), leaf			Bark: tannins (8%-20%): ellagitannins, flavan polymers eg. epicatechol, epigallocatechol	OK	1
Quercus serrata subsp. serrata	Fagaceae	Quercus glandulifera Blume	bark, fruit (nutgall), leaf			No specific info on chemistry. Probably: ellagitannins, flavan polymers eg. epicatechol, epigallocatechol	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Quercus suber L.	Fagaceae		bark, fruit (nutgall), leaf			Tannins: ellagic, flavan polymers eg. epicatechol, epigallocatechol	OK	1
Quillaja saponaria Molina	Quillajaceae (Rosaceae)	Quillaja smegmadermos DC.	bark	bark	Calciumoxalate (11%)	Triterpenoid saponins (quillaia saponins) 8%-17%. Irritation of mucosa when in high doses over long period.	OK	2
Raphanus raphanistrum subsp. sativus (L.) Domin	Brassicaceae	Raphanus sativus var. niger (Mill.) J.Kern.	whole plant, essential oil	whole plant	Whole plant: glucosinolates e.g. glucoerucun, glucobrassicin, gluconasturtiin; essential oil: allyl- isothiocyanate		OK but the amount of glucosinolates must be determined	1
Raphanus sativus L.	Brassicaceae		whole plant	whole plant	Glucosinolates		OK but the amount of glucosinolates must be determined. Warning not to take during pregnancy.	2
Raphia farinifera (Gaertn.) Hyl.	Arecaceae	Raphia pedunculat	starch (stem pith)			Food	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Rehmannia glutinosa (Gaertn.) DC.	Plantaginaceae		root			Iridoids: e.g. catalpol, rehmanosides, aucubin.	OK	2
Rehmannia glutinosa (Gaertn.) DC.	Plantaginaceae		root			Iridoids: e.g. catalpol, aucubin, rehmanniosides. Terpenoids: e.g. rehmaionosides	OK	3
Rhamnus alpina L.	Rhamnaceae		bark, fruit	bark	Hydroxyanthracene derivatives: emodin, dianthrones		OK but the amount of anthraquinones must be determined	1
Rhamnus cathartica L.	Rhamnaceae		whole plant	whole plant	Hydroxyanthracene derivatives: cascarosides and free anthraquinones: e.g. emodin, aloe-emodin		OK but the amount of anthraquinones must be determined	3
Rheum australe D. Don	Polygonaceae	Rheum emodii Wall. ex Meisn.	leaf, rhizoma	leaf, rhizoma	Rhizome: 1,8-hydroxyanthracene derivatives: e.g. emodin, alo-emodin, rheine; leaf: oxalic acid	Purgative at high dosage	OK but the amount of anthraquinones should be determined	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Rheum officinale Baill.	Polygonaceae		radix, rhizome	radix, rhizome	Hydroxyanthracene derivatives: (2.2%- 6%): anthraquinones: rhein, emodin,..; dianthrones: sennosides A, B, palmidin C,…	Purgative at high dosage	OK but the amount of anthraquinones must be determined	3
Rheum palmatum L.	Polygonaceae		root, rhizoma	root, rhizoma	Hydroxyanthracene derivatives: (2.2%- 6%): anthraquinones: rhein, emodin,..; dianthrones: sennosides A, B, palmidin C,…	Different other Rheum species are used from which the most important is Rheum tanguticum.	OK but the amount of anthraquinones must be determined	2
Rheum rhabarbarum L.	Polygonaceae	Rheum undulatum L.	rhizoma, stalk	rhizome, stalk	Rhizome: 1,8-hydroxyanthracene derivatives e.g. emodin, alo-emodin, rheine; hydroxystilbenes: e.g. rhaponticoside. Stalk: oxalic acid, methyl-branched alcohols e.g. 2-methylbutenol and acids	Oxalic acid as kidney irritant. Anthraquinones: laxative but purgative at high dosage	OK but the amount of anthraquinones must be determined	1
Rheum rhaponticum L.	Polygonaceae		leaf, rhizome	leaf, rhizome	Rhizome: 1,8-hydroxyanthracene derivatives e.g. emodin, alo-emodin, rheine; hydroxystilbenes :e.g. Rhaponticoside; leaf: oxalic acid	Laxative, purgative at high dosage	OK but the amount of anthraquinones must be determined	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Rheum x hybridum Murray	Polygonaceae	Rheum x rhabarbarum L.	leaf, rhizoma	leaf, rhizoma	1,8-hydroxyanthracene derivatives e.g. emodin, alo-emodin, rheine; hydroxystilbenes: e.g. rhaponticoside; leaf: oxalic acid		OK but the amount of anthraquinones must be determined	1
Rhodiola crenulata (Hook. f. & Thomson) Ohba	Crassulaceae		root, essential oil			Phenylpropanoid glycoside e.g.salidroside, dihydrobenzofuran neo-lignans glycosides, polysaccharides, gallic acid, triterpens and sterols. Essential oil: monoterpenes e.g. geraniol (53.3%), citronellol (5.3%), linalol (2.4%)	OK	1
Rhus aromatica Aiton	Anacardiaceae		root bark	essential oil	Root bark essential oil (0.01%-0.07%): e.g. safrol	Tannins (8%).	OK but when the essential oil is used the amount of safrole must be determined	1
Rhus coriaria L.	Anacardiaceae		leaf			Leaf tannins: 21%-28%	OK	1
Rhus glabra L.	Anacardiaceae		fruit			Tannins	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Ribes nigrum L.	Grossulariaceae		bud, fruit, leaf			Leaf: flavonoids, prodelphinidins. Fruit: anthocyanins (250mg/100 g fres	OK	3
Ribes rubrum L.	Grossulariaceae		fruit, leaf			fruit: phenolic compounds anthocyanins, proanthocyanidins, flavonol glycosides e.g. rubrumin, dehydrorubrumin. Leaf: tannins. Fruit edible (organic acids, vitamine C). Leaf: no toxicity info	OK	1
Robinia pseudoacacia L.	Leguminosae (Fabaceae)		flower, seed	bark, seed	Seed and bark: toxalbumins: robin (1,6% in bark), phasin	Toxalbumins destroyed by heating	OK	2
Roccella phycopsis Ach.	Rocellaceae	Roccella tinctoria D	thallus		Presence of usnic acid?	Lichen. Contains para-depsides: e.g. erythrin, lecanoric acid, roccellic acid	OK but the amount of usnic acid must be determined	1
Rosa canina L.	Rosaceae		flower, fruit, leaf, seed			Flower: essential oil (0.02%) with mono- sesqui and diterpenes. Fruit: vitamin C, carotenoids, anthocyanes, flavonoids; leaf: catechine, gallocatechines, ellagitannins; root: triterpenesaponins	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Rosa gallica L.	Rosaceae		flower, fruit, leaf, seed			Flower: essential oil (0.02%) with mono- sesqui and diterpenes. Fruit: vitamin C, carotenoids, anthocyanes, flavonoids; leaf: catechine, gallocatechines, ellagitannins; root: triterpenesaponins	OK	3
Rosa moschata Mill.	Rosaceae		flower, fruit, leaf, seed			Flower: essential oil (0.02%) with mono- sesqui and diterpenes. Fruit: vitamin C, carotenoids, anthocyanes, flavonoids; leaf: catechine, gallocatechines, ellagitannins; root: triterpenesaponins	OK	3
Rosa rubiginosa L.	Rosaceae		flower, fruit, leaf				OK	2
Rosa x damascena Mill.	Rosaceae	Rosa gallica f. trigintipetala Dieck	flower, fruit, leaf				OK	2
Rosmarinus officinalis L.	Lamiaceae		aerial part	aerial part	Essential oil from the herb: bicyclic monoterpenes: e.g. camphor and monoterpene etheroxide: 1,8-cineole (13 to 31%) . Essential oil from the leaf: monoterpene etheroxide: 1,8-cineole (11.2-47%) and bicyclic monoterpenes: e.g. camphor (13-31%) and monocyclic monoterpene ketone: pulegone (0.98%)		OK but when using the essential oil the amount of 1,8 cineole, camphor and pulegone must be determined	3
Rubia cordifolia L.	Rubiaceae		root		1,3-Dihydroxy-2-hydroxymethyl-9,10-anthraquinone: lucidin		OK but the amount of lucidin must be detremined	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Rubus caesius L.	Rosaceae		aerial part			Food	OK	3
