

though the uppermost one is by no means the largest. The strips of the lower group number three and are also elongate, lying nearly at right angles to the foregoing and connected with one another at the lower end. The adradial muscular area is broken into two parts as seen in *A. platyacanthus*. In comparison with these species, the oral plate of *A. miyadui* is more specialized. The abradial muscular area is extraordinarily large and protrudes distally so as to form a conspicuous wing; the indentation, which penetrates into the area from the middle of proximal margin, is very distinct and elevated, bearing many branches like the venation of a leaf. The adradial muscular area is also divided into two parts as in the foregoing (Pl. V, figs. 1-4). In *A. japonicus* the abradial muscular area is similarly divided into two parts dorso-ventrally by a middle transverse interval, the inner margins of which are irregularly notched; between these two parts are two smaller ones, lying nearly horizontally. The spoon-shape of the adradial muscular area is imperfect, consisting of upper large and lower small fragments (Pl. V, figs. 9-10). The oral plate in *Unioplus macraspis* is similar to that of *Amphioplus asterictus* (Pl. IV, fig. 49-50). The oral plates of *Amphichilus trichoides* and *Amphiacantha acanthina* are well in agreement with those of *Amphioplus* in many features. The abradial muscular areas bear an indentation, which is rather broad, not far-reaching and bifurcated dorso-ventrally at the centre of the area. The adradial ones are spoon-shaped (Pl. V, figs. 5-8). The oral plate of *Diamphiodia*, as seen in an unnamed species of that genus, is distinctly divergent proximad, and resembles that of *Amphioplus miyadui*. The abradial muscular area, which is well developed and forms a conspicuous distal wing, is divided into two parts, the upper one of which is large and bears a radially branched indentation at the middle of proximal margin, while the lower one is very small, without any notch. The adradial muscular area is typically spoon-shaped. As the oral plate of *D. debita* agrees so well with that of the foregoing in many features, it seems needless to add any account of it.

In contradistinction to those mentioned above, the oral plate of *Amphipholis sobrina* is a little longer than high and not so distinctly divergent proximad. The abradial muscular area is of moderate size, entire and ear-shaped, but it does not form a conspicuous distal wing. The adradial area is divided into two parts, as often seen in this family; the upper part is exceedingly large and somewhat triangular in shape, while the lower one is very small and elliptical (Pl. V, figs. 11-12). The oral plate of *A. japonica* falls in the same category as that of *A. sobrina*, but the abradial muscular area is divided into two parts dorso-ventrally by a transverse interval, though the division is rather imperfect, and the adradial one preserves only the upper enlarged portion, the lower narrow one wholly disappearing (Pl. V, figs. 13-14). On the other hand, that of *A. tetracantha* is typically wing-shaped. Here, the abradial muscular area, which is rather large and markedly concave at the middle of proximal margin, forms a moderate distal wing, an indentation with several short branches entering the area from the middle of distal margin. The abradial area is quite spoon-shaped (Pl. V, figs. 15-16). The oral plate of *A. kochii*, like that of *A. tetracantha*, carries a distinctly spoon-shaped adradial muscular area, but its abradial muscular area, which is rather large and forms a marked distal wing, is subdivided into two parts, one lying above the other. Each of them has a more or less branched notch on the inner border. Besides these, two small portions are found between them, as already observed in *Amphioplus japonicus* (Pl. V, figs. 17-18).

The oral plate is essentially wing-shaped in the other genera of Amphiuroidae studied, as in most members of the family. In *Hemilepis arcystata*, *Amphinephthys crossota*, and *Amphiura trachydisca* the abradial muscular area is ear-