bases and wider free tips. The cells in fixed material do not appear to be ciliated though Graham (1938) has shown in more normal aeolids that they usually bear cilia in life. Digestive cells highly vacuolated and in some the vacuoles are filled with ingested food particles. The nuclei are large, ovoid, and generally confined to the narrow proximal neck of the cell; they have nucleoli that are clearly visible in haemotoxylin-stained material. Scattered amongst the digestive cells are small numbers of cells packed with yellowish refractive granules, like those considered by Graham to have an excretory function.

The cerata (Fig. 1e) contain only cnidosacs with nematocysts. Proximally they communicate with the underlying alimentary canal by narrow winding ducts. The first pair are connected, the right ceras to the stomach and the left to the digestive gland as in *P. salamandrops*. Remaining cerata connected to the digestive gland. There appears to be no terminal pore distally, but the thinness of the distal epithelium and the ease with which it is ruptured by slight pressure suggests that the nematocysts may be liberated when the cerata are slightly damaged. The nematocysts are for the most part grouped in large vacuolated cells similar to those described from the anterior cerata of *Eolidina alderi* Graham (1938). These cells are arranged in a column in the lumen of the ceras. Some nematocysts were found lying free in the lumen of the cnidosac, but this may be the result of tissue damage caused by fixation.

NERVOUS SYSTEM: Central nervous system (Fig. 3a-b) similar to that described for *P. salamandrops* lying immediately posterior to the buccal bulb and characteristic of the type generally found in members of the Aeolidacea. Cerebro-pleural complex fully coalesced, pedal ganglia situated in the dorsal half of the body. Pedal commissure running horizontally beneath the oesophagus behind the buccal bulb with the statocyst arranged on the outside of the cerebro-pedal connective. Only one statolith in the statocyst. Buccal ganglia lying between the buccal bulb and the oesophagus joining the cerebro-pedal connective immediately below the cerebro-pleural ganglia. Several large nerves run forward from the anterior region of the cerebro-pleural ganglia and from these a number of branches terminate in sensory cells scattered throughout the head (Fig. 4a-c). The sensory cells are not arranged in foliaceous groups as are those described for *P. paradoxus* Kowalevsky (1901). A number of nerves run ventrally from the pedal ganglia.

RENOPERICARDIAL SYSTEM: Kidney an elongated sac, extending on the right side from behind the genital openings almost to the gonad. Renal pore opening immediately beside the anus. Towards the posterior end of the kidney a short renopericardial duct runs dorsally to a small pericardium, lying between the kidney and the body wall. The pericardium does not appear to have the features described by Marcus (1953) for *P. salamandrops*. There is no "mug-shaped" cuticularised basement membrane in this species nor is the pericardium glandular in appearance. There are no further traces of a circulatory system.

REPRODUCTIVE SYSTEM (Fig. 3c-d): Hermaphrodite gonad lying posteriorly beneath the digestive gland, consisting of three follicles, two containing only oocytes and a third containing only sperm. Gonad discharging anteriorly into a short common ampulla which immediately narrows to become the hermaphrodite duct, continuing anteriorly for a short distance to bifurcate into oviduct and vas deferens. Entrance to the oviduct guarded by a muscular sphincter.

Male System: Anterior to the bifurcation of the hermaphrodite duct the vas deferens extends forward almost to the level of the buccal bulb then turns abruptly upon itself and joins the anterior end of the prostate. This gland is a wide tube lined with strongly ciliated columnar cells, whose cytoplasm is densely packed with eosinophilous granules. Prostate extending for some distance posteriorly. From near its proximal end a narrow, ciliated "penial" duct runs forward again and