



## Table of herb-drug interactions based on the monographs of ESCOP

The rational use of herbal medicinal preparations is based on the proof of quality, safety and efficacy. An important topic for health care professionals is the knowledge about interactions between herbal medicinal products (HMPs) and medications with synthetic drugs, especially with those with a narrow therapeutical margin.

Despite large numbers of available publications, the results concerning interactions often remain contradictory and in many cases are based on pre-clinical research only or the extrapolation of theoretical mechanisms. Health care professionals need reliable information to allow for a balanced evaluation of herb-drug interactions, with relevance to severity and frequency. The monographs of the European Scientific Cooperative on Phytotherapy (ESCOP) are a source of first class information in these areas. The monographs include a compilation of clinically relevant herb-drug interactions and show that the most frequent ones concern anticoagulants, corticoids, benzodiazepines as well as antiarrhythmic, antidepressant and antiviral drugs.

This table is distilled from the ESCOP monographs, which are elaborated by international experts who evaluate available scientific literature and translate relevant data on efficacy and safety for the clinical use of HMPs.

ESCOP herewith provides a functional tool for health care professionals to obtain fast and reliable information on clinically relevant herb-drug interactions.

The compilation is based on the analysis of the clinical relevance regarding the potential interactions between herbal medicinal products and other medications from published scientific data.

Visit our website [www.escop.com](http://www.escop.com) if you wish:

- Search in the table by words, and order alphabetically the fields: English and Latin name of the drug, name of the species, interactions and publication data
- [>> Check if this is the last update](#)

Drug (English name)	Drug (Latin name)	Species	Interactions based on clinical data	Publication
Agnus Castus	Agni casti fructus	<i>Vitex agnus-castus</i> L.	No evidence in literature. Interactions with dopamine agonists, dopamine antagonists, oestrogens and antioestrogens cannot be excluded due to possible dopaminergic and oestrogenic effects	<a href="#">2nd ed. (2003)</a>
Agrimony	Agrimoniae herba	<i>Agrimonia eupatoria</i> L.	None reported.	<a href="#">Online 2019</a>
Angelica root	Angelicae archangelicae radix	<i>Angelica archangelica</i> L. (syn. <i>Angelica officinalis</i> Hoffm.)	None reported.	<a href="#">Suppl. 2nd ed. (2009)</a>
Aniseed	Anisi fructus	<i>Pimpinella anisum</i> L.	None reported.	<a href="#">Online 2014</a>
Arnica flower	Arnicae flos	<i>Arnica montana</i> L.	None reported.	<a href="#">Online 2019</a>
Artichoke leaf	Cynarae folium	<i>Cynara cardunculus</i> L. (syn. <i>Cynara scolymus</i> L.)	None reported.	<a href="#">Suppl. 2nd ed. (2009)</a>
Barbados Aloes	Aloe barbadensis	<i>Aloe barbadensis</i> Mill.	Hypokalaemia (resulting from long term laxative use) potentiates the action of cardiac glycosides and interacts with antiarrhythmic drugs and with drugs which induce reversion to sinus rhythm (e.g. quinidine). Concomitant use with other drugs inducing hypokalaemia (e.g. thiazide diuretics, adrenocorticosteroids and liquorice root) may aggravate electrolyte imbalance.	<a href="#">Online 2014</a>
Bearberry leaf	Uvae ursi folium	<i>Arctostaphylos uva-ursi</i> (L.) Spreng.	None reported.	<a href="#">Online 2012</a>
Bilberry fruit	Myrtilli fructus	<i>Vaccinium myrtillus</i> L.	None reported.	<a href="#">Online 2014</a>
Birch leaf	Betulae folium	<i>Betula pendula</i> Roth, <i>Betula pubescens</i> Ehrh.	None reported.	<a href="#">Online 2015</a>
Black Cohosh	Cimicifugae rhizoma	<i>Actaea racemosa</i> L. (syn. <i>Cimicifuga racemosa</i> (L.) Nutt.)	None reported.	<a href="#">Online 2011</a>
Black Currant leaf	Ribis nigri folium	<i>Ribes nigrum</i> L.	None reported.	<a href="#">Online 2017</a>

