



DESINFICIENTS

Besides synthetic drugs used to combat microbial originator of diseases several natural drugs stayed in use.

Can be formally divided:

- Essential oils (mainly terpenoids)
- Phenols



BUCCO FOLIUM – LIST BUKO

MP: Species of *Barosma*: *Barosma betulina* syn *Agathosma b.* - round leaf buchu and *B. serratifolia* (Rutaceae). Low shrubs, native to area of South Africa, Cap Code

Drug: Dried leaves harvested on wildy growing plants.

CC: flavonoids (diosmin and others), mucilage, essential oil (10-20 ml/kg, prevalent ketons with skeleton of p-menthane: menthone, isomenthone, pulegone; diosphenol). Typical odor caused by sulphur containing compound.

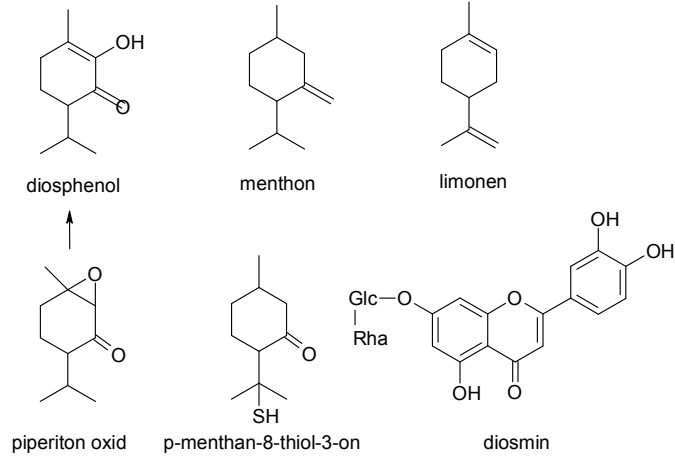
Usage: Infusion - urinary desinfectant (diosphenol), diuretic during urolithiasis.

Contraindiction: pregnancy



BUCCO FOLIUM – BUCHU LEAVES

Content compounds



BALSAMUM PERUVIANUM – PERU BALSAM (ČL 2005)

MP: *Myroxylon balsamum* var. *pereirae* – Fabaceae. Tree native to Central America

Drug: pathologic product produced after stem wounding

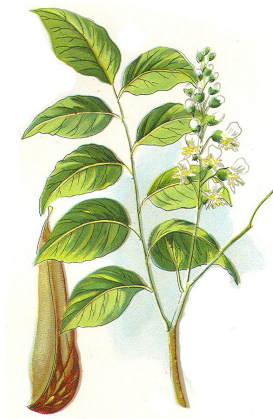
CC: 45 to 70 % of esters (benzylbenzoate, benzyl cinnamate), 6-8 % free and bound cinnamic acid; nerolidol, vanillin; resinoid fraction – purosresinotannols

Usage: external antiseptic, dermatologic (epitelizant, granulant)

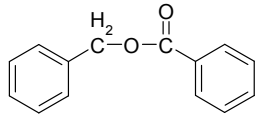
rarely expectorant

Cosmetics, parfumery

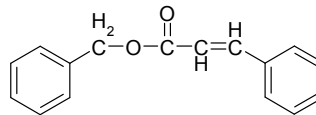
Contact dermatitis; cross-reaction



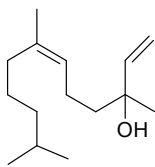
BALSAMUM PERUVIANUM – PERU BALSAM
Content compounds



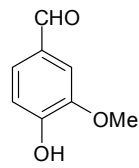
benzylester of benzoic acid



benzylester of cinnamic acid



nerolidol (peruviol)



vanillin

BALSAMUM COPAIVAE – COPAIVA BALSAM


MP: *Copaifera reticulata*, *C. guayanensis* – (Caesalpiniaceae); tree native to tropic Central and South America

Drug: oleoresin flowing from core wood; from one tree 25-50 liters

CC: essential oil (α -caryophyllen, cadinol, sesquiterpenic carbohydrates, diterpenic acids, bitter substances

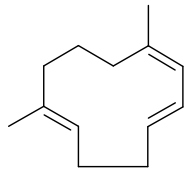
Usage: genito-urinal desinfectant mainly in veterinary medicine, perfumery, soap manufacturing, technical purposes



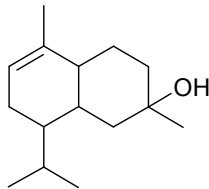


BALSAMUM COPAIVAE – COPAIVA BALSAM

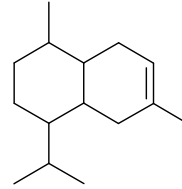
Content compounds



alfa-caryophyllen



cadinol



copaen



GUMMIRESINA MYRRHA - MYRHA (ČL 2005)

