

### ③ ~~P~~ Photoreceptors - (Contd)

They ~~enable~~ enable the fish to locate objects from a distance, as the fish easily becomes aware of any distortion or obstruction in its electric field caused by an enemy, prey or inanimate object. With the help of electroreceptors, becomes aware about the presence of a neighbour, its distance, sex and its activity etc.

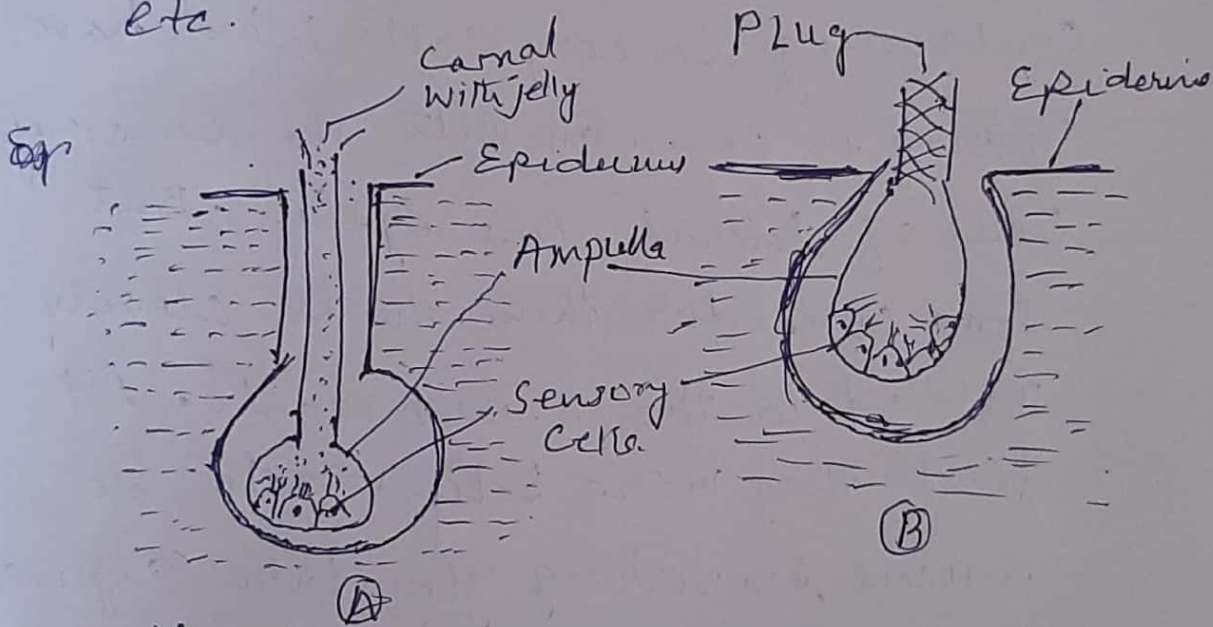


Fig - Diagrammatic representation of electroreceptors.

① Ampullary organ

② Tuberous organ.

(4)

## THE AMPULLAE OF LOREZINI

The ampullae of Lorezini form a complicated system of jelly filled canal which open all over the snout and head in the elasmobranchs and in one bony fish *Plotosus anguillaris*. The canal ends in swollen bulbs containing sensory cells which have nothing in common with the sensory cells of lateral line system. But some consider them to be closely related to the neuromasts. At first they were believed to be mucous secreting glandular organs but later were found to be sensory in nature. They are supplied by branches of the facial nerves.

The duct of ampulla is full of jelly-like material and does not give a positive reaction for mucous

(5)

The sac like ampulla is usually divided into several secondary ampullae but in Torpedo and Plotosus, the ampulla are simple undivided structures. Histologically, the ampulla consists of two types of cells, Pyramid cells and flask cells. Both type of cells are sensory.

