

theca; hydrocladia alternate, rather more than one-tenth of an inch in length, arising one from every internode of the stem close to the base of a hydrotheca. Hydrothecæ deep, conical in front view, cylindrical in profile, adnate by somewhat more than half their height to the supporting internode, flanked on either side by a short tooth-like process, which carries a long lateral nematophore; a single mesial nematophore borne by the hydrothecal internode at the proximal side of the hydrotheca, and another at its distal side in the hydrocladia, while in the stem the single mesial nematophore is replaced in the distal portion of each internode by a pair of lateral nematophores.

*Gonosome*.—Female gonangia borne along the stem, each springing by a very short peduncle from a point opposite to the origin of a hydrocladium, large, ovate with truncated summit, carrying from base to summit along one side a single linear series of nematophores.

Male gonangia developed in the same colony with the female, and borne exclusively by the internodes of the hydrocladia, springing by a short peduncle from the internode at the proximal side of its hydrotheca, very much smaller than the female, crescentic in form, destitute of nematophores, and with rounded summit curved towards the supporting internode.

*Plumularia armata* is a small and delicate Hydroid. The condition of the gonosome is very exceptional. The nematophores, which are developed on the outside of the female gonangium, constitute in themselves a very unusual and striking feature. These extend in a continuous series along the course of the blastostyle, with which they communicate through perforations in the chitinous walls of the gonangium. In order to allow of this communication, the blastostyle is thrown out of the axis of the gonangium, and lies against the inner surface of its walls, immediately under the series of nematophores.

In *Sciurella indivisa* of the present Report we also find the gonangium carrying numerous nematophores. Here, however, the nematophores are not arranged in a single series, but form symmetrically disposed groups.

Striking, however, as is the development of gonangial nematophores in these instances, it is only an extreme case of what occurs in several other Eleutheroplean Plumularidæ, as in *Plumularia catharina* and allied species, and in *Antennularia fascicularis*, and the two species of *Schizotricha* described in the present Report. In all these a pair of nematophores is developed from the base of the gonangium, and there communicates with the proximal end of the blastostyle.

Another very exceptional, though by no means unique character, is found in the presence of both male and female gonangia in the same colony. These differ not only in form but in situation. The large ovate female gonangia, with their series of parietal nematophores, are borne exclusively on the stem, which, like the hydrocladia, is composed of a series of hydrotheca-bearing internodes, while the very much smaller crescentic male gonangia are confined to the hydrocladia.