

PLATE XXXI.

Figs. 1-4. *Psammaplidium rude*, n. sp.

Figs. 5-10. *Psammaplidium subviride*, n. sp.

Figs. 11, 12. *Psammaplidium exiguum*, n. sp.

Figs. 13-16. *Psammaplidium ovatum*, n. sp.

Figs. 17-19. *Amaroucium nigrum*, n. sp.

at. Atrial aperture.

at.l. Atrial languet.

br. Branchial aperture.

br.s. Branchial sac.

en. Endostyle.

l. Languet.

l.v. Fine longitudinal vessels of branchial sac.

m. Mantle.

m.b. Muscle band in mantle.

m.f. Muscle fibres.

n.g. Nerve ganglion.

o. Ovum.

œ. Oesophagus.

p.abd. Post-abdomen.

p.br. Peribranchial cavity.

p.c. Pigment cell.

sg. Stigmata of branchial sac.

t.c. Test cells.

t.m. Test matrix.

tr. Transverse vessel of branchial sac.

t.v. Spermatic vesicles.

v.d. Vas deferens.

Fig. 1. Colony of *Psammaplidium rude*; natural size.

Fig. 2. Another colony of *Psammaplidium rude*; natural size.

Fig. 3. Anterior end of Ascidiozooid of *Psammaplidium rude*, seen from right side, showing apertures and atrial languet; magnified (S., 1 inch).

Fig. 4. Dorsal part of branchial sac of *Psammaplidium rude*, showing languets; magnified (S., 1 inch).

Fig. 5. Colony of *Psammaplidium subviride*; natural size.

Fig. 6. Part of branchial sac of *Psammaplidium subviride*; magnified (S., 1 inch).

Fig. 7. Anterior end of Ascidiozooid of *Psammaplidium subviride*, showing atrial languet; magnified (S., 1 inch).

Fig. 8. Dorsal languet of *Psammaplidium subviride*; magnified (S., 1 inch).

Fig. 9. Section of test of *Psammaplidium subviride*, showing imbedded foreign particles; magnified (S., 1 inch).

Fig. 10. Part of post-abdomen of *Psammaplidium subviride*, showing ova and spermatic vesicles; magnified (S., 1 inch).

Fig. 11. Colony of *Psammaplidium exiguum*; natural size.

Fig. 12. Part of branchial sac of *Psammaplidium exiguum*; magnified (S., 1 inch).

Fig. 13. Colony of *Psammaplidium ovatum*; natural size.

Fig. 14. Part of branchial sac of *Psammaplidium ovatum*; magnified (S., 1 inch)

Fig. 15. Ascidiozooid of *Psammaplidium ovatum*, seen from ventral edge; magnified (S., 1 inch).

Fig. 16. Anterior part of young Ascidiozooid of *Psammaplidium ovatum*, cut open; highly magnified (S., $\frac{1}{4}$ inch).

Fig. 17. Colony of *Amaroucium nigrum*; natural size.

Fig. 18. Section through test of *Amaroucium nigrum*, showing test cells; highly magnified (S., $\frac{1}{4}$ inch).

Fig. 19. Part of mantle of *Amaroucium nigrum*, showing muscle bands and pigment cells; highly magnified (S., $\frac{1}{4}$ inch).