Drug (English name)	Drug (Latin name)	Species	Interactions based on clinical data	Publication
Black Horehound	Ballotae nigrae herba	<i>Ballota nigra</i> L.	None reported.	<a href="#">Online 2015</a>
Bogbean leaf	Menyanthidis trifoliatae folium	<i>Menyanthes trifoliata</i> L.	None reported. Due to their structure and low content the coumarins are presumed not to interact with anticoagulants.	<a href="#">Online 2013</a>
Boldo leaf	Boldi folium	<i>Peumus boldus</i> Molina	None reported.	<a href="#">2nd ed. (2003)</a>
Burdock root	Arctii radix	<i>Arctium lappa</i> L. (syn. <i>Arctium major</i> Gaertn.), <i>Arctium minus</i> (Hill) Bernh., <i>Arctium tomentosum</i> Mill.	None reported.	<a href="#">Online 2016</a>
Butcher's Broom	Rusci rhizoma	<i>Ruscus aculeatus</i> L.	None reported.	<a href="#">Online 2017</a>
Calendula flower	Calendulae flos	<i>Calendula officinalis</i> L.	None reported.	<a href="#">Online 2019</a>
Cape Aloes	Aloe capensis	<i>Aloe ferox</i> Mill.	Hypokalaemia (resulting from long term laxative use) potentiates the action of cardiac glycosides and interacts with antiarrhythmic drugs and with drugs which induce reversion to sinus rhythm (e.g. quinidine). Concomitant use with other drugs inducing hypokalaemia (e.g. thiazide diuretics, adrenocorticosteroids and liquorice root) may aggravate electrolyte imbalance.	<a href="#">Online 2014</a>
Capsicum	Capsici fructus	<i>Capsicum annuum</i> L. var. <i>minimum</i> (Mill.) Heiser, <i>Capsicum frutescens</i> L.	Not to be applied topically together with other external products (e.g. other rubefacient or pain-relieving gels) at the same application site.	<a href="#">Suppl. 2nd ed. (2009)</a>
Caraway fruit	Carvi fructus	<i>Carum carvi</i> L.	None reported.	<a href="#">Suppl. 2nd ed. (2009)</a>
Caraway oil	Carvi aetheroleum	<i>Carum carvi</i> L.	None reported.	<a href="#">Online 2019</a>
Cascara	Rhamni purshianae cortex	<i>Rhamnus purshiana</i> DC. (syn. <i>Frangula purshiana</i> (DC) A. Gray)	Hypokalaemia (resulting from long term laxative use) potentiates the action of cardiac glycosides and interacts with antiarrhythmic drugs and with drugs which induce reversion to sinus rhythm (e.g. quinidine). Concomitant use with other drugs inducing hypokalaemia (e.g. thiazide diuretics, adrenocorticosteroids and liquorice root) may aggravate electrolyte imbalance.	<a href="#">Online 2015</a>
Cat's Claw bark	Uncariae tomentosae cortex	<i>Uncaria tomentosa</i> (Willd. ex Roem. et Schult.) DC.	None reported.	<a href="#">Online 2018</a>

Drug (English name)	Drug (Latin name)	Species	Interactions based on clinical data	Publication
Centauray	Centaurii herba	<i>Centaurium erythraea</i> Rafn s.l., <i>Centaurium majus</i> Zeltner, <i>Centaurium suffruticosum</i> (Griseb.) Ronniger (Syn. <i>Erythraea centaurium</i> Pers.; <i>Centaurium umbellatum</i> Gilib.; <i>Centaurium minus</i> Garsault)	None reported.	<a href="#">Online 2016</a>
Centella	Centellae asiaticae herba	<i>Centella asiatica</i> (L.) Urb.	None reported.	<a href="#">Suppl. 2nd ed. (2009)</a>
Cinnamon	Cinnamomi cortex	<i>Cinnamomum verum</i> J. Presl.	None reported.	<a href="#">2nd ed. (2003)</a>
Clove oil	Caryophylli aetheroleum	<i>Syzygium aromaticum</i> (L.) Merrill et L.M. Perry (syn. <i>Eugenia caryophyllus</i> (Spreng.) Bull. et Harr.)	None reported.	<a href="#">Online 2014</a>
Cola	Colae semen	<i>Cola nitida</i> (Vent.) Schott et Endl. (syn. <i>Cola vera</i> K. Schum.), <i>Cola acuminata</i> (P. Beauv.) Schott et Endl. (syn. <i>Sterculia acuminata</i> P. Beauv.)	Due to the caffeine content, concomitant intake of caffeine-containing drinks or psycho-analeptic medicines may cause a stronger caffeine effect.	<a href="#">Online 2014</a>
Comfrey root	Symphyti radix	<i>Symphytum officinale</i> L.	None reported in topical use.	<a href="#">Online 2012</a>
Couch Grass rhizome	Graminis rhizoma	<i>Agropyron repens</i> (L.) P. Beauv. (syn. <i>Elymus repens</i> (L.) Gould)	None reported.	<a href="#">Online 2016</a>
Cranberry	Vaccinii macrocarpi fructus	<i>Vaccinium macrocarpon</i> Aiton, <i>Vaccinium oxycoccus</i> L.	A pharmacokinetic interaction between cranberry juice and warfarin is highly unlikely, despite in some cases with excessive cranberry consumption.	<a href="#">Upcoming Revision 2020</a>
Dandelion leaf	Taraxaci folium	<i>Taraxacum officinale</i> F. H. Wigg.	None reported.	<a href="#">2nd ed. (2003)</a>
Dandelion root	Taraxaci radix	<i>Taraxacum officinale</i> F. H. Wigg.	None reported.	<a href="#">2nd ed. (2003)</a>

