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MEDICINAL PLANTS IN MONASTERIES IN DUBROVNIK

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Monastery pharmacy

Figure 1. Dioscorides '*De materia medica*' – (copy in Arabic)

- The Bible (plants of importance in the treatment process or preserve health: figs, pomegranates, olives and vines, myrtle, rue ...)
- The monastery pharmacy was in its bloom from 6th to 9th century, based on the works of Cassiodorus and his translations of Greek medicine books, Dioscorides books on herbs; works of Hippocrates and Galen

Dubrovnik Republic (1358–1808)









- The monastery medicine and pharmacy sons of St. Benedict, Monte Cassino.
- Salerno
- Edict of Medicine of Frederick II
- Bologna, Pavia and Padova





Monastery



- Pharmacy "Mala braća"
- 1317. (- until now)
- At first, selling medicinal herbs, and later the real drugs
- "Herbarium"
- Recipes of monastery pharmacist
- Books of secret healing





Rheum rhabarbarum, Polygonaceae



Inventory of medicines

- 1553.
- Simple medicines "simplicia" and composedcalled "composita".
- Most of the simple medicines are herbal, so there we can find:

Flores croci, Fl. cinae, Fructus anisi, Fruct. colocynthidis, Fr. cubebae, Fr. datali, Lignum aloe, Lign. santali albi & rubri, Lign. cassiae, Herba polipodii, **Mandragora**, Rhizoma curcumae, Radix rhebarbarae, Semen mirabolani, Semen nucis

vomicae.

Strychnos nux-vomica L., Loganiaceae





Santalum album, Santalaceae



Mandragora

Pietro Andrea Mattioli (<u>Siena</u>, <u>12 marzo 1501</u> – <u>Trento</u>, <u>1578</u>)

- "Discorsi del Matthioli", Venezia, 1558.
- Mandragora



- "I've seen many times in gardens and markets of Naples, Rome and Venice. In other areas of Italy are planted both species"
- "There are two species, one is black, which is considered to be a female, has a very dense branches, smaller than lettuce, with unpleasant smell and it spreads in the ground. The other species of mandrake, which is a white male, called by some Morion ".







Mandragora



- One small glass is taken in insomnia.
- In pains similar to those when juice is given, or in a case of limb amputation so that one does not feel the pain.
- It is also given in a case of cholera and inflammation.
- Lethal if taken in overdose.
- It is also put in eye medicine similar to pain relieves the pain, and together with vinegar weighing half a coin it is given in cases of menstrual pain and birth.
- Fresh root branches are put as balm together with mashcorn for eye inflammation, pus caused by ulcers.
- Crushed roots, put with vinegar as balm, cure inflammations and snakebites.
- Smelling of the fruit causes sleepnes, similar to when eaten.
- Anyone who makes juice out of it, uses in overdose, eats or smells it, becomes mute.

Composed medicines - "composita"

- "Species dulces" called "confectiones" = mixtures of drugs mixed with sugar, which served as a preservative
- "Species letificante" for cheering up unknown ingredients
- "Condita, is cooked vegetative parts of plant in sugar or honey
- "Syrups" from sugar cane



marzipan

- Amatus Lusitanus (*1511, Portugal, Castelo Branco, + Solun 1568)
- The first describe the accute myocardial infarction
- Pulmonary hemorrhage with nettle juice
- Hemorrhoidal bleeding put leeches on his rectum to start bleeding + laxative, decoct rhabarbarum et tamarindorum (*Tamarindus indica*, Caesalpiniaceae)
- **Cough** poppy seeds; **Acute cough** *Succus petroselini, semen lini, foenum graecum*

Trigonella foenum-graecum



Astragalus gummifer



Plants in the treatments



- Anuria (6 month old boy) after changing the nursing women and got four prescriptions of which was the most important *Radix petroselini* and child urinated. *Radix petroselini* is still used in medicine as a diuretic.
- In gynecologic bleeding Gummi tragacanthae (Astragalus gummifer), Sanguinis draconis (Dracaena), bolus armenica (lime?), a variety of other plants and Cera alba Ragusina.





Dracaena cinnabari, Ruscaceae



Pinellia ternata

 Against nose polyposis, syphilis, febrile illness, gout-gout, ascites, dizziness and migraines *decoct radicis synarum* (Radix chinae) (=*Pinellia ternata*, Araceae) was prescribed.

- In case of indigestion Egyptian Cassia species (Cinnamon, coumarin)
- **Renal colic** *decoctum alvaes gummi tragacanthae* was prescribed.

- The story of a patient who accidentally ate poisonous seeds of the plant called *Ricinus communis* thinking it was pistachio seeds proves the possibility of a serious mistake.
- Another woman threw out a worm in the lenght of four elbows, and she was prescribed Semen cucumeris.

Ricinus communis



 The great Amatus gave one young man, who during coitus threw out flatus, instead of semen, which made him very sad, *Piper albus et niger, Semen urticae & Pyrethrum*.



Piper



Pyrethrum / Tanacetum / Chrysanthemum



Urtica

Conclusions

- The monastery treatment is no longer in use.
- The use of plants is now limited.
- Used evidence based medicine products of powerful pharmaceutical industry are used instead.



Thank you for your attention!!