Rubus chingii var. suavissimus (S. Lee) L.T. Lu	Rosaceae	Rubus suavissimus S. Lee	fruit			Triterpenic derivatives e.g. oleanic, ursolic acids. Diterpene glycosides. No specific references on var. suavissimus but only chingii.	OK	1
Rubus fruticosus L.	Rosaceae		whole plant			Fruit: anthocyans: e.g. cyanidin-3-glucoside, cyanidin-3-rutinoside, cyanidin-3-xyloside, cyanidin-3- malonylglucoside. Phenolics: e.g. ellagic acid, catechin, epicatechin, rutin (quercetin-3-rutinoside), and quercetin.	OK	3
Rubus idaeus L.	Rosaceae		leaf, fruit			Fruit: vitamins, ellagitannins. Leaf: ellagitannins	OK. Warning not to take during pregnancy.	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Rumex acetosa L.	Polygonaceae		whole plant	whole plant	Leaf: oxalates (0.3%); root: anthraquinones: e.g. emodin, physcion, rhein	Leaf: tannins (7%-15%). Leaf: some anthraquinones detected.	OK but the amount of anthraquinones must be determined	3
Rumex acetosella L.	Polygonaceae		whole plant	whole plant	Leaf: oxalates (0.3%); root: anthraquinones: e.g. emodin, physcion, rhein	Leaf: tannins (4%-10%). Leaf: some anthraquinones detected.	OK but the amount of anthraquinones must be determined	3
Rumex alpinus L.	Polygonaceae		whole plant	whole plant	Oxalic acid; anthraquinone derivatives: e.g. emodin, physcion		OK but the amount of anthraquinones must be determined	1
Rumex conglomeratus Murray	Polygonaceae	Rumex acutus Sm.	whole plant	whole plant	Oxalic acid; hydroxymethylanthraquinones		OK but the amount of anthraquinones must be determined	1
Rumex crispus L.	Polygonaceae		whole plant	whole plant	Leaf: oxalates; root: anthraquinones (1%-2.5%): e.g. emodin, physcion, rhein	Leaf: tannins (3%-6%). Leaf: some anthraquinones detected.	OK but the amount of anthraquinones must be determined	3
Rumex longifolius DC.	Polygonaceae		whole plant	whole plant	oxalic acid; anthraquinone derivatives		OK but the amount of anthraquinones should be determined	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Rumex obtusifolius L.	Polygonaceae		whole plant	whole plant	Calciumoxalate, ; anthraquinone derivatives: e.g. emodine, physcion, aloe-emodin	Tannins (12%-20%)	OK but the amount of anthraquinones should be determined	1
Rumex patientia L.	Polygonaceae		whole plant	whole plant	Root: anthraquinones: e.g. nepodin , chrysophanol, emodin, physcion		OK but the amount of anthraquinones must be determined	3
Rumex sanguineus L.	Polygonaceae		whole plant	whole plant	Oxalic acid, anthraquinone derivatives: e.g. chrysophanol;		OK but the amount of anthraquinones must be determined	1
Ruscus aculeatus L.	Asparagaceae		whole plant	rhizome		Steroidal saponins: e.g; ruscogenin, neoruscogenin.	OK	3
Ruscus hypoglossum L.	Asparagaceae		leaf, rhizome			Steroidal glycosides	OK	1
Sabatia angularis (L.) Pursh	Gentiananceae		aerial part			Iridoids: gentiopicroside, erythrocentaurin, gentiopicrin	OK	1
Saccharina latissima (L.) C.E.Lane, C.Mayes, Druehl & G.W.Saunders	Laminariaceae	Laminaria saccharina (L.) J.V. Lam.	thallus			Fucoidans, mannitol, alginic acid, sum lipids	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Saccharum officinarum L.	Poaceae (Gramineae)		branch; sap				OK	2
Salix alba L.	Salicaceae		bark, bud, flower, leaf	bark, leaf	Salicylates: e.g. salicin, salicortin	Salix intake possibly associated with Reyes syndrome ? May induce or increase pre-natal jaundice. Possible interference with anticoagulants.	OK but the amount of salicylates must be determined. Warning in case of anticoagulant intake	3
Salix caprea L.	Salicaceae		bark		Salicylates: e.g. salicin, salicortin, tremulacin	Salix intake possibly associated with Reyes syndrome ? May induce or increase pre-natal jaundice. Possible interference with anticoagulants.	OK but the amount of salicylates must be determined. Warning in case of anticoagulant intake	1
Salix fragilis L.	Salicaceae		bark, leaf		Salicylic glycosides : eg salicortin, acetylsalicortin, tremulacin in concentration from 1% - 8%	Salix intake possibly associated with Reyes syndrome ? May induce or increase pre-natal jaundice. Possible interference with anticoagulants.	OK but the amount of salicylates must be determined. Warning in case of anticoagulant intake	2
Salix pentandra L.	Salicaceae		bark, leaf		Salicylic glycosides : eg salicortin, acetylsalicortin, tremulacin in concentration from 3% - 8%	Salix intake possibly associated with Reyes syndrome ? May induce or increase pre-natal jaundice. Possible interference with anticoagulants.	OK but the amount of salicylates must be determined. Warning in case of anticoagulant intake	2
Salix purpurea L.	Salicaceae		bark, leaf	bark, leaf	Salicylates: e.g. salicin, salicortin		OK but the amount of salicylates must be determined. Warning in case of anticoagulant intake	3
Salvia miltiorrhiza Bunge	Lamiaceae		leaf, root	leaf, root		Diterpenes: tanshinones: e.g. cryptotanshinone, isotanshinone,	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Salvia officinalis L.	Lamiaceae		aerial part	aerial part	Essential oil from leaf: bicyclic monoterpenes: e.g.alpha-thujone (12-65%), beta-thujone (1.2-35.6%) (total thujone content 30-60%), camphor (4.4-30%) and monoterpene etheroxide: 1,8-cineole (8-22.5%); phenylpropanoids: e.g. methylchavicol		OK but when the essential oil is used the amount of thujones, 1,8 cineole, camphor and methylchavicol must be determined	3
Salvia officinalis subsp. lavandulifolia (Vahl) Gams	Lamiaceae	Salvia lavandulifolia Vahl	aerial part; essential oil	aerial part	Essential oil: e.g. monoterpene etheroxide: 1,8 cineole; bicyclic monoterpenes: e.g. camphor, thujones (0.5%)		OK but when EO is used the amount of 1,8 cineole, camphor and thujones must be determined	3
Salvia pratensis L.	Lamiaceae		whole plant; essential oil	leaf, stem	Leaf and stem: essential oil (0.073%): 1,8 cineole (leaf: 8%, stem: 10%), thujones (leaf alpha thujone: 5.7%, beta thujone: 10,8%, stem: alpha thujone: 0.9%, beta thujone:2%), camphor (1%)	Root; abietane diterpenoids. Aerial part: polyphenolic compounds e.g; flavonoids	OK but when EO is used the amount of 1,8 cineole, thujones and camphor must be determined	1
Salvia sclarea L.	Lamiaceae (Labiatae)		aerial part	aerial part	Essential oil from the herb: monoterpene etheroxide: 1,8 cineole (3.23%) and bicyclic monoterpenes: e.g. camphor (1%). Essential oil from the flower: 1,8 cineole (traces), camphor.		OK but when the EO is used the amount of 1,8 cineole and camphor must be determined	2
Sambucus canadensis L.	Adoxaceae		bark, fruit, leaf	bark, fruit, leaf	Aerial part: cyanogenic glycosides: eg sambunigrin	Fresh plant: vomiting and laxative. Sambunigrin destroyed by heating.	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Sambucus ebulus L.	Adoxaceae		whole plant	aerial part	Aerial part: cyanogenic glycosides: eg sambunigrin	Proteins: nigrine b, ebuline I: Ribosome inactivating proteins. Fresh plant: vomiting, laxative.	OK	1