Drug (English name)	Drug (Latin name)	Species	Interactions based on clinical data	Publication
Devil's Claw root	Harpagophyti radix	<i>Harpagophytum procumbens</i> DC., <i>Harpagophytum zeyheri</i> Decne	None reported.	<a href="#">Suppl. 2nd ed. (2009)</a>
Dog Rose hip	Rosae pseudo-fructus	<i>Rosa canina</i> L., <i>Rosa pendulina</i> L.	None reported.	<a href="#">Suppl. 2nd ed. (2009)</a>
Elder flower	Sambuci flos	<i>Sambucus nigra</i> L.	None reported.	<a href="#">Online 2013</a>
Eleutherococcus	Eleutherococci radix	<i>Eleutherococcus senticosus</i> (Rupr. et Maxim.) Maxim.	None reported.	<a href="#">Suppl. 2nd ed. (2009)</a>
Equisetum stem	Equiseti herba	<i>Equisetum arvense</i> L.	None reported.	<a href="#">Online 2018</a>
Eucalyptus oil	Eucalypti aetheroleum	<i>Eucalyptus globulus</i> Labill., <i>Eucalyptus polybractea</i> R.T. Baker, <i>Eucalyptus smithii</i> R.T. Baker	None reported.	<a href="#">2nd ed. (2003)</a>
European Goldenrod	Solidaginis virgaureae herba	<i>Solidago virgaurea</i> L.	None reported.	<a href="#">Online 2018</a>
Fennel fruit	Foeniculi fructus	<i>Foeniculum vulgare</i> Mill. subsp. <i>vulgare</i> var. <i>vulgare</i> ; <i>Foeniculum vulgare</i> Mill. subsp. <i>vulgare</i> var. <i>dulce</i> (Mill.) Batt. & Trab.	None reported.	<a href="#">Online 2019</a>
Fennel oil	Foeniculi aetheroleum	<i>Foeniculum vulgare</i> Mill. subsp. <i>vulgare</i> var. <i>vulgare</i>	None reported.	<a href="#">Online 2019</a>
Fenugreek	Trigonellae foenugraeci semen	<i>Trigonella foenum-graecum</i> L.	No evidence in literature.	<a href="#">2nd ed. (2003)</a>
Feverfew	Tanacetii parthenii herba	<i>Tanacetum parthenium</i> (L.) Sch. Bip.	None reported.	<a href="#">Online 2014</a>
Frangula bark	Frangulae cortex	<i>Frangula alnus</i> Mill. (syn. <i>Rhamnus frangula</i> L.)	Hypokalaemia (resulting from long term laxative use) potentiates the action of cardiac glycosides and interacts with antiarrhythmic drugs and with drugs which induce reversion to sinus rhythm (e.g. quinidine). Concomitant use with other drugs inducing hypokalaemia (e.g. thiazide diuretics, adrenocorticosteroids and liquorice root) may aggravate electrolyte imbalance.	<a href="#">Online 2017</a>

Drug (English name)	Drug (Latin name)	Species	Interactions based on clinical data	Publication
Fumitory	Fumariae herba	<i>Fumaria officinalis</i> L.	None reported.	<a href="#">Online 2018</a>
Garlic	Allii sativi bulbus	<i>Allium sativum</i> L.	An increased International Normalized Ratio (INR) has been observed in 2 patients on warfarin and in one patient on fluindione who had used garlic products. The results of studies with saquinavir and ritonavir in healthy volunteers remain unclear.	<a href="#">Online 2019</a>
Gentian root	Gentianae radix	<i>Gentiana lutea</i> L.	None reported.	<a href="#">Online 2014</a>
Ginger	Zingiberis rhizoma	<i>Zingiber officinale</i> Roscoe	None reported.	<a href="#">Suppl. 2nd ed. (2009)</a>
Ginkgo leaf	Ginkgo folium	<i>Ginkgo biloba</i> L.	An interaction with substances that inhibit blood coagulation cannot be excluded. However, no such interactions have been observed in controlled studies.	<a href="#">2nd ed. (2003)</a>
Ginseng	Ginseng radix	<i>Panax ginseng</i> C. A. Mey	May slightly reduce blood glucose levels. Interaction of ginseng with warfarin is possible.	<a href="#">2nd ed. (2003)</a> <a href="#">Upcoming Revision 2020</a>
Goldenseal rhizome	Hydrastidis rhizoma	<i>Hydrastis canadensis</i> L.	Investigations in healthy volunteers revealed significant interactions with drugs that are metabolized by cytochrome P450 3A4/5 (e.g. midazolam) and 2D6 (e.g. debrisoquin).	<a href="#">Online 2013</a>
Greater Celandine	Chelidonii herba	<i>Chelidonium majus</i> L.	None reported.	<a href="#">2nd ed. (2003)</a>
Grindelia	Grindeliae herba	<i>Grindelia robusta</i> Nutt., <i>Grindelia squarrosa</i> Dunal, <i>Grindelia humilis</i> Hook. & Arn., <i>Grindelia camporum</i> Greene	None reported.	<a href="#">Online 2015</a>
Guarana seed	Paullinae semen	<i>Paullinia cupana</i> Kunth (syn. <i>Paullinia sorbilis</i> Mart.)	Due to the caffeine content, concomitant intake of caffeine-containing drinks or psycho-analeptic medicines may cause a stronger caffeine effect.	<a href="#">Suppl. 2nd ed. (2009)</a>
Hamamelis bark	Hamamelidis cortex	<i>Hamamelis virginiana</i> L.	None reported.	<a href="#">Online 2012</a>
Hamamelis leaf	Hamamelidis folium	<i>Hamamelis virginiana</i> L.	None reported.	<a href="#">Online 2012</a>
Hamamelis water	Hamamelidis aqua	<i>Hamamelis virginiana</i> L.	None reported.	<a href="#">Online 2012</a>

