Maretia (Spatangus).

Maretia, Gray, 1855, Cat. Rec. Ech.

Maretia alta (Pl. XXXVII. figs. 1-4).

Maretia alta, A. Agassiz, 1863, Proc. Ac. N. S. Phila., p. 360.

As there are many excellent figures of Maretia planulata, I have figured Maretia alta for the sake of facilitating comparison between these two recent species of the genus. The specimens of this species collected by the Challenger show that it becomes considerably larger than was previously known, one of the Challenger specimens measuring 35 mm. in length.

I could find no trace in the specimens examined of the rudimentary lateral fasciole first seen by Duncan¹ in a fossil species of the genus, Maretia anomala. It, however, occurs in the recent species of the genus, for among the many specimens of Maretia planulata I found that some of them show a very distinct interrupted lateral fasciole, but far less well marked than in Lovenia, where I have also detected a similar but a much better defined lateral fasciole and one apparently uniformly present, which is not the case with the rudimentary lateral fasciole of Maretia planulata.

Maretia carinata, Bolau,² is evidently from its very characteristic description identical with the species I briefly noticed in 1863 in the Proc. Phil. Acad., and subsequently described more fully in the Revision, part 3, p. 569, 1873, as Maretia alta.

The presence of only two to three large primary spines near the ambitus on the abactinal surface gives this species (Pl. XXXVII. figs. 1, 4) a very different aspect from that of Maretia planulata, in which the whole of the abactinal surface above the ambitus in the paired interambulacral areas is covered by many large primaries carrying long curved spines often equalling in length half the length of the test, with a coarse miliary intertubercular granulation, while the miliary tuberculation of Maretia alta is close and fine, the abactinal surface of the test, carrying only very short, slender miliary spines uniformly distributed over the coronal plates. The bare ambulacral fields of the actinal surface are also comparatively narrow in this species, the primary tuberculation of the actinal surface extending nearer towards the actinostome from the ambitus than in Maretia planulata. The difference in coloration is also most striking, all the alcoholic specimens of Maretia planulata are of a light straw colour, while those of Maretia alta are of a dark pinkish-buff colour.

Station 191. September 23, 1874. Lat. 5° 41′ S., long 134° 4′ E.; 800 fathoms; bottom temperature, 3.9° C.; mud.

Station 192. September 26, 1874. Lat. 5° 42′ S., long. 132° 25′ E.; 129 fathoms; mud.

¹ Duncan, 1877, Quar. Journ. Geol. Soc., vol. xxxiii. p. 52.

² Dr Heinrich Bolau, Die Spatangiden des Hamburger Museums, Hamburg, 1873.