Sambucus nigra L.	Adoxaceae		whole plant	whole plant	Cyanogenic glycoside: S-sambunigrin (3 to 17 mg HCN /100 g fresh weight in leaf and 3 mg HCN / 100g of fruit)	Presence of lectins in the branches	OK	3
Sanguisorba minor Scop.	Rosaceae		aerial part			Flavonoids, tannins, triterpene glycosides. Food	OK	3
Sanguisorba officinalis L.	Rosaceae		whole plant			Flavonoids, ellagitannins (8%), triterpene glycosides. Sterols	OK	3
Sanicula elata Buch.-Ham. ex D. Don	Apiaceae	Sanicula europaea L.	leaf, root			Triterpenesaponins: e.g. saniculosides	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Santalum album L.	Santalaceae		bark, wood; essential oil			Wood essential oil (3-5%): e.g. santalols (cis alpha-santalol (50%). cis-beta-santalol (20%). epi-beta-santalol (4%)	OK. Warning not to take in case of kidney disease	3
Santolina chamaecyparissus L.	Asteraceae		flowering top, leaf, seed	aerial part	Essential oil : camphor (2%), 1,8 cineole, artemisia ketone (up to 35%),	The amount of camphor can go up to 25% according the cultivation place	OK but when using the EO the amount of camphor and 1,8 cineole must be determined.	2
Saponaria officinalis L.	Caryophyllaceae		whole plant			Triterpenoid saponins: saponarioside A and B (major) and others. These saponins are also called sapotoxins as they are among the most irritating saponins.	OK but the amount of saponins must be determined	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Saposhnikovia divaricata (Turcz.) Schischk	Apiaceae	Siler divaricatum (Turcz.) Benth. & Hook. f.	root	root	Root essential oil (0.1%) : furanocoumarins : e.g. psoralen, bergapten	Seed: hyperoside (8%);	OK but the amount of furocoumarins must be determined	2
Sarcopoterium spinosum (L.) Spach	Rosaceae	Poterium spinosum	root bark			Catechin and epicatechines considered responsible for hypoglycemic effect	OK Warning when under antidiabetic treatment	1
Sargassum fusiforme (Harvey) Setchell	Sargassaceae	Hizikia fusiformis (Harvey) Okamura	thallus	thallus	Potentially toxic inorganic arsenicum amount	Hiziki algae may concentrate arsenic	OK	2
Sarracenia purpurea L.	Sarraceniaceae		leaf, rhizome			Iridoid glucoside: morroniside. Flavonoid: hyperoside.	OK	1
Satureja hortensis L.	Lamiaceae		flowering top, seed			Aerial part: essential oil (0.2%-3%) : e.g. carvacrol (67.00%), γ-terpinene (15.3%), and p-cymene (6.73%), α–terpinene (1.29%), β–caryophyllene (1.90%) and β–bisabolene (1.01%)	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Satureja montana L.	Lamiaceae		aerial part	aerial part	Essential oil: monoterpene etheroxide: 1,8-cineole (0.59%) and bicyclic monoterpenes: e.g. camphor (0.21%) and phenylpropanoids: e.g. methyleugenol (25 -415 ppm).		OK but when the essential oil is used the amount of 1,8 cineole, camphor and methyleugenol must be determined	3
Satureja thymbra L.	Lamiaceae		aerial part; essential oil			Essential oil: monoterpenes e.g.: terpineol, para-cymene; sequiterpenes e.g. caryophyllene; phenols e.g.: thymol, carvacrol	OK	1
Saussurea costus (Falc.) Lipsch.	Asteraceae	Saussurea lappa (Decne.) Sch. Bip.	root			Sesquiterpenelactones: e.g; costunolide, dehydrocostus lactone and cynaropicrin	OK	2
Schinus molle L.	Anacardiaceae		fruit, leaf, resin			There is no urushiol present. Leaf: isoquercitrine 6-O-p-hydroxybenzoaat, 2-O- -L-rhamnopyranosyl-hyperine, 6-O-gallaat, galluszuur, methylgallaat, chlorogeenzuur, 2- -L-rhamnopyranosyl-hyperine, quecetine, 3-O- -D-neohesperidoside, miquelianine, quercetine 3-O- -D-galacturonopyranoside, isoquercetrine, hyperine, isoquecitrine 6-gallaat, hyperine 6-O-gallaat en catechine.	OK	1
Schisandra chinensis (Turcz.) Baill.	Schisandraceae		branch, fruit, leaf			Lignans (deoxyschisandrin, gomisin N, gomisin A, schisandrin, and wuweizisu C)	OK but warning in case of intake of anticoagulants	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Scorzonera hispanica L.	Compositae		root			Food	OK	1
Scrophularia ningpoensis Helmsl.	Scrophulariaceae		root			Iridoids: harpagoside, harpagide,…	OK	2
Scutellaria baicalensis Georgi	Lamiaceae		leaf, root	leaf, root	O-methylated flavone: wogonin	Long term administration of 120 mg of wogonin per kg to rats resulted in heart injury. Wogonin is only present in small amounts in the root.	OK but the amount of wogonin must be determined	2
Scutellaria lateriflora L.	Lamiaceae		whole plant			Often adulterated with Teucrium chamaedys and T canadense. Teucrium is known for hepatotoxicity due to the presence of furano diterpenoid neoclerodanes. S. laterifolia contains flavonoids: baicaleine, baicalin, laterifolin	OK but absence of the phenylpropanoid teucrioside (a marker) must be proven.	1
Secale cereale L.	Poaceae		whole plant				OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Sedum acre L.	Crassulaceae		aerial part	aerial part	Alpha substituted piperidine alkaloids : e.g. sedacrine		OK but the amount of alkaloids must be determined.	3
Sedum album L.	Crassulaceae		leaf		Possible presence of piperic	In some Sedum species presence of alkaloids	OK but the amount of alkaloids must be determined	1
Sedum roseum (L.) Scop.	Crassulaceae	Rhodiola rosea L.	root			Phenylethanoids: e.g. salidroside, tyrosol; phenylpropanoid glycosides: e.g. rosarin, rosavin, rosin; monoterpene: rosiridin	OK	3
Selenicereus grandiflorus (L.) Britton & Rose	Cactaceae	Cereus grandiflorus	flower			Flower: glucosilated flavonoids	OK	1
Sempervivum tectorum L.	Crassulaceae		aerial part				OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Senna alexandrina Mill.	Leguminosae, (Fabaceae)	Cassia acutifolia Delile, Cassia alexandrina (Garsault) Thell., Cassia angustifolia M.Vahl , Cassia senna L., Senna acutifolia (Delile) Batka, Senna alexandrina Garsault, Senna angustifolia (Vahl) Batka.	leaf, pod	leaf, pod	Hydroxyanthraceneglycosides (2.5% in leaves, 2.2% in pods): e.g sennosides,	No toxicity by normal use (emodin and potential emodin too low to be of concern).	OK but the amount of anthraquinones must be determined	3
Senna obtusifolia (L.) H.S.Irwin & Barneby	Fabaceae		whole plant	whole plant	Anthraquinones: e.g. emodin	Seeds deliver cassia gum and are roasted to be used as coffee substitute;	OK but the amount of anthraquinones must be determined	2
Senna occidentalis (L.) Link	Leguminosae		bark, leaf, seed	seed	Unknown phytotoxin	Seeds: hepatoencephalopathy syndrome in horses after ingestion. Alcoholic extract orally to rats in acute and subacute toxicity studies showed no toxicity. Cases of encephalopathy in children described.	OK but not the seeds. The amount of anthraquinones must be defined.	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Senna tora (L.) Roxb.	Leguminosae		leaf, seed		Seed: anthraquinone derivatives: e.g. emodin, chrysobtusin, alatermin, cassiaside…tetramethoxy-methyl-anthraquinones.	leaf: polyphenols, ononitol. Anthraquinones: at high doses purgative	OK but the amount of the anthraquinones should be determined	1