Drug (English name)	Drug (Latin name)	Species	Interactions based on clinical data	Publication
Hawthorn berries	Crataegi fructus	<i>Crataegus monogyna</i> Jacq. (Lindm.); <i>Crataegus laevigata</i> (Poir.) DC. (syn. <i>Crataegus oxyacantha</i> auct.), <i>Crataegus pentagyna</i> Waldst. et Kit. ex Willd., <i>Crataegus nigra</i> Waldst. et Kit., <i>Crataegus azarolus</i> L.	None reported.	<a href="#">Suppl. 2nd ed. (2009)</a>
Hawthorn leaf and flower	Crataegi folium cum flore	<i>Crataegus monogyna</i> Jacq. (Lindm.); <i>Crataegus laevigata</i> (Poir.) DC. (syn. <i>Crataegus oxyacantha</i> L.)	None reported.	<a href="#">2nd ed. (2003)</a>
Helichrysi flos	Sandy everlasting flower	<i>Helichrysum arenarium</i> (L.) Moench.	None reported.	<a href="#">Online 2019</a>
Hop strobile	Lupuli flos	<i>Humulus lupulus</i> L.	None reported.	<a href="#">2nd ed. (2003)</a>
Horse Chestnut seed	Hippocastani semen	<i>Aesculus hippocastanum</i> L.	None reported.	<a href="#">2nd ed. (2003)</a>
Iceland Moss	Lichen islandicus	<i>Cetraria islandica</i> (L.) Ach. s.l.	None reported.	<a href="#">2nd ed. (2003)</a>
Indian Frankincense	Olibanum indicum	<i>Boswellia serrata</i> Roxb. ex Colebr.	None reported.	<a href="#">Suppl. 2nd ed. (2009)</a>
Ispaghula husk	Plantaginis ovatae testa	<i>Plantago ovata</i> Forssk. (syn. <i>Plantago ispaghula</i> Roxb.)	Enteral absorption of concomitantly administered minerals (e.g. calcium, iron, lithium, zinc), vitamins (B <sub>12</sub> ), cardiac glycosides and coumarin derivatives may be delayed. For this reason, other medications should be taken at least 30-60 minutes before ispaghula husk. In the case of insulin-dependent diabetics it may be necessary to reduce the insulin dose.	<a href="#">Online 2016</a>
Ispaghula seed	Plantaginis ovatae semen	<i>Plantago ovata</i> Forssk. (syn. <i>Plantago ispaghula</i> Roxb.)	Enteral absorption of concomitantly administered minerals (e.g. calcium, iron, lithium, zinc), vitamins (B <sub>12</sub> ), cardiac glycosides and coumarin derivatives may be delayed. For this reason, other medications should be taken at least 30-60 minutes before ispaghula husk. In the case of insulin-dependent diabetics it may be necessary to reduce the insulin dose.	<a href="#">2nd ed. (2003)</a>