MP: *Commiphora molmol* –
(Burseraceae)

Drug: Air-dried hardened gummy-resin
obtained from stems and branches
after section or freely flowing out

CC:

- cca 60 % sacharids and proteins;
- cca 25-40 % of resinous acid
(commiforic acid), resens;
- 3-10 % of essential oils – terpens,
sesquiterpens, eugenol

Usage:

- desinfectant with astringent
component
- Oral and body cosmetics,
deodorants



CARYOPHYLLI FLOS – Clove flower (ČL 2005)
 CARYOPHYLLI ETHEROLEUM – Clove essential oil (ČL 2005)
 EUGENOL

Source: *Syzygium aromaticum* – cloves (Myrtaceae); tree cultivated in tropics

Drug: whole flower buds dried until it gets red-brown color.
 Contains not less than 150 ml of essential oil / 1kg of drug.
 Essential oil obtained by water steam distillation.

CC: essential oil containing 70-85 % of eugenol, 10 % of β -caryophyllen, aliphatic and aromatic terpenoids



CARYOPHYLLI FLOS – clove flower (ČL 2005)
 CARYOPHYLLI ETHEROLEUM – clove essential oil (ČL 2005)
 EUGENOL

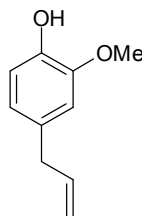
Usage:

- Topic preparation of treatment of small wounds
- Infections of oral cavity (oral hygiene)
- Spice (stomachic, aromatic)
- Indonesia – cigarettes „KRETEK“
- Cosmetics – Old Spice

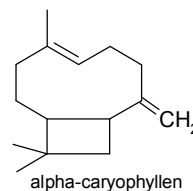
EUGENOL
 CARYOPHYLLI ETHEROLEUM

In stomatology:

- Local anesthetic
- Desinficient



eugenol
 4-allyl-2-methoxyfenol



$\text{CH}_3\text{-CO-C}_5\text{H}_{11}$
 methyl-n-amylketon

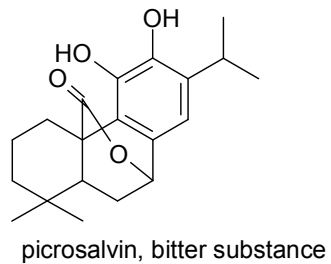
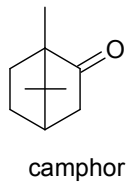
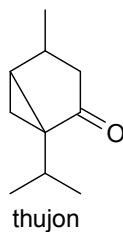
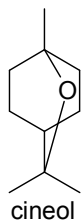
$\text{CH}_3\text{-CO-C}_7\text{H}_{11}$
 methyl-n-heptylketon

SALVIAE OFFICINALIS FOLIUM – sage leaves (ČL 2005)

MR: *Salvia officinalis* – sage
(Lamiaceae); perennial
branched woody semi-shrub
Drug: Whole or cut dried green-
grey leaves; harvested in
flowering period
CC: 10-15 ml of essential oil/kg of
drug (thujone, cineol,
camphor); flavonoids (1-3 %),
diterpenes (pikrosalvin);
triterpenes, rosmarinic acid
Usage: Desinfectant of oral cavity
(Florsalmin)



SALVIAE HERBA – SAGE LEAVES content compounds



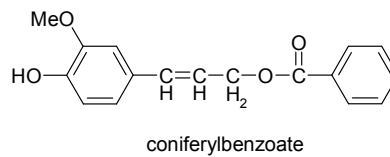
RESINA BENZOE – BENZOIN RESIN (STYRAX RESIN)

MP: *Styrax tonkinense* – styrax, *S. benzoin* – *S. sumatranus* – (Styracaceae). Trees native to eastern and southeastern Asia, but also crossing the equator in South America.

Drug: Resin flowing out from incisions into bark

CC: phenols, coniferylbenzoate, benzoic acid

Usage: Desinficient, cosmetics



UVAE URSI FOLIUM – MEDVĚDICOVÝ LIST (ČL 2005)

MR: *Arctostaphylos uva-ursi* – bearberry, manzanita (Ericaceae). Perennial woody shrub of woods

Drug: Whole or cut dried leaves

CC: at least 7,0 % of arbutine phenolic glycosides (arbutin and methylarbutin), triterpens (ursolic acid), tannins

Usage: Urinary desinficient





UVAE URSI FOLIUM – BEARBERRY LEAVES Content compounds