Sequoiadendron giganteum (Lindl.) J.Buchholz	Taxodiaceae		leaf, essential oil	leaf	Leaf: resin and essential oil. Essential oil: monoterpenes: e.g. safrole, 1,8 cineole, O-methyleugenol, elemicin,		OK but when using the EO the amount of safrole, 1,8 cineole, methyleugenol and elemicin must be determined	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Serenoa repens (W.Bartram) Small	Arecaceae	Serenoa serrulata (Michx.) G. Nicholson ; Serenoa serrulata (Michx.) Hook.f. ex B.D.Jacks.; Sabal serrulata (Michx.) Schult.f.	fruit	fruit		Lipido-sterolic fraction: reported anti-androgenic and anti-estrogenic activity.	OK	3
Sesamum indicum L.	Pedaliaceae	Sesamum orientale L.	seed			Fatty oil, lignans, steroids	OK	3
Seseli tortuosum L.	Apiaceae		aerial part			Plant contains coumarin derivatives: campestrinol, tortuosin , tortuosinin, tortuosinol,tortuosidin. Essential oil: e.g. α-pinene (35.9%), sabinene (8.8%), (E)-sesquilavandulol (8.4%) and β-pinene (7.0%).	OK	1
Sigesbeckia orientalis L.	Compositae	Sigesbeckia serrata DC.	leaf, root			Diterpenoids: e.g. orientalin A, and B	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Silaum silaus (L.) Shinz Et Thell.	Apiaceae		fruit, root	fruit	Essential oil: e.g. myristicin (major compound)	Root: phtalides.	OK but when the essential oil is used the amount of myrisiticin must be determined	1
Silybum marianum (L.) Gaertn.	Compositae		aerial part			Herb: flavonoids, steroids, polyynes, organic acids. Seed: flavonolignans: sylimarin: e.g. silibinin, isosilibinin, silicristin and silidianin	OK	3
Simarouba amara Aubl.	Simaroubaceae		cortex	cortex	Quassinoids: e.g. acetylglaucarubine, glaucarubinone	Some toxicity from the wood in dogs and horses	OK but the amount of quassinoids must be determined	1
Simmondsia chinensis (Link) C.K. Schneid.	Simmondsiaceae		seed	seed	Nitrile derivatives: e.g. simmondsin	Not to be used by children adolescents and pregnant women: very strong inhibitor of angiogenesis.	OK but the amount of simmondsin must be determined. May not be used by children, adolescents and pregnant women.	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Siraitia grosvenorii (Swingle) C.Jeffrey ex A.M.Lu & Zhi Y.Zhang	Cucurbitaceae	Momordica grosvenori Swingle	fruit			Triterpenoid glycosides (mogrosides)		3
Sisymbrium officinale (L) Scop.	Brassicaceae	Erysimum officinale L.	aerial part	aerial part	Young leaves: cardioactive steroid glycosides (0.05%): e.g. corchoroside and helveticoside; glucosinolates: e.g. sinigrin, glucoputranjivin, gluconapin, glucocochlearin, glucocheirolin, glucobrassicin and neoglucobrassicin.		OK but the amount of cardioactive steroid glycosides and glucosinolates must be determined	3
Sium latifolium L.	Apiaceae		aerial part	aerial part	Essential oil (7%): polyacetylenes	These polyacetylenes cause gastroenteritis, vomiting, diarrhoea, weakness, nausea, bradycardia and muscle paralysis. Toxic to sheep causing acute gastro-enteritis. Cattle show signs of stupor and sometimes they suddenly die.	OK but not for essential oil	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Smilax aristolochiifolia Mill.	Smilacaceae	Smilax medica Schltdl. et Cham.	rhizome, root			Steroidal saponins (0.5%-3%): e.g. disporoside A	OK	3
Smilax aspera L.	Smilacaceae (Liliaceae)		rhizome, root, shootroot			Presence of steroidal saponins: e.g. curillin G, asparagoside E, asparoside B that are poorly absorbed	OK	3
Smilax china L.	Smilacaceae		whole plant			Steroidal saponins; catechins,	OK	3
Smilax glabra Roxb.	Smilacaceae		rhizome, root			Flavonol glucosides: e.g. isoengetitin, isoastilbin and astilbin. Steroidal saponins: e.g. smilagenin. High dose of saponins and long term use might irritate gastrointestinal system.	OK	2
Smilax officinalis Kunth	Smilacaceae		root			Steroidal saponins: sarsaporin,parallin, sarsasapogenin, neotigogenin that are poorly absorbed	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Smilax purhampuy Ruiz	Smilacaceae	Smilax febrifuga Kunth	rhizome, root			Steroidal saponins	OK	3
Smilax regelii Killip & C.V. Morton	Smilacaceae		rhizome, root			Steroidal saponins	OK	3
Solanum melongena L.	Solanaceae	Solanum ovigerum Dun.	fruit, root	whole plant, unripe fruit	Glycosidic steroidal alkaloids: e.g. solanine , solasodine	The ripe fruit contains only traces of alkaloids and is consumed as food (eggplant)	OK	3
Solanum tuberosum L.	Solanaceae		tuber	tuber	Glycosidic steroidal alkaloids: solanine in shoot and green part		OK	3
Solidago virgaurea L.	Compositae		aerial part			Flavonoids (1.4%), anthocyanidins, saponins (2.4%) , phenolic glucosides, diterpenes, phenol carboxylic acids, catechols (10 – 15%), polysaccharides.	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Sorbus aucuparia L.	Rosaceae		aerial part	seed	Cyanogenic glycosides		OK	3
Sorghum bicolor (L.) Moench	Poaceae		grain, young shoot	shoot	Shoot: cyanogenic derivatives (HCN: 240mg/100g)		OK	1
Spatholobus suberectus Dunn.	Leguminosae		stem		Isoflavones: e.g. formononetin, daidzein, calycosin		OK but the amount of isoflavones must be determined	2
Spergularia rubra (L.) J.Presl & C. Presl.	Caryophyllaceae		aerial part			Non-acylated C-glycosyl flavones (38%), C-glycosyl flavones acylated with aromatic acids (36%), C-glycosyl flavones acylated with aliphatic acids (13%) and 10% corresponded to C-glycosyl flavones with a mixed acylation. Organic acids: oxalic, citric, malic, quinic and fumaric acids and fatty acids: azelaic, myristic, palmitic, linoleic, linolenic and stearic acids.	OK. Warning when under antidiabetic treatment	1
Spinacia oleracea L.	Amaranthaceae		leaf	leaf	Oxalic acid (1%)		OK	3
Spirulina major Kützing ex Gomont	Pseudanabaenaceae	Spirulina major Kützing	single cell (algae)			Proteins, phytocyanins.	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Spirulina maxima (Setchell & Gardner) Geitler	Pseudanabaenaceae	Arthrospira maxima Setchell & Gardner	single cell alga				OK	2
Spirulina platensis (Gomont) Geitler	Pseudanabaenaceae		single cell alga				OK	2
Stachys officinalis (L.) Trevis.	Lamiaceae	Betonica officinalis L.	aerial part			Leaf: phenylethanoid glycosides: e.g. betonyosides A-F. Roots: diterpene glycoside.g. betonicosides A-D	OK	3
Stachys recta L.	Lamiaceae		aerial part			Iridoids: e.g. ajugoside, aucubin, harpagide derivatives. Flavonoids and acylated flavonoids	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Stachys sylvatica L.	Lamiaceae		aerial part			Aerial part: essential oil (0.001-0.007%): e.g. pinenes		1
Stellaria media (L.) Vill.	Caryophyllaceae		aerial part			Rich in vitamins, minerals, flavonoids, triterpenoids, gamma-linolenic-acid, phenols and beta carotene	OK	1
Stemmacantha carthamoides (Willd.) Dittrich	Asteraceae	Rhaponticum carthamoides (Willd.) Iljin	root			Ecdysteroids; polypodines A and B. Synonym: Leuzea carthamoides, Rhaponticum carthamoides.	OK	2
Styphnolobium japonicum (L.) Schott	Leguminosae (Fabaceae)	Sophora japonica L.	leaf, flower	pod, seed	Seed: quinolizidine alkaloids: e.g. cytisine, N-methyl cytisine, matrine, sophorine	Pods: abortifacient effect reported. Seed highly toxic. Flower is a source of rutin	OK but preparation should be free of alkaloids	2