Drug (English name)	Drug (Latin name)	Species	Interactions based on clinical data	Publication
Ivy leaf	Hederae heli- cis folium	<i>Hedera helix</i> L.	None reported.	<a href="#">2nd ed. (2003)</a>
Java tea	Orthosiphonis folium	<i>Orthosiphon aristatus</i> (Blume) Miq. var. <i>aristatus</i> (syn. <i>Orthosiphon stamineus</i> Benth.)	None reported.	<a href="#">Online 2014</a>
Javanese Turmeric	Curcumae zanthorrhizae rhizoma	<i>Curcuma zanthorrhiza</i> Roxb.	None reported.	<a href="#">Suppl. 2nd ed. (2009)</a>
Juniper	Juniperi galbulus	<i>Juniperus communis</i> L.	None reported.	<a href="#">2nd ed. (2003)</a>
Kava-Kava	Piperis methistici rhizoma	<i>Piper methisticum</i> G. Forst	None confirmed.	<a href="#">2nd ed. (2003)</a>
Lady's Mantle	Alchemillae herba	<i>Alchemilla vulgaris</i> L. s.l.	None reported.	<a href="#">Online 2013</a>
Lavender oil/flower	Lavandulae aetheroleum/flos	<i>Lavandula angustifolia</i> Mill. (syn. <i>Lavandula officinalis</i> Chaix)	None reported.	<a href="#">Suppl. 2nd ed. (2009)</a>
Linseed	Lini semen	<i>Linum usitatissimum</i> L.	The absorption of other medications taken at the same time may be delayed. For this reason, other medications should be taken at least 30-60 minutes before linseed. Diabetics should be aware of a potential delay in glucose absorption.	<a href="#">Online 2017</a>
Liquorice root	Liquiritiae radix	<i>Glycyrrhiza glabra</i> L., <i>Glycyrrhiza inflata</i> Batalin, <i>Glycyrrhiza uralensis</i> Fisch.	Hypokalaemia (resulting from excessive use of liquorice root) may potentiate the action of cardiac glycosides and interact with antiarrhythmic drugs or drugs which induce reversion to sinus rhythm (e.g. quinidine). Concomitant use with other drugs inducing hypokalaemia (e.g. thiazide diuretics, adrenocorticosteroids and stimulant laxatives) may aggravate electrolyte imbalance.	<a href="#">2nd ed. (2003)</a>
Mallow flower	Malvae flos	<i>Malva sylvestris</i> L.	None reported.	<a href="#">Online 2016</a>
Marshmallow root	Althaeae radix	<i>Althaea officinalis</i> L.	The absorption of other medications taken at the same time may be delayed. For this reason, other medications should be taken at least 30-60 minutes before marshmallow root.	<a href="#">Online 2019</a>
Matricaria flower	Matricariae flos	<i>Matricaria recutita</i> L. (syn. <i>Chamomilla recutita</i> (L.) Rauschert)	None reported.	<a href="#">Online 2020</a>
Meadowsweet	Filipendulae ulmariae herba	<i>Filipendula ulmaria</i> (L.) Maxim. (syn. <i>Spiraea ulmaria</i> L.)	None reported.	<a href="#">Online 2015</a>



Drug (English name)	Drug (Latin name)	Species	Interactions based on clinical data	Publication
Melilot	Meliloti herba	<i>Melilotus officinalis</i> (L.) Lam.	None reported.	<a href="#">2nd ed. (2003)</a>
Melissa leaf	Melissae folium	<i>Melissa officinalis</i> L.	None reported.	<a href="#">Online 2013</a>
Milk Thistle fruit	Silybi mariani fructus	<i>Silybum marianum</i> (L.) Gaertn.	None reported.	<a href="#">Suppl. 2nd ed. (2009)</a>
Motherwort	Leonuri cardiaca herba	<i>Leonurus cardiaca</i> L.	None reported.	<a href="#">Online 2019</a>
Mullein flower	Verbasci flos	<i>Verbascum thapsus</i> L., <i>Verbascum densiflorum</i> Bertol. (syn. <i>Verbascum thapsiforme</i> Schrad), <i>Verbascum phlomoides</i> L.	None reported.	<a href="#">Online 2014</a>
Myrrh	Myrrha	<i>Commiphora myrrha</i> (Nees) Engl. (syn. <i>Commiphora molmol</i> (Engl.) Engl. ex Tschirch)	None reported.	<a href="#">Online 2014</a>
Narrow-leafed Coneflower root	Echinaceae angustifoliae radix	<i>Echinacea angustifolia</i> DC.	None reported.	<a href="#">Online 2019</a>
Nettle leaf/herb	Urticae folium/herba	<i>Urtica dioica</i> L., <i>Urtica urens</i> L.	None reported.	<a href="#">Online 2018</a>
Nettle root	Urticae radix	<i>Urtica dioica</i> L., <i>Urtica urens</i> L.	None reported.	<a href="#">Online 2015</a>
Pale Coneflower root	Echinaceae pallidae radix	<i>Echinacea pallida</i> Nutt.	None reported.	<a href="#">Online 2018</a>
Passion flower	Passiflorae herba	<i>Passiflora incarnata</i> L.	None reported.	<a href="#">2nd ed. (2003)</a>
Pelargonium root	Pelargonii radix	<i>Pelargonium sidoides</i> DC., <i>Pelargonium reniforme</i> Curt.	None reported.	<a href="#">Online 2015</a>
Peppermint leaf	Menthae piperitae folium	<i>Mentha x piperita</i> L.	None reported.	<a href="#">Online 2019</a>

