

Dermathologics

Preparation used for

- Treatment of pathological changes on the skin
- Triggering of sensation of heat, skin irritation, blood congestion
- Protection of healthy skin against external influences

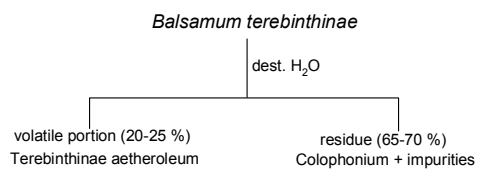
DERMATHOLOGICS

1. Desinfectants and antiseptics (Acidum salicylicum, Camphora)
2. Astringents (Taninum, silver nitrate)
3. Antipruritics (Mentholum, Ichthamolum, Camphora, tars)
4. Antiseborrheics (Ichthamolum, Camphora, acids from Cetraria islandica)
5. Antihydrotics (Formaldehydum solutum, Tanninum, Camphora)
6. keratolytics, keratoplastics (Acidum salicylicum, Pix lithanthracis)
7. Antiphlogistics (Chamomillae flos, Salviae herba
8. Preparation to combat frost-bites (Camphora, Balsamum peruvianum)
9. Preparations to combat burns (Lini oleum, Solutio calcii hydrooxydati)
10. Preparations with granulation and epithelization effect (Jecoris aselli oleum, Balsamum peruvianum)
11. Preparations protecting against light (Tanninum, Chininum sulfuricum)
12. Antimycotics (Chrysarobinum, tars)
13. Antiscabietics (Sulphur praecipitatum, tars)
14. Antipsoriatics (Pix lithanthracis, Chrysarobinum)
15. Derivants, rubefaciens (Terebinthinae oleum, Arnicae flos, Camphora, Cantharis)
16. Working and protecting ointments

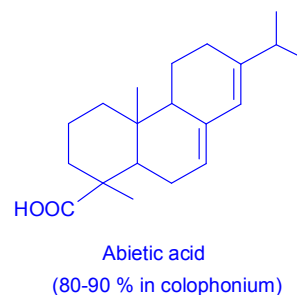
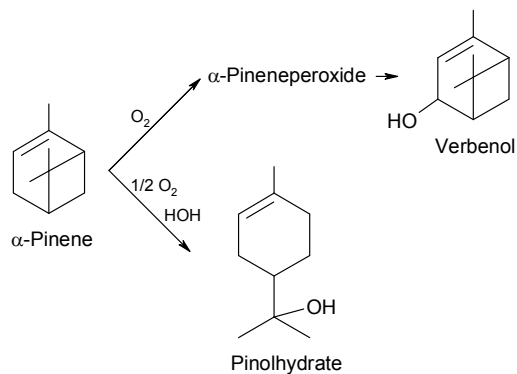
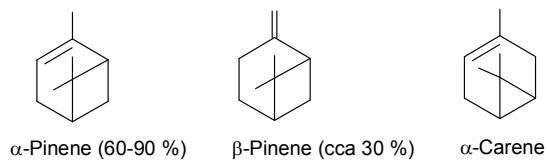
BALSAMUM TEREBINTHINAE – Turpentin

Mother plant: different Pinus species - pines, mostly *P. silvestris*, scots pine, *P. pinaster*, *P. nigra*

Drug: Turpentin is balsam (oleoresin – Oleoresina), stored in schizogenous secretion channels in wood. To obtain the wood is deeply cut. The biggest producer is USA. Drug is composed of essential oil and resin. Essential oil represents approx. 20-25 % and is obtained by water-steam distillation of drug, not volatile residue is colophonium.



