

opiumpg. 473  
Kalia 46

Syn: - poppy, Aphim, Khas-Khas

B.S = Kolcotte

Cultivation & Collection:-

Due to narcotic effect, the cultivation & collection are governed by respective govt of different countries.

- In India it is governed by "Narcotic drug & Psychotropic Substances Act 1985"

- Genus Papaver has ~~50~~ 50 species in which 6 species found in India

- Plant - 60-120 cm height

↳ Contains bluish white, purple or violet colour large flower

production (Nov - March)

Collection of opium

After plantation (Nov)

↓  
3-4 months

↓  
Bears flowers

(Dark green) (~~Bluish white~~)

↓  
Flowers are covered by ~~flowers~~

capsule (take 15-20 days to make mature)

(light green)

indicate flow in mature

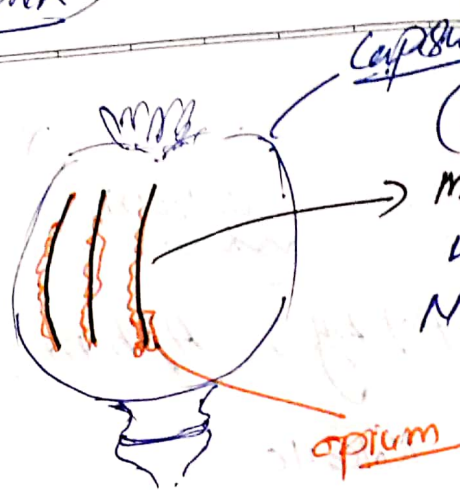
↓  
make incision vertically into afternoon with the help of Nushbtur (upto 2mm)

↓  
Latex exudes out & thickens due to cold weather in night

↓  
Collect in Next morning with Iron scoop (Charpala)

↓  
then's collect in plate container

✓ Incision repeated for 4 times on same capsule with 2 days interval



(upto 2mm)  
incision vertically with the help of Needle like apparatus  
R/S (Nushbtur)

Macroscopy

odour - Strong characteristic

Taste - Bitter

colour - Dark Brown.

Microscopy

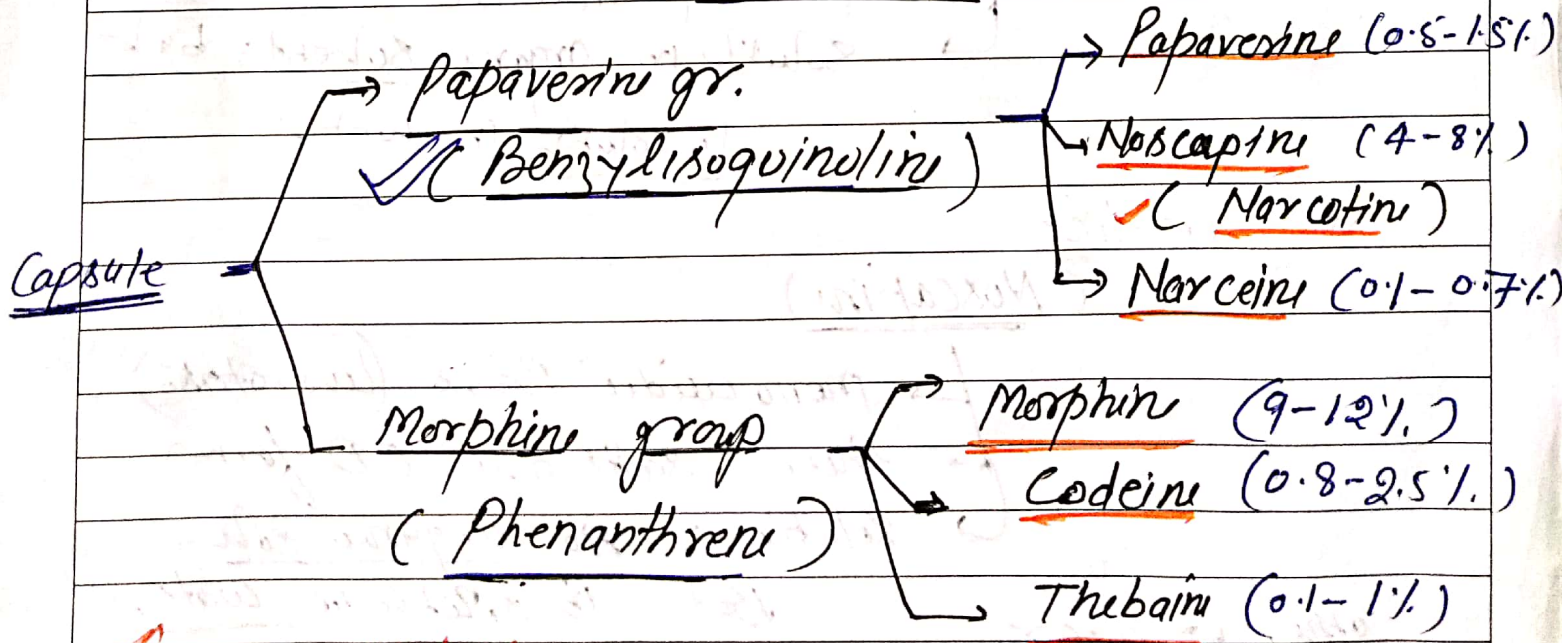
stomata Anomocytic (~~unequally~~ celled)  
(Irregular celled)