Drug (English name)	Drug (Latin name)	Species	Interactions based on clinical data	Publication
Peppermint oil	Menthae piperitae aetheroleum	<i>Mentha x piperita</i> L.	Patients with achlorhydria (caused e.g. by medication with H <sub>2</sub> receptor blockers) should use peppermint oil only in enteric coated capsules.	<a href="#">2nd ed. (2003)</a>
Primula root	Primulae radix	<i>Primula veris</i> L., <i>Primula elatior</i> Hill.	None reported.	<a href="#">2nd ed. (2003)</a>
Psyllium seed	Psylli semen	<i>Plantago afra</i> L. (syn. <i>Plantago psyllium</i> L.), <i>Plantago indica</i> L. (syn. <i>Plantago arenaria</i> Waldst. & Kit.)	Enteral absorption of concomitantly administered minerals (e.g. calcium, iron, lithium, zinc), vitamins (B <sub>12</sub> ), cardiac glycosides and coumarin derivatives may be delayed. For this reason, other medications should be taken at least 30-60 minutes before psyllium seed. In the case of insulin-dependent diabetics it may be necessary to reduce the insulin dose.	<a href="#">Online 2017</a>
Pumpkin seed	Curcubita semen	<i>Cucurbita pepo</i> L.	None reported.	<a href="#">Suppl. 2nd ed. (2009)</a>
Purple Coneflower herb	Echinaceae purpureae herba	<i>Echinacea purpurea</i> (L.) Moench	None reported.	<a href="#">Suppl. 2nd ed. (2009)</a>
Purple Coneflower root	Echinaceae purpureae radix	<i>Echinacea purpurea</i> (L.) Moench	None reported.	<a href="#">Suppl. 2nd ed. (2009)</a>
Pygeum bark	Pruni africanae cortex	<i>Prunus africana</i> (Hook.f.) Kalkman (syn. <i>Pygeum africanum</i> Hook.f.)	None reported.	<a href="#">2nd ed. (2003)</a>
Red Vine leaf	Vitis viniferae folium	<i>Vitis vinifera</i> L.	None reported.	<a href="#">Suppl. 2nd ed. (2009)</a>
Restharrow root	Ononidis radix	<i>Ononis spinosa</i> L.	None reported.	<a href="#">Online 2015</a>
Rhatany root	Ratanhiae radix	<i>Krameria triandra</i> Ruiz et Pav.	None reported.	<a href="#">Online 2017</a>
Rhubarb	Rhei radix	<i>Rheum palmatum</i> L., <i>Rheum officinale</i> Baill.	Hypokalaemia (resulting from long term laxative abuse) potentiates the action of cardiac glycosides and interacts with anti-arrhythmic drugs or with drugs which induce reversion to sinus rhythm (e.g. quinidine). Concomitant use with other drugs inducing hypokalaemia (e.g. thiazide diuretics, adreno-corticosteroids and liquorice root) may aggravate electrolyte imbalance.	<a href="#">Online 2018</a>
Ribwort Plantain leaf/herb	Plantaginis lanceolatae folium/herba	<i>Plantago lanceolata</i> L. s.l.	None reported.	<a href="#">Online 2013</a>

Drug (English name)	Drug (Latin name)	Species	Interactions based on clinical data	Publication
Roman Chamomile flower	Chamomillae romanae flos	<i>Chamaemelum nobile</i> (L.) All. (syn. <i>Anthemis nobilis</i> L.)	None reported.	<a href="#">Online 2019</a>
Rosemary leaf	Rosmarini folium	<i>Rosmarinus officinalis</i> L.	None reported.	<a href="#">2nd ed. (2003)</a>
Sage leaf	Salviae officinalis folium	<i>Salvia officinalis</i> L.	None reported.	<a href="#">2nd ed. (2003)</a>
Sage leaf, Three-lobed	Salviae trilobae folium	<i>Salvia fruticosa</i> Mill. (syn. <i>Salvia triloba</i> L.f.)	None reported.	<a href="#">Online 2014</a>
Saw Palmetto fruit	Serenoae repentis fructus	<i>Serenoa repens</i> (W. Bartram) Small (syn. <i>Sabal serrulata</i> (Michx.) Schult. f)	Few case reports of suspected interactions with warfarin. Increased INR values have been described.	<a href="#">2nd ed. (2003)</a>
Senega root	Polygalae radix	<i>Polygala senega</i> L.	None reported.	<a href="#">2nd ed. (2003)</a>
Senna leaf	Sennae folium	<i>Cassia senna</i> L. (syn. <i>Cassia acutifolia</i> Delile), <i>Cassia angustifolia</i> Vahl	Hypokalaemia (resulting from long term laxative abuse) potentiates the action of cardiac glycosides and interacts with anti-arrhythmic drugs or with drugs which induce reversion to sinus rhythm (e.g. quinidine). Concomitant use with other drugs inducing hypokalaemia (e.g. thiazide diuretics, adreno-corticosteroids and liquorice root) may aggravate electrolyte imbalance.	<a href="#">2nd ed. (2003)</a>
Senna pods	Sennae fructus	<i>Cassia senna</i> L. (syn. <i>Cassia acutifolia</i> Delile)	Hypokalaemia (resulting from long term laxative abuse) potentiates the action of cardiac glycosides and interacts with anti-arrhythmic drugs or with drugs which induce reversion to sinus rhythm (e.g. quinidine). Concomitant use with other drugs inducing hypokalaemia (e.g. thiazide diuretics, adreno-corticosteroids and liquorice root) may aggravate electrolyte imbalance.	<a href="#">2nd ed. (2003)</a>

