PART-I

Un-Organized Drugs

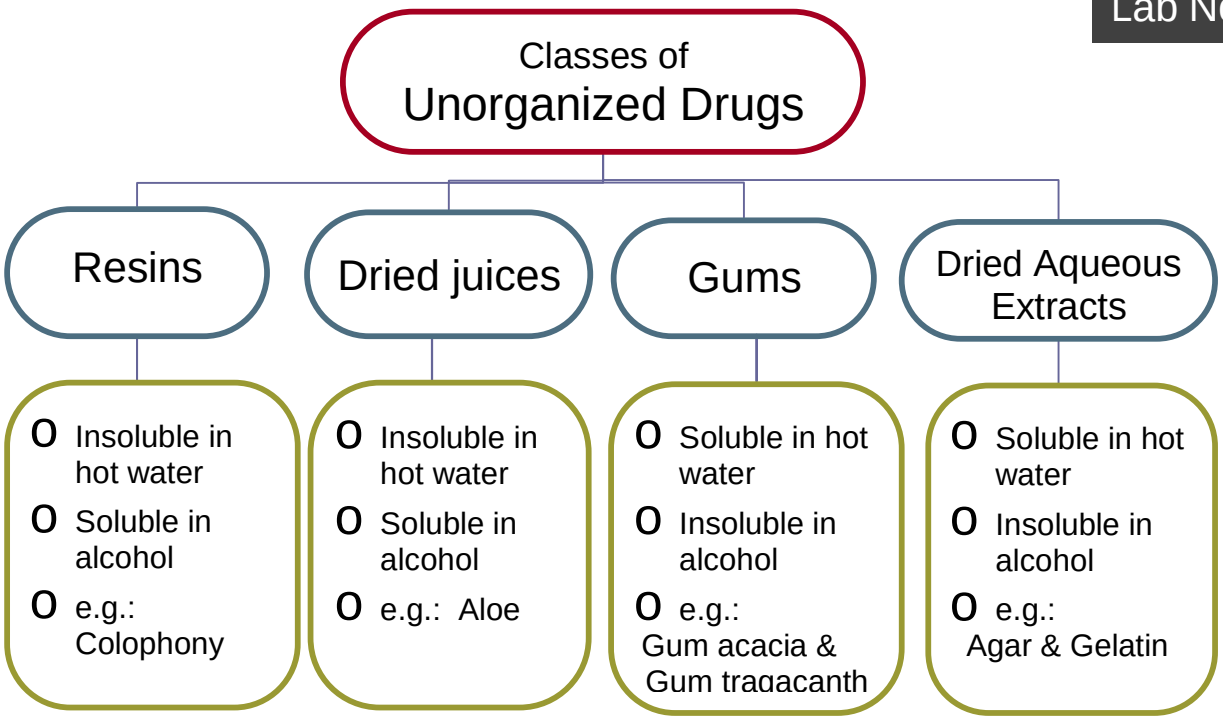
Lab No. 2

UnOrganized Drugs

They are dried constituents from animal or vegetable origin, they have no cellular structure. They are either:

- Derived from parts of plants or animals by some processes of: Exudation, extraction or decoction
- Natural secretions such as myrrh.

UnOrganized Drugs are classified based on their nature & origin into:



1- C o l o p h o n y

Definition: It is the residue left after the distillation of the volatile oil from the oleo-resin of various *Pinus* species

Description:

Condition: powder

Color: Yellowish

Odour: Characteristic

Taste: Bitter

Solubility: Insoluble in hot water, Soluble in alcohol.

Chemical Tests:

- In a dry test tube: dissolve very few amount of powder in 5 ml acetic anhydride, then add 1 drop of conc. H_2SO_4 → purple → violet

- In a dry test tube: dissolve very few amount of powder in least amount of $CHCL_3$ + 5 ml petroleum ether, shake and filter → take 2 ml of filtrate and add 4 ml cupric acetate → emerald green color in the ether layer (upper layer)

Uses:

- Used as a diuretic
- Used in the preparation of some ointments and printing inks.

2- Acacia

Definition: The dried gummy exudates obtained from the stem & branches of *Acacia senegal*

Description:

Condition: powder

Color: Yellowish white

Odour: odourless

Taste: mucilaginous

Solubility: Soluble in hot water forming viscous solution on cooling

Insoluble in alcohol.

Chemical Tests:

1- In a porcelain dish: soak the powder in drop of H_2O + N/50 I_2 solution

→ - ve (**NO** blue or crimson color).

2- In a test tube: Dissolve 1 g of powder in 10 ml H_2O + lead sub acetate solution → flocculent ppt.

Uses:

- Used as a demulcent
- Emulsifying and bulking agent

3- Tragacanth

Definition: It is the dried gummy exudate obtained from the stem of *Astragalus gummifer*. Gum tragacanth consists of two fractions, tragacanthin (30-40%) and bassorin (60-70%), they can be separated by simple filtration of a very diluted gum tragacanth.

Description:

Condition: Powder

Color: white

Odor: Odorless

Taste: mucilaginous

Solubility: soluble in hot water forming viscous solution on cooling, insoluble in alcohol

Chemical tests:

1- In porcelain dish put the powder soaked in water + N/50 I_2 **à** Blue spot.

P.S.: Bassorin gives yellow color with few blue spots.

2- Powder + 2ml alcoholic KOH heat on W.B. **à** Canary yellow color.

Uses:

- Demulcent in cough preparation
- Emollient in cosmetics