Styrax benzoides Craib.	Styracaceae		balsamic resin			Benzoic acid (15-45 %) and coniferylbenzoate (15-60%), vanillin (<5%), benzyl benzoate (<2%), 2-hydroxy-1-phenylethanone and 1-(4-hydroxy-3-methoxyphenyl)-2-propanone. Highly allergenic.	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Styrax tonkinensis (Pierre) Craib ex Hartwich	Styracaceae		balsamic resin			Benzoic acid (15-45 %) and coniferylbenzoate (15-60%), vanillin (<5%), benzyl benzoate (<2%), 2-hydroxy-1-phenylethanone and 1-(4-hydroxy-3-methoxyphenyl)-2-propanone. Highly allergenic.	OK	1
Symplocarpus foetidus (L.) Salisb. ex W.Barton	Araceae	Spathyema foetida	leaf, root	leaf, root	Leaf, root: calciumoxalate. Root: indole alkaloids: biogenic amines: e.g. tryptamine derivatives	Endangered plant.	OK	1
Syringa vulgaris L.	Oleaceae		aerial part			Fliederoside, oleuropein, lilacoside, rutin, syringin (eleutheroside B), acteoside, echinacoside	OK	1
Syzygium aromaticum (L.) Merr.	Myrtaceae	Caryophyllus aromaticus L., Eugenia caryophyllata Thunb. (nom. illeg.) Mansfeld	flower bud (clove)	flower bud (clove)	Essential oil: phenylpropanoids: e.g. methylchavicol (59.3%), methyleugenol (310-340 ppm)		OK but when using the essential oil the amount of methylchavicol and methyleugenol must be determined	3
Syzygium cumini (L.) Skeels	Myrtaceae		bark, fruit,leaf,seed			Bark :ellagitannins, ferlic acid, lignans e.g. cuminiresinol, syzygiresinols A,B. Fruit: ellagitannins, anthocyanins peptidoglycans. Leaf essential oil (0.04%): epicarveol, myrtenol.	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Syzygium jambos (L.) Alston	Myrtaceae		fruit, leaf	whole plant	Bark: alkaloid: jambosine; bark, leaf, root, seed: unknwon amount of cyanogenic glycosides	Polyphenols: flavonoid glycosides: e.g. myristicin; dihydrochalcones: e.g. phloretin, myrigalone; hydrolyzable tannins (12%)	OK	1
Syzygium malaccense (L.) Merr. Et L. M. Perry.	Myrtaceae		leaf			phenolic derivatives: flavonoids e.g. myricitrin, mearnsitrin; catechin derivatives	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Tagetes erecta L.	Compositae (Asteraceae)		aerial part	whole plant	Flower, leaf, root: polyines : e.g. alpha-terthienyl. Essential oil from flower: tagetone (50-60%), furocoumarins (?), methyleugenol (?)	Alpha-terthienyl is considered to be the phototoxic principle.	OK but when using EO the amount of alpha-terthienyl must be determined	3
Tagetes minuta L.	Compositae		aerial part			Root: polyacetylenes: thiophene derivatives; flowers rich in carotenoids	OK	1
Tamarindus indica L.	Leguminosae		fruit			Xyloglucan oligosaccharides, galactoxyloglucan polysaccharides; tartaric acid, citric acid, malic acid	OK	3
Tamarix gallica L.	Tamaricaceae		bark, bud, gum				OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Tanacetum balsamita L.	Compositae		aerial part		Essential oil from the aerial parts at full flowering stage: monocyclic monoterpene ketone: carvone (51%); bicyclic monoterpenes: beta-thujone (20.8%), alpha-thujone (3.2%); monoterpene etheroxide: 1,8-cineole (4.4%)		OK but when the essential oil is used the amount of carvone, thujones and 1,8 cineole must be determined	1
Tanacetum parthenium (L.) Sch. Bip.	Compositae		aerial part	aerial part	Sesquiterpene lactone: parthenolide. Essential oil: bicyclic monoterpenes: e.g. camphor (42-64%)		OK but the amount of parthenolide must be determined. If the essential oil is used the amount of camphor must be determined.	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Tanacetum vulgare L.	Compositae		aerial part		Essential oil (0.12-0.18%): bicyclic monoterpenes: camphor (up to 90%), thujones (up to 80%) and monoterpene etheroxide: 1,8-cineole.		OK but when the essential oil is used the amount ofcamphor, thujones and 1,8 cineole must be determined	1
Taraxacum officinale Web.	Asteraceae		whole plant				OK	2
Terminalia bellerica (Gaertn.) Roxb.	Combretaceae		fruit			Hydrolyzable tannins (20%-25%)	OK	1
Terminalia chebula Retz.	Combretaceae		fruit				OK	3
Thalictrum flavum L.	Ranunculaceae		root	root	Isoquinoline alkaloids: berberine, pseudoberberine. Bisbenzylisoquinolins: e.g. thalfoetidine		OK but the amount of the alkaloids must be determined	1
Theobroma cacao L.	Malvaceae		seed	seed	Purine alkaloids (3%-4%): e.g. theobromine (2.8%-3.5%), caffeine (0.1%-0.4%); Isoquinoline alkaloids: e.g. salsonlinol. Oxalate: up to 1%.	Catechin tannins (10%). From which 8% oligomeric proanthocyanidines.	OK but the amount of the purine alkaloids must be determined	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Thlaspi arvense L.	Brassicaceae		seed	aerial part	Glucosinolates: e.g. allylglucosinolate	Phytoalexins: e.g.wasalexin A and arvelexin	OK but the amount of the glucosinolates must be determined	1
Thymus satureioides Coss.	Lamiaceae		aerial part			There are numerous chemotypes and therefore the essential oil composition can present a different chemical profile . Example: borneol type: essential oil 1.5% with borneol (36.2%), a-terpineol (17.1%), terpinen-4-ol (6.7%), b-caryophyllene (4.9%), bornyl acetate (3.0%), camphene (4.4%), g-terpinene (4.4%), thymol (2.5%), carvacrol (2.2%), a-pinene (1.7%)	OK	2
Thymus serpyllum L.	Lamiaceae		aerial part	aerial part	Essential oil: monoterpene etheroxide: 1,8-cineole	Essential oil: thymol (58.8%), p-cymene (5.7%), thymol methyl ether (4.0%), borneol (3.8%), sabinene (3.4%), gamma-terpinene (3.4%) and carvacrol methyl ether (3.2%).	OK. Warning not to be used under the age of 12 years. Not during pregnancy.	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Thymus vulgaris L.	Lamiaceae		aerial part			Essential oil containing phenols, predominantly thymol and/or carvacrol, and terpenoids; glycosides of phenolic monoterpenoids, eugenol and aliphatic alcohols; flavonoids, among which thymonin, cirsilineol and 8-methoxy-cirsilineol are characteristic; biphenyl compounds of monoterpenoid origin; caffeic and rosmarinic acid; Different chemotypes exist.	OK. Warning not to be used under the age of 12 years. Not during pregnancy.	3
Thymus zygis L.	Lamiaceae		aerial part	aerial part	Essential oil 0.5-1.2%): e.g. 1,8 cineole (20%), camphor (3.9%).		OK but when using the EO the amount of 1,8 cineole and camphor must be determined.	2
Tilia americana L.	Malvaceae		aerial part			Polyphenols: flavonoides e.g. quercetin, kaempferol…	OK	1
Tilia cordata Mill.	Malvaceae		whole plant			Leaf, flower: arabinogalactans, flavanoids, ellagitannins; bark: tannins, leucoanthocyans; wood: sesquiterpenes: e.g. 7 hydroxy calamenen	OK	3
Tilia platyphyllos Scop.	Malvaceae		whole plant			Leaf, flower: arabinogalactans, flavanoids, ellagitannins; bark: tannins, leucoanthocyans; wood: sesquiterpenes: e.g. 7 hydroxy calamenen	OK	3
Tilia tomentosa Moench	Malvaceae	Tilia argentea DC.	whole plant			Leaf, flower: arabinogalactans, flavanoids, ellagitannins; bark: tannins, leucoanthocyans; wood: sesquiterpenes: e.g. 7 hydroxy calamenen	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Tilia x europaea L.	Malvaceae (Tiliaceae)	Tilia x vulgaris B. Heyne	bark, flower, leaf, seed			Polyphenolic compounds: e.g. flavonoids (kaempferol glycoside..), mucilages, tannins, essential oil (0.038-0.05%). Seed (28-58% fatty oil)	OK	2