Drug (English name)	Drug (Latin name)	Species	Interactions based on clinical data	Publication
St. John's Wort	Hyperici herba	<i>Hypericum perforatum</i> L.	<p>Oral administration of preparations with a daily dose of more than 1000 mg drug equivalent or more than 1 mg hyperforin can lead to induction of enzymes of the cytochrome P450 family and the P-glycoprotein drug efflux transporter. Interactions can occur with drugs including amitriptyline, fexofenadine, benzodiazepines, methadone, simvastatin, finasteride, digoxin.</p> <p>Concomitant use of cyclosporine, tacrolimus for systemic use, amprenavir, indinavir and other protease inhibitors, irinotecan and anticoagulants (e.g. warfarin or phenprocoumon) is contraindicated.</p> <p>The reduction of plasma concentrations of oral contraceptives could cause mid-cycle bleeding. The use of additional contraceptive measures due to a possible reduction in contraceptive efficacy is recommended.</p> <p>Several cases of serotonergic effects after concomitant use of St. John's wort preparations with certain antidepressants have been reported. The attribution of these cases to St. John's wort remains unclear.</p> <p>Patients taking other medicines on prescription should consult a physician or pharmacist before taking St. John's wort.</p>	<a href="#">Online 2018</a>
Tea Tree oil	Melaleucae aetheroleum	<i>Melaleuca alternifolia</i> (Maiden & Betche) Cheel, <i>Melaleuca linariifolia</i> Sm., <i>Melaleuca dissitiflora</i> F. Muell.	None reported.	<a href="#">2nd ed. (2003)</a>
Thyme	Thymi herba	<i>Thymus vulgaris</i> L., <i>Thymus zygis</i> L.	None reported.	<a href="#">2nd ed. (2003)</a>
Tormentil	Tormentillae rhizoma	<i>Potentilla erecta</i> (L.) Raeusch. (syn. <i>Potentilla tormentilla</i> Stokes)	None reported.	<a href="#">Online 2013</a>
Turmeric	Curcumae longae rhizoma	<i>Curcuma longa</i> L. (syn. <i>Curcuma domestica</i> Valeton)	None reported.	<a href="#">2nd ed. (2003)</a>
Valerian root	Valerianae radix	<i>Valeriana officinalis</i> L. s.l.	None reported.	<a href="#">2nd ed. (2003)</a>
White Horehound	Marrubii herba	<i>Marrubium vulgare</i> L.	There are reports from a clinical trial with diabetic patients taking glibenclamide that consumption of an aqueous extract was linked with minor symptoms of nausea, oral dryness or salivation, and dizziness.	<a href="#">Online 2013</a>
Wild Pansy	Violae herba cum florae	<i>Viola arvensis</i> Murray, <i>Viola tricolor</i> L.	None reported.	<a href="#">Online 2015</a>
Wild Thyme	Serpylli herba	<i>Thymus serpyllum</i> L. s.l.	None reported.	<a href="#">Online 2014</a>

European Scientific Cooperative on Phytotherapy (ESCOP). Table of herb-drug interactions based on the monographs of ESCOP. Source: <https://escop.com/interactions/>. Updated: 4/5/2020.

<b>Drug (English name)</b>	<b>Drug (Latin name)</b>	<b>Species</b>	<b>Interactions based on clinical data</b>	<b>Publication</b>
Willow bark	Salicis cortex	<i>Salix purpurea</i> L., <i>Salix daphnoides</i> Vill., <i>Salix fragilis</i> L.	Willow bark may slightly increase the effects of oral anticoagulants.	<a href="#">Online 2017</a>
Wormwood	Absinthii herba	<i>Artemisia absinthium</i> L.	None reported.	<a href="#">2nd ed. (2003)</a>
Yarrow	Millefolii herba	<i>Achillea millefolium</i> L.	None reported.	<a href="#">Suppl. 2nd ed. (2009)</a>