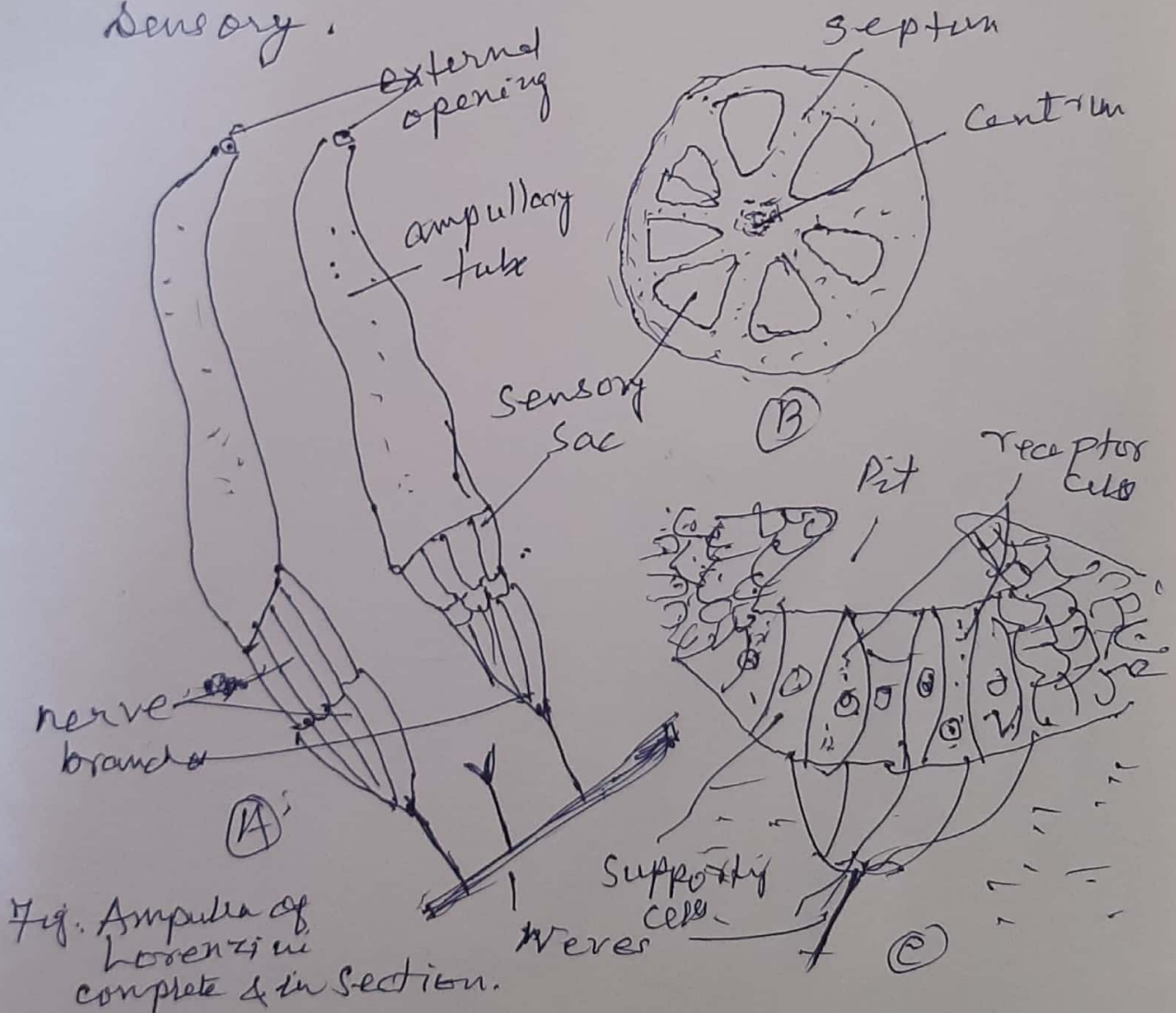


Fig. Ampulla of Lorenzini complete & in section.

(6)

Functions :-

Ampulla of Lorenzoni are temperature receptor. Murray (1957) believe that like the lateral line system, the ampulla are pressure receptors.

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