TEREBINTHINAE AETHEROLEUM



ARNICAE FLOS – Arnica flower ČL 2005
 ARNICAE RHIZOMA – Arnica rhizome

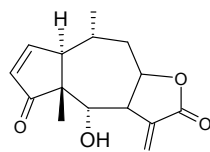
Perennial herb on mountain meadows of Europe

Drug: Flower – ČL 2002
 - dried whole inflorescences (yellow capitulas)
 - separate ligulated and tubular flowers without receptacle
 - harvested in VI and VII

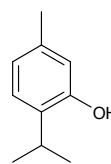
Rhizomes
 - harvested in III (Austria, north of Italy)



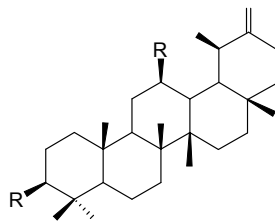
Arnicae flos, Arnicae rhizoma – content compounds



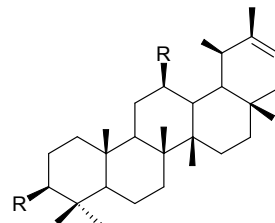
Helenalin



Thymol



Taraxasten R = H
 Arnidiol R = OH



Faradiol R = OH

CAMPHORA D – D-CAMPHOR ČL 2005

Cinnamomum camphora NEES et EBM., camphor tree, camphor laurel (Lauraceae) native to east Asia, Japan, south China, cultivated at Ceylon, South Africa, Brazil.

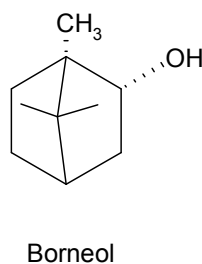
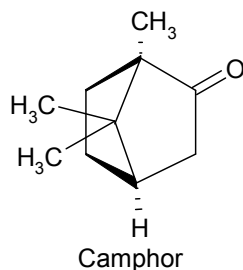
Drug: Camphor is contained in essential oil-containing cells of all organs of tree. Getting old increases the camphor content. To obtain camphor the wood from stems and roots of 50-60 years old trees is used – contain camphor crystalline or dissolved in essential oil. Wood is distilled with water steam. 1 kg of raw camphor is obtained from approx. 20-40 kg of wood.

Properties: White crystalline powder or fragile mass, highly volatile at room temperature. Very easily soluble in 96% ethanol or fatty oils. Melting point 175 °C to 179 °C.

Usage: Component of alcoholic preparations for treatment of rheumatic and neuralgic pains. In form of oil intramuscular injections as central analeptic. In industry used for manufacturing of plastics.



CAMPHORA – CONTENT COMPOUNDS

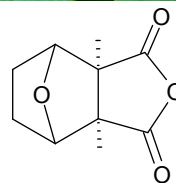


CANTHARIS – SPANISH FLIES

Source: *Lytta vesicatoria* FABRICIUS, spanish fly (Meloidae). Beetles living in south and middle Europe on woody plants of Oleaceae and Caprifoliaceae, for example Fraxinus, Olea, Syringa, Sambucus (eating leaves).

Drug: Dried, completely developed beetles incorrectly assigned as „spanish flies“, what does not correspond neither to origin or systematics. Collected in VI and VII. Sacrificed by chloroform vapours and dried in temperature up to 40°C. Stored in well closed vessels.

- **Usage:** Vesicant, rubefacient. Cantharidine strongly irritated skin and mucosal layers. Peroral administration of 30 mg can be lethal. Substantially lower doses can damage kidneys. Strong irritation of urogenital tract – misused as aphrodisiac and abortive compound. Used in veterinary medicine only. Rarely in dermatology (alopecia).



Cantharidine

Hexahydro-3a,8a-dimethyl-4,7-epoxyisobenzofuran-1,3-dione

CHRYSAROBINUM – Chrysarobin, araroba, goa powder

Andira araroba AGUIAR – brazil araroba, Fabaceae. Tree native to brazilian forests, (province Bahia and Sergipe), cultivated in India. In secondary woods are formed cavities (schisolsigenic) filled with yellow-green secretion.

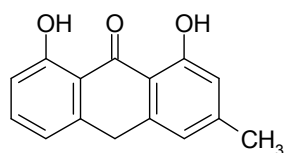
Drug: Purified extract from the secretion. Chrysarobin is prepared via extraction by hot benzene, evaporation to dryness and powdering.