Trachyspermum ammi (L.) Sprague	Apiaceae		seed (fruit pod); essential oil			Essential oil (2%-4%) : thymol (35%-60%), dillapiole (9%), γ-terpinene, para-cymene, and α- and β-pinene. T. ammi seed used for abortion. There was a high risk of potential human fetotoxicity of ten plants including T. ammi, based on teratogenicity observed in rat foetuses.	OK but the amount of dillapiole must be determined. Warning not to use during pregnancy	1
Tragopogon porrifolius L.	Compositae		root			Bibenzyl derivatives and isohydrocoumarins. Root is food. The root latex can be used as chewing gum	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Tribulus terrestris L.	Zygophyllaceae		whole plant	whole plant	β-carboline alkaloids (40-80 mg/kg dry matter), e.g. harmane and norharmane. Lithogenic steroidal saponins: e.g. protodioscin. Mycotoxin: sporidesmin	Central Nervous System toxicity observed in sheep. Hepatotoxicity observed in male rats after oral administration of the fruit. Reported effect on testosterone levels and prostate weight following administration of a fruit extract with high protodioscin level to castrated male rats.	OK but the amount of alkaloids and saponins must be determined and absence of the mycotoxin given.	3
Trichilia catigua A. Juss.	Meliaceae		bark			Due to the vernacular name catuaba, a lot of confusion and/or falsifications are described. About 50% of the catuaba on the market is not Trichililia catigua. Some of the Trichilia species contain tropane alkaloids which are absent in T. catigua.	OK but absence of tropane alkaloids must be proven.	1
Trichosanthes kirilowii Maxim.	Cucurbitaceae		fruit (pericarp and seed)	root	Root: polypeptides: e.g. trichosanthin	Trichosanthin: inhibits protein synthesis and decreases progesterone. Used as abortifacient (however only by IP administration); trichosanthine is destroyed by heat and by stomach acid and proteases. Absorption is therefore nearly zero.	OK but the amount of trichosanthin must be determined.	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Tridax procumbens L.	Compositae		aerial part			Aerial part: sulfated polysaccharides. They have an anticoagulant effe	OK but warning not to be used when under anticoagulant therapy	1
Trifolium arvense L.	Leguminosae		aerial part	aerial part	Isoflavones: e.g. formononetin, biochanin A; cyanogenic glycosides		OK but the amount of isoflavones must be determined	2
Trifolium campestre Schreb.	Leguminosae		aerial part	aerial part	Leaf, root, stem isoflavones: e.g. genistein. Flower only traces of isoflavones		OK but the amount of isoflavones must be determined	2
Trifolium pratense L.	Leguminosae		aerial part	aerial part	Isoflavones: daidzein, genistein, formononetin, biochanin		OK but the amount of isoflavones must be determined	3
Trifolium repens L.	Leguminosae		aerial part	aerial part	Isoflavones: e.g. ononin, genistin, daidzin		OK but the amount of isoflavones must be determined	2
Trigonella caerulea (L.) Ser.	Leguminosae		aerial part	seed	Steroid saponins: e.g diosgenin, protodioscin; proteinase inhibitors		OK but warning during pregnancy	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Trigonella foenum-graecum L.	Leguminosae		seed	seed	Seed: steroidal saponins (2%-3%): e.g. diosgenin, yamogenin; proteinase inhibitors. Leaf: steroidal saponins: e.g. diosgenin glycosides	Seed: 30% of seeds in the diet causes reduced male fertility in rabbits and abnormal development of foetuses in rabbits. Ethanol extract showed the most important anti implantation effect.	OK but warning during pregnancy	3
Trillium erectum L.	Melanthiaceae		rhizome			Steroidal saponins: e.g. bethosides, pennogenins	OK but warning not to use during pregnancy	1
Triticum aestivum L.	Poaceae	Triticum vulgare Vill. ; Triticum sativum Lam.	aerial part			Proteins; polysaccharides; oil: e.g. triacylglycerols	OK	3
Triticum dicoccon (Schrank.) Schübl.	Poaceae						OK	1
Triticum durum Desf.	Poaceae (Gramineae)	Triticum turgidum L. subsp. durum (Desf.) Husnot	shoot, seed	aerial part		Tricin (5,7,4'-trihyroxy-3',5'-dimethoxyflavone) is an efficient chemopreventive agent and present in rice, oat, maize, and wheat	OK	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Triticum spelta L.	Poaceae (Gramineae)		shoot, seed	aerial part			OK	2
Triticum turgidum L.	Poaceae (Gramineae)		shoot, seed	aerial part			OK	2
Tropaeolum majus L.	Tropaeolaceae		aerial part	aerial part	Glucosinolates: e.g. glucotropaeolin (benzylglucosinolate)		OK but the amount of glucosinolates must be determined.	3
Tropaeolum minus L.	Tropaeolaceae		leaf, immature fruit		Glucosinolates: e.g. glucotropaeoline, benzyl isothiocyante. Curcubitacines B, D, E, in immature fruit		OK but the amount of glucosinolates must be determined	1
Tsuga Canadensis (L.) Carrière	Pinaceae		aerial part; resin			Tannins (8%-15%), stilbene derivatives: picea tannols,	OK	1
Turnera diffusa Wild. ex Schult.	Passifloraceae		aerial part	leaf, resin	Leaf: essential oil (0.5%-1%): monoterpene etheroxide: 1,8 cineole (10%); resin (14%); hydroquinone glycosides (0.2%-0.7%): e.g. arbutin; cyanogenic glycosides (0.26%) : tetraphylline B (barterin)	According the British Herbal Compendium no 1,8 cinole is present in the essential oil. Alkaloids not present in the leaf but present in the wood.	OK but the amount of arbutin must be determined. Warning when under antidiabetes treatment. Warning not to use during pregnancy	3
Ulmus glabra Huds.	Ulmaceae	Ulmus campestris L.; Ulmus scabra Mill.	bark, bud			Proanthocyanidines, mucilages	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Ulmus pumila L.	Ulmaceae		bark, leaf			Mucilage; triterpenes; flavonoids;. In root: sesquiterpenoids: mansonone E and mansonone F as cytotoxic compounds	OK	2
Ulmus rubra Muhl.	Ulmaceae	Ulmus fulva Michx.	bark				OK	3
Ulva lactuca L.	Ulvaceae		thallus			Food	OK	2
Uncaria gambir (Hunter) Roxb.	Rubiaceae		aerial part, shoot	leaf, shoot		Catechin tannins (20%-50%): e.g. gambirines A1-A3. Beta carboline type indole alkaloids (traces): e.g. gambirtanine	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Uncaria rhynchophylla (Miq.) Miq. ex Havil.	Rubiaceae	Nauclea rhynchophylla Miq.	hook	leaf, hook (thorn)	Hook: tetracyclic oxindole alkaloids: e.g. rhyncophylline, isorhyncophylline; leaf: glycosidic indole alkaloids: e.g. vincoside lactam, strictosidine		OK but the amount of the indole alkaloids must be determined	3
Uncaria Tomentosa (Willd. ex Schult.) DC.	Rubiaceae		bark, stem, root	root	Pentacyclic oxindole alkaloids: e.g. pteropodine, spaciophylline, uncarine F; tetracyclic oxindole alkaloids: e.g. rhynchophylline, isorhynchophylline		OK but the amount of the indole alkaloids must be determined	3
Undaria pinnatifida (Harvey) Suringar	Alariaceae	Alaria pinnatifida Harvey	thallus	thallus		Fucoxanthin and fucoidans. Some fucoidans have a strong anticoagulation effect.	OK but warning when under anticoagulant therapy	3
