

(3) CORPORA ALLATA

- ① Situated laterally behind brain, close to roots.
- ② Origin ectodermal.
- ③ Usually paired but in some like hemiptera - fused.
- ④ In Apterigota and Ephimeroptera, CA are innervated by suboesophageal ganglion, in some others, supplied by cerebral hemisphere. Such nerves called NCA (Central nerve).
- ⑤ CA, \uparrow in size in older insects size may go down.
- ⑥ Active throughout the life.
- ⑦ Cells are irregular, homogenous cytoplasm, abundant lysosome, less conspicuous golgi body. Abundant SER are present from which lipid droplets are derived.
- ⑧ CA produces Juvenile hormone which is of 4 types. JH₀, JH_I, JH_{II}, JH_{III} and so on.
- ⑨ JH are chemically terpenoid related esters of tridecaadienoic acid.
- ⑩ In immature stages, it is required for maintenance of juvenile.

ii) In adults, it is k/a **reproductive hormone** (in female particularly). On removal of CA, **egg prod** is stopped.

In males, CA causes **prod of GnRH** and also **maintainance of accessory sex organ**.

iii) Insects maintainance of PTU.

iv) Break adult reproductive diapause.

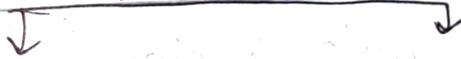
v) Modify epigenic behavior / cocoon formation.

vi) Maintains polymorphism in termites.

vii) In Honey bee, development of queen.

viii) In Locust, if JH is given they become solitaneous (generally gregarious).

~~Ecdyso~~ Ecdysone



Phytoecdysone

- produced by plant

- usually called JHA

Juvenile hormone analogue

Zoecdysone

- by animals