10 varying no. of stomata

Chemical consti.

Latex contains Alkaloid (10-20%)  
derived from AAAs  
Phenylalanine  
Tyrosine ✓

Alkaloids are placid in  
two groups



Opium alkaloids are present as salt of Meconic Acid (GPAT) ✓

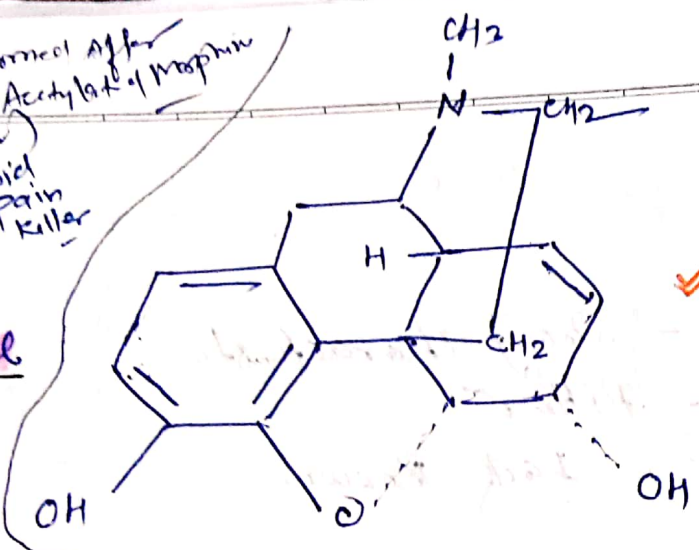
Teacher's Signature : .....

Heroin:

It is 3,6 diacetyl  
ester of  
Morphine

(10 Diacetylmorphine)  
(Pg. 218)  
Tyler)

Formed after  
Acetylation of Morphine



(Morphine)  $(C_{17}H_{19}NO_3)$   
(7,8-dihydro-4,5-epoxy-  
17-methylmorphinan-3,6-diol)

Morphine

- Monoacidic levorotatory phenolic comp
- Due to presence of phenolic groups, it is soluble in Alkali hydroxide.
- But less soluble in organic solvents & water

Codeine

- (Methyl morphine)
- Monoacidic Base (l-form)
- soluble in water & organic solvent

Papaverine

- Monoacidic Base
- optically inactive
- soluble in organic solvents but insoluble in water

Narcotine

(Noscapine)

- monoacidic Base (levorotatory)
- their salts are (D-form)
- soluble in organic sol
- But is soluble in water

other

- sugars
- Wax
- mucilage
- Tannin
- Calc oxalate ; Ca, Mg, K