Content compounds: Mixture of anthraquinone derivatives, prevalently free anthrones and anthranols. Chrysophanol-anthrone and chrysophanol-anthranol represents 30–40 %, emodin-anthronemonomethylether approx. 20 %.

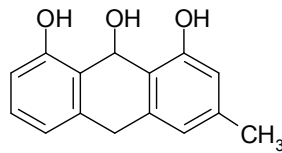
Usage: for content of anthracene derivatives cytotoxic, it is not used for mucous layers and internally. Strong reduction powder – antiseptic. Used as keratolytic agent for treatment of psoriasis, chronic eczemas and mycoses. Carefull handling during manipulation – avoid of powdering to air (inflammation after contact with mucosal layer)



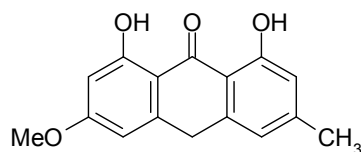
CHRYSAROBINUM – CONTENT COMPOUNDS



Chrysophanolantron



Chrysophanolantranol



Emodinanthron-
-6-methylether

SINAPIS SEMEN – black mustard seed

Brassica nigra – black mustard (Brassicaceae)
annual herb native in Mediterranean,
cultivated in many countries.

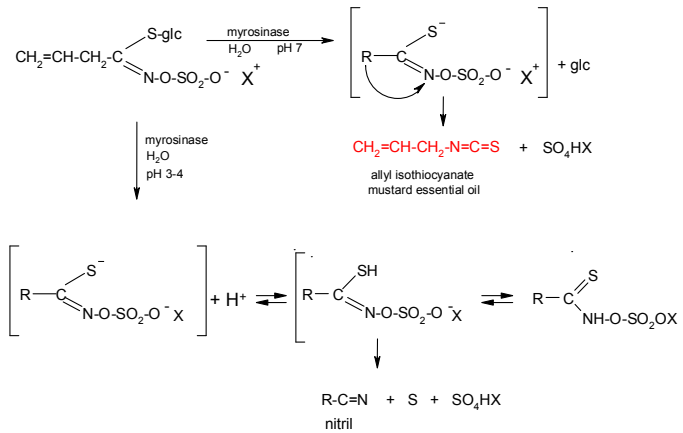
Drug: rippen seeds obtained from fruits -
double-capsuled siliquas.

Contain compounds: 30-35 % of fatty oil,
approx. 18 % of proteins and glycoside
sinigrine (1-5 %). It is cleaved by
myrosinase into mustard essential oil (allyl
isothiocyanate syn. *Oleum sinapis*).

Usage: 0,7 – 1,3 % of mustard essential oil is
obtained from grinded seeds macerated in
water, it is used after dissolving in ethanol,
it is used as rubefacient and derivative
(*Spiritus sinapis* – today used mostly
synthetic allyl isothiocyanate). *Semen
sinapis* is further used in form of powder to
compress or to prepare „mustard paper“ –
Charta sinapisata – also for compresses. In
food industry for manufacturing of mustard.



SINAPIS SEMEN – contain compounds



ERUCAE SEMEN – white mustard seed

Sinapis alba L. - white mustard - Brassicaceae.
Annual herb, native to Mediterranean.
Cultivated in mild climate of whole world.

Drug is rippen dried seed.

Content compounds: Glycoside **sinalbin**, cleaved by myrosinase into p-hydroxybenzyl-isothiocyanate + acidic sulphate of sinapine and glucose. Seed further contains fatty oil (20-25 %), proteins (approx. 25 %) and mucilage.

Usage: Effective similarly as *Semen sinapis*, but weaker. Powder seed of white mustard is used mainly for manufacturing of food mustard.

Note:

Fatty oil of seeds of Brassicaceae possesses unpleasant spicy taste and may be used to technical purposes (manufacturing of soaps and greases).



SEMEN ERUCAE – content compounds