## References

- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. 2nd edition. Exeter: ESCOP, Stuttgart: Georg Thieme Verlag, New York: Thieme New York. 2003.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Suppl. 2nd edition. Exeter: ESCOP, Stuttgart: Georg Thieme Verlag, New York: Thieme New York. 2009.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Agrimoniae herba (Agrimony). Exeter: ESCOP; 2019.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Alchemillae herba (Lady's mantle). Exeter: ESCOP; 2013.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Allii sativi bulbus (Garlic). Exeter: ESCOP; 2019.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Aloe barbadensis (Barbados aloes). Exeter: ESCOP; 2014.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Aloe capensis (Cape aloes). Exeter: ESCOP; 2014.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Althaeae radix (Marshmallow root). Exeter: ESCOP; 2019.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Anisi fructus (Aniseed). Exeter: ESCOP; 2014.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Arctii radix (Burdock root). Exeter: ESCOP; 2016.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Ballotae nigrae herba (Black Horehound). Exeter: ESCOP; 2015.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Betulae folium (Birch Leaf). Exeter: ESCOP; 2015.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Calendulae flos (Calendula flower). Exeter: ESCOP; 2019.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Carvi aetheroleum (Carum carvi). Exeter: ESCOP; 2019.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Caryophylli aetheroleum (Clove oil). Exeter: ESCOP; 2014.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Centaurii herba (Centaury). Exeter: ESCOP; 2015.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Chamomillae romanae Flos (Roman chamomille flower). Exeter: ESCOP; 2019.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Cimicifugae rhizoma (Black cohosh). Exeter: ESCOP; 2011.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Echinacea angustifoliae radix (Narrow-leaved coneflower root). Exeter: ESCOP; 2019.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Echinacea pallidae radix (Pale coneflower root). Exeter: ESCOP; 2018.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Equiseti herba (Equisetum stem). Exeter: ESCOP; 2018.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Filipendulae ulmariae herba (Meadowsweet). Exeter: ESCOP; 2015.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Foeniculi aetheroleum (Bitter-fennel fruit oil). Exeter: ESCOP; 2019.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Foeniculi fructus (Fennel fruit). Exeter: ESCOP; 2019.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Frangulae cortex (Frangula bark). Exeter: ESCOP; 2017.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Fumariae herba (Fumitory). Exeter: ESCOP; 2018.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Gentianae radix (Gentian root). Exeter: ESCOP; 2014.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Graminis rhizoma (Couch grass rhizome). Exeter: ESCOP; 2016.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Grindeliae herba (Grindelia). ESCOP: Exeter: 2016.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Hamamelidis aqua (Hamamelis water). Exeter: ESCOP; 2012.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Hamamelidis cortex (Hamamelis bark). Exeter: ESCOP; 2012.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Hamamelidis folium (Hamamelis leaf). Exeter: ESCOP; 2012.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Hydrastis rhizoma (Goldenseal rhizome). Exeter: ESCOP; 2013.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Hyperici herba (St. John's Wort). Exeter: ESCOP; 2018.
- European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. Leonuri cardiaca herba (Motherwort). Exeter: ESCOP; 2019.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Lini semen* (Linseed). Exeter: ESCOP; 2017.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Malvae flos* (Mallow Flower). Exeter: ESCOP; 2016.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Marrubii herba* (White horehound). Exeter: ESCOP; 2013.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Melissae folium* (Melissa leaf). Exeter: ESCOP; 2013.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Menthae piperitae folium* (Peppermint leaf). Exeter: ESCOP; 2019.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Menyanthis trifoliatae folium* (Bogbean leaf). Exeter: ESCOP; 2013.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Myrrha* (Myrrh). Exeter: ESCOP; 2014.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Myrtilli fructus* (Bilberry fruit). Exeter: ESCOP; 2014.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Ononidis radix* (Restharrow root). Exeter: ESCOP; 2015.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Orthosiphonis folium* (Java tea). Exeter: ESCOP; 2014.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Pelargonii radix* (Pelargonium root). Exeter: ESCOP; 2015.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Plantaginis lanceolatae folium/herba* (Ribwort plantain leaf/herb). Exeter: ESCOP; 2013.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Plantaginis ovatae testa* (Ispaghula Husk, Blond Psyllium Husk). Exeter: ESCOP; 2016.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Psylli semen* (Psyllium seed). Exeter: ESCOP; 2017.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Ratanhiae radix* (Rathany root). Exeter: ESCOP; 2017.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Rhamni purshianae cortex* (Cascara). Exeter: ESCOP; 2015.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Rhei radix* (Rhubarb). Exeter: ESCOP; 2019.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Ribis nigri folium* (Black currant leaf). Exeter: ESCOP; 2017.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Rusci rhizoma* (Butcher's broom). Exeter: ESCOP; 2017.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Salicis cortex* (Willow bark). Exeter: ESCOP; 2017.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Salvia trilobae folium* (Sage leaf, three-lobed). Exeter: ESCOP; 2014.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Sambuci flos* (Elder ower). Exeter: ESCOP; 2013.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Serpylli herba* (Thyme European). Exeter: ESCOP; 2014.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Solidaginis virgaureae herba* (European Goldenrod). Exeter: ESCOP; 2018.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Symphyti radix* (Comfrey root). Exeter: ESCOP; 2012.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Tanacetii parthenii herba* (Feverfew). Exeter: ESCOP; 2014.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Tormentillae rhizoma* (Tormentil). Exeter: ESCOP; 2013.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Uncariae tomentosae cortex* (Cat's Claw Bark). Exeter: ESCOP; 2018.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Urticae folium/herba* (Nettle leaf/herb). Exeter: ESCOP; 2018.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Urticae radix* (Nettle root). Exeter: ESCOP; 2015.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Uvae ursi folium* (Bearberry leaf). Exeter: ESCOP; 2012.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Verbasci flos* (Mullein flower). Exeter: ESCOP; 2014.

European Scientific Cooperative on Phytotherapy. ESCOP monographs, The Scientific Foundation for Herbal Medicinal Products. Online series. *Violae herba cum flore* (Wild pansy). Exeter: ESCOP; 2015.