Urtica dioica L.	Urticaceae		whole plant			Stings of the fresh plant: histamine, serotonin, acetylcholine, formic acid, leukotriens (LTB4, LTC4, LID4).Flavonoids (0.7-1.8%): e.g. rutin, isoquercitrin (0.02%), astragalin. kaempferol-3-0-rutinoside. Silicic acid (I% -4%); potassium ions (0.6%), nitrates (1.5 to 3%).Root: sterols: e.g. beta-sitosterol (0.03 to 0.06%); lectins (0.1%): UDA (Urtica dioica agglutinin, isolectine mixture); Polysaccharides: glucans, glucogalacturonans, acidic arabinogalactans; lignans: including secoisolariciresinol-9"O-glucoside (0.004%), neo-olivil (0.003%), neo-0livil-4-0-g1ucoside (0.004%).	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Urtica urens L.	Urticaceae		whole plant			Stings of the fresh plant: histamine, serotonin, acetylcholine, formic acid, leukotriens (LTB4, LTC4, LID4).Flavonoids (0.7-1.8%): e.g. rutin, isoquercitrin (0.02%), astragalin. kaempferol-3-0-rutinoside. Silicic acid (I% -4%); potassium ions (0.6%), nitrates (1.5 to 3%).Root: sterols: e.g. beta-sitosterol (0.03 to 0.06%); lectins (0.1%): UDA (Urtica dioica agglutinin, isolectine mixture); Polysaccharides: glucans, glucogalacturonans, acidic arabinogalactans; lignans: including secoisolariciresinol-9'O-glucoside (0.004%), neo-olivil (0.003%), neo-0livil-4-0-g1ucoside (0.004%).	OK	3
Usnea barbata (L.) Weber ex F.H.Wigg.	Parmeliaceae		thallus	thallus	Dibenzofuran derivatives: e.g. usnic acid	Usnic acid might increase bleeding time (?). Usnic acid under scrutiny for hepatotoxicity	OK but the amount of usnic acid must be determined	3
Usnea longissima Ach.	Parmeliaceae		thallus	thallus	Dibenzofuran derivatives: e.g. usnic acid	Usnic acid might increase bleeding time (?). Usnic acid under scrutiny for hepatotoxicity	OK but the amount of usnic acid must be determined.	2
Usnea plicata Wiggers	Parmeliaceae		thallus	thallus	Dibenzofuran derivatives: e.g. usnic acid	Lichen acids: usnic, thamnolic or hirtellic, usnaric or salazinic, lobaric, stictinic, protocetraric, everminic, barbatinic or rhizonic, diffractaic or dirhiazonic, and barbatolic acids. Lichens accumumalate heavy metals. Usnic acid under scrutiny for possible hepatotoxicity	OK but the amount of usnic acid must be determined	1
Vaccinium myrtilloïdes Michx.	Ericaceae	Vaccinium angustifolium var. myrtilloides (Michx.) House	fruit, leaf				OK	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Vaccinium corymbosum L.	Ericaceae		fruit, leaf	leaf	Leaf: possible presence of hydroquinone derivatives	Fruit: edible (organic acids)	OK but the amount of hydroquinones should be determined	1
Vaccinium macrocarpon Aiton	Ericaceae		berry			Proanthocyanidins, vitamin C, triterpenoids, catechins, lectins	OK	3
Vaccinium myrtillus L.	Ericaceae		fruit, leaf			Leaf: catechin tannins (1%-7%) including oligomeric proanthocyandins. Flavonoids: e.g. avicularin, hyperoside. Iridoids: e.g. asperuloside, monotropein. Phenolic acids: e.g. salicylic acid. Quinolizidine alkaloids: e.g. myrtine, epimyrtine. Fruit: acids: e.g. quinic acid (3-5%),malic acid, citric acid. Tannins (5-12%): catechin tannins, oligomeric procyanidins. Anthocyanosides (0.1% -0.5%): e.g. delphinidines	OK	3
Vaccinium oxycoccos L.	Ericaceae	Oxycoccus palustris Pers.	fruit				OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Vaccinium uliginosum L.	Ericaceae		fruit, leaf		Fruit: unknown toxic constituents	Fruit: vertigo, visual troubles… but controversial because could be due to the presence of fungi : Sclerotinia megalospora	OK	1
Vaccinium vitis-idaea L.	Ericaceae		fruit, leaf	fruit, leaf	Hydroquinone glycosides: arbutin (3-5%), pyroside (6'-acetyl-arbutin), hydroquinone gentiobioside, 2-0-caffeoylarbutin.	Tannins (condensed) (10%-20%)	OK but the amount of hydroquinones must be determined.	3
Valeriana jatamansi Jones	Valerianaceae	Valeriana wallichii DC.	root			Acylated iridoids: jatamanvaltrates A−M ; valepotriates	OK	2
Valeriana officinalis L.	Caprifoliaceae		root			Essential oil (0.3-0.7%): monoterpenes e.g. bornyle acetate, sesquiterpenes. Iridoids: valepotriates (0.5-2%) e.g. valtrate, dihydrovaltrate, acevaltrate. Sesquiterpene acids (0.08-0.3%) e.g. valerenic, acetoxyvalerenic acids	OK	1
Valerianella locusta (L.) Laterr.	Caprifoliaceae	Valeriana locusta L	leaf			Field salad. Food	OK	1
Vanilla planifolia Jacks. ex Andrews	Orchidaceae		fruit, oleoresin			Flavour components: vanillin, vanillic acid, p-hydroxybenzoic acid, and p-hydroxybenzaldehyde	OK	3
Verbascum densiflorum Bertol.	Scrophulariaceae		aerial part			Mucilages, Iridoid glycosides: e.g. aucubin, catalpol; phenylethanoid glycosides: e.g.verbascoside; triterpene saponins: e.g. verbascosaponin	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Verbascum phlomoides L.	Scrophulariaceae		flower			Polyphenols: phenylethanolids; flavonoids: e.g. apiosylverbascoside. Iridoid ester: e.g. specioside. Saponins: e.g. desrhamnosylverbascoscosaponins.	OK	1
Verbascum thapsus L.	Scrophulariaceae		aerial part				OK	3
Verbena officinalis L.	Verbenaceae		aerial part			Iridoids: e.g.verbenalin (0.15%), hastatosid (0.08%). Phenylpropanoid (0.8%): e.g. verbascoside. Verbenalin said to have a galactgogue and emmenagogue effect.	OK. Not to be used during pregnancy.	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Veronica anagallis-aquatica L.	Plantaginaceae		whole plant			Iridoids and bis-sesquiterpenes: e.g. aquatosides, veronicoside, catalposide…aquaticol	OK	1
Veronica beccabunga L.	Plantaginaceae		aerial part			Iridoid monoterpenes: e.g. aucubin (0.8%). Flavonoids: e.g. scutellarin glycosides	OK	1
Veronica chamaedrys L.	Plantaginaceae		whole plant			Polyphenols e.g; luteolin, acteoside. Steroidal spirostane glycosides: e. g. chamaedrosides	OK	1
Veronica officinalis L.	Plantaginaceae		aerial part			Iridoids (0.5%-1%): e.g. aucubin, catalpol and esters thereof	OK	3
Viburnum lantana L.	Adoxaceae		aerial part			Flavonoids and biflavonoids: e.g. amentoflavone; coumarines; iridoids; diterpenes;saponins; phenolic compounds: e.g. chlorogenic acid. Gastro-intestinal troubles if immature fruits are consumed.	OK	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Viburnum opulus L.	Adoxaceae		aerial part			Bark: catechins, fatty acid, 0.3% essential oil with 50% acids valerenic acid,…): Fruit: saponins, tannins. Eating of fresh berries might induce in 10% of cases in children vomiting, diarrhoea (saponins)	OK	2
Vicia ervilia (L.) Willd.	Leguminosae			seed	non proteinogenic alpha amino acid: L-canavanine	L-canavanine: a potent arginine antimetabolite. May induce Lupus-like automimmunity. This non biogenic amino acid can only be destroyed by autoclaving.	OK but the canavanine must be absent	1
Vicia faba L.	Leguminosae		seed		Pyrimidine derivatives: e.g. vicioside (0.4%-0.8%) and convicine (0.1%-0.6"%)	In case of congenital deficit of G6PD development of favism: vomiting, ictere, hemoglobinury	OK but warning in case of congenital G6PD deficit	1
