

The obliquely egg-shaped subumbrella is much more vaulted in the ventral than in the dorsal half; the diameter of its aperture is about equal to its height. The velum (figs. 1, *v*, 2, *v*) is small. The four radial canals of the subumbrella are arranged symmetrically; the dorsal canal (figs. 1, 2, *cd*) is shorter, the ventral (*cv*) longer than the two lateral canals (*cx* right, *cl* left). The apical canal (fig. 7, *cn*), which arises from their proximal junction, is short, and passes obliquely through the jelly substance of the top in ventral direction to the somatocyst (*cs*).

Apical Bract (figs. 1, *b*, 2, *b*, 7 *b*).—The peculiar organ, which we call the apical bract, distinguishes at once *Mitrophyes* from all other Monophyidæ, and from all Calyconectæ in general. It covers the exumbrella of the nectophore in the same manner as a cap covers the head of a man. The bract is a circular concave-convex shield, the diameter of which nearly equals that of the subjacent nectophore.

Its morphological signification is difficult to make out; it may be nothing other than the reduced umbrella of a medusome, which has lost all its other parts; but it may also be the remnant of the primary nectophore, the place of which is taken by the permanent nectophore afterwards developed. These two pieces are connected by a narrow short pedicle (figs. 2, 7) which is probably the uppermost part of the original trunk. The jelly substance of the bract is rather thin in the peripheral, thicker in its central part, and includes here three short blind radial canals, a longer dorsal (fig. 1, *cb*) and two smaller lateral canals; from their junction arises a short bracteal canal (fig. 7, *cb*) which passes through the pedicle to the somatocyst (*cs*).

Somatocyst (figs. 1, 2, 7, *cs*).—The somatocyst, or the coryphal cavity of the stem, is a slender conical canal, placed nearly horizontally in the gelatinous umbrella of the nectophore, in its sagittal plane, and directed towards the dorsal side. Its direct continuation towards the ventral side is the axial canal of the trunk. Its proximal apex is closed. From its distal base arise two lateral branches nearly opposite; proximally the peduncular canal of the bract (fig. 7, *cb*), and distally the peduncular canal of the nectophore (fig. 7, *cn*).

Hydræcium.—*Mitrophyes* does not possess a distinct hydrocæcium, but it has a very small cavity, which may be considered as the rudimentary homologue of such a "funnel cavity" (figs. 1, 7, *ui*). This rudiment of a hydrocæcium is placed nearly in the apex of the nectophore, and represents a very small funnel-shaped foveola of its exumbrella, which surrounds the origin of the free trunk (α).

Siphosome (figs. 1, 2, 7, α).—The common trunk or stem of the siphosome in the expanded state (fig. 1) is a very long thin cylindrical tube, attaining a length of 20 to 30 mm. The internodes between the ordinate cormidia are twice as long as these. In the contracted state (fig. 2) the internodes disappear, and the convoluted stem becomes hidden between the nectophore and bract. The number of the cormidia in the largest specimen observed was between thirty and forty.