Vigna angularis (Willd.) Ohwi & H. Ohashi	Leguminosae	Phaseolus chrysanthos Savi	seed			Adzuki beans and husk = food	OK	2
Viola odorata L.	Violaceae		aerial part with flower			Salicylic acid (traces), mucilages, flavonoids, anthocyanins derivatives	OK	1
Viola palustris L.	Violaceae		aerial part			Chemical profile not very well studied but in the family of Violaceae no toxicity expected.	OK	2

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Viola tricolor L.	Violaceae		aerial part			Flavonoids: e.g. rutosid (23%). Triterpene saponins (5.2%): ursolic acid. Carotenoids: e.g. violaxanthin (zeaxanthindiepoxide) (75%). Anthocyanes: violanin (33%). Essential oil (0.008%): e.g. methylsalicylate	OK	3
Viscum album L.	Santalaceae		branch, leaf	Whole plant	Peptides: viscotoxins (I, II, III) and glycoproteins: viscum lectins	No toxicity by oral intake.	OK	2
Vitex agnus-castus L.	Lamiaceae (Labiatae)		whole plant	whole plant	Essential oil from fruit (0.72%): monoterpene etheroxide: 1,8-cineole (16-18%) and bicyclic monoterpenes: e.g. sabinene (7-17%) Essential oil from leaf 0.56%): monoterpenes: e.g. 1,8-cineole,(22-33%) and sabinene (2-18%), Essential oil from flower: monoterpenes: e.g. 1,8-cineole (13.5%) and sabinene (5.7%)	Signs of possible liver toxicity were observed in rats in two repeat-dose toxicity studies on extracts of the fruit. This effect has not been confirmed yet by other studies. Powdered seeds resulted in a slight reduction in the number of foetuses when administered to pregnant rats in doses of 1 or 2 mg/kg from days 1-10 of pregnancy. A lactation inhibiting effect (decrease of prolactin) was seen in lactating female rats dosed with a Vitex agnus-castus preparation. In vitro studies with cells from rat pituitaries showed that an extract had a dose-dependent lowering effect of prolactin.	OK but when EO is used the amount of 1,8 cineole and sabinene must be defined. A warning must be given not to take Vitex preparations during lactation	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Vitex trifolia L.	Lamiaceae		fruit			Similar to V. Agnus castus. Iridoids and flavonoids. No info on prolactine effect as with Agnus castus	OK but not during pregnancy	2
Vitis vinifera L.	Vitaceae		fruit, leaf, seed			Proanthocyanidins. Stilbenes: e.g. resveratrol, viniferins. Fruit acids. Flavonoids (4%-5%): e.g. kaempherol, quercetin	OK	3
Withania somnifera (L.) Dunal	Solanaceae		whole plant	whole plant	In leaf: steroidal lactones: withanolides in root: piperidine alkaloids: anaferine, anahygrine and various alkaloids including withanine, somniferine, somnine, tropineIn leaf: steroidal lactones: withanolides in root: piperidine alkaloids: anaferine, anahygrine and various alkaloids including withanine, somniferine, somnine, tropine		OK but the amount of the steroidal lactones and of the alkaloids must be determined	2
Xeranthemum annuum L.	Compositae		flower				OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Yucca filamentosa L.	Asaparagaceae		aerial part			Steroid saponins: e.g. sarsasapogenin , tigogenin (1,4% in leaves). Polysaccharides.	OK	1
Yucca schidigera Roezl ex Ortgies	Asaparagaceae		aerial part			Steroid saponins: e.g. sarsasapogenin, tigogenin. Polysaccharides.	OK	1
Zanthoxylum acanthopodium DC.	Rutaceae		fruit	bark, seed	Possible presence of benzylisoquinoline alkaloids. Essential oil: 1,8 cineole (7.7%)		OK for the fruit	1
Zanthoxylum americanum Mill.	Rutaceae		bark, seed	bark, seed	Benzylisoquinoline alkaloids: e.g. magnoflorine; benzo(c)phenanthridine alkaloids: e.g. chelerythrine,	Lignans: asarinin and sesamin	OK but the amount of the alkaloids must be determined	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Zanthoxylum armatum DC.	Rutaceae		bark, fruit, seed	bark, seed	Benzylisoquinoline alkaloids: e.g. magnoflorine; benzo(c)phenanthridine alkaloids: e.g. chelerythrine,	Essential oil may contain alpha thujone	OK but the amount of the alkaloids must be determined	1
Zea mays L.	Poaceae		flower, fruit (cornsilk)			Essential oil (0.2%): e.g. carvacrol. alphaterpineol, menthol, thymol. Flavonoids: e.g. maysin, maysin-3'-ethylether.Saponins (2-3%). Alkaloids (0.05%): e.g. 6-methoxybenzoxazolinone.	OK	3
Zingiber officinale Rosc.	Zingiberaceae		rhizome			An increased percentage of resorbed implantations were found in both dosed groups of pregnant rats receiving an infusion made from 20 g/l or 50 g/l freshly grated ginger compared to a control group ($P < 0.05$). No signs of maternal toxicity were observed, neither were any gross morphological malformations in the treated foetuses.	OK	3

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Ziziphus jujuba Mill.	Rhamnaceae		aerial part	seed, stem bark	Seed: dammarane-type triterpene oligoglycosides: e.g. jujubosides A1 & C and acetyljujuboside B1. Stem bark : isoquinoline alkaloids: e.g. isoboldine, norisoboldine, asimilobine, juziphine, juzirine	Triterpenes probably responsible for a sedative effect.	OK but when other parts than seed are used the amount of isoquinoline alkaloids must be determined.	3
FUNGI								
Bovista plumbea Pers.	Agaricaceae		fruiting body			Edible when young and the gleba white, but too small to be considered for the table.	OK	1
Cordyceps sinensis (Berk.) Sacc.	Ophiocordycipitaceae	Paecilomyces hepiali Q.T. Chen & R.Q. Dai	fungus			Nucleotides (adenosine), polysaccharides, sterols	OK	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Ganoderma lucidum (Curtis) P. Karst.	Ganodermataceae		fungus			Reishi. Aqueous extract is OK. Pure powder is under scrutiny for eventual hepatotoxicity for the moment, although up to now only 2 case reports exist.	OK but literature to be followed up	1
Grifola frondosa (Dicks.) Gray	Meripilaceae		fruiting body	fruiting body	Contains alphaglucosidase inhibitor	Polysaccharide-peptides with cytotoxic activity. Mushroom also named Maitake	OK but warning when under antidiabetic treatment	1
Grifola umbellata (Pers.) Pilat	Meripilaceae		fruiting body	fruiting body		Polysaccharides and steroids with cytotoxic activity.	OK but not to take when kidney problems present	1
Lasiosphaera gigantea Batch Ex Pers.	Lasiosphaeriaceae		fruiting body			Ergostanes : e.g. ergosta-4,6,8 (14),22-tetraen-3-one. Edible mushroom.	OK	1
Lentinula edodes (Berk.) Pegler	Marasmiaceae		fungus			Shiitake. Polysaccharides: lentinans	OK	1
Monascus purpureus	Monascaceae		microfungi		May produce citrinin (mycotoxin)		OK but absence of citrinin	1

Botanical name	Family	Synonym	Part traditionally used/specific preparations	Part of concern	chemical	Info	particular considerations	Present in x countries
Pleurotus ostreatus (Jacq. : Fr.) P. Kumm	Pleurotaceae		fungus				OK	1
Polyporus umbellatus (Pers.) Fr.	Polyporaceae	Grifola umbellata (Pers.) Pilát	fungus			Ecdysterones: e.g. polyporusterone A, B, C, D, E, F and G; polysaccharides; ergone	OK	1
Wolfiporia extensa (Peck) Ginns	Polyporaceae	Poria cocos F. A. Wolf	sclerotium			Triterpenoid acids (tumulosic derivatives, poriacosones of lanostane type) polysaccharides	OK	1