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## ON A NEW SPECIES OF DISTICHOPORA.

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The following species of *Distichopora* has not, I think, been described, at least I can find no record of its description. It is very common I should think in the Islands, as I have seen a good many specimens of it at various times, amongst collections of shells and curiosities from Solomon Islands, between Lat.  $5^{\circ}$  and  $12^{\circ}$  S. and Long.  $154$  and  $163$  E., and the Penrhyn Islands, Lat.  $9^{\circ} 12'$  S.  $154^{\circ} 35'$  W. Also from the Marshall Group. I cannot however be sure of the locality in any case, as the information I could procure was not only obtained second-hand, but also in general, vague and indefinite. The species is particularly interesting, as its habit is larger and stouter than *D. coccinea*, Gray, which is our largest species from the Pacific. I have not seen the descriptions of the species dredged by Pourtales in the Atlantic.

## DISTICHOPORA LIVIDA, n. s.

Corallum, in stout, solid tufts, three or four inches high, flabellate or twisted, and gnarled like the branches of a tree, not always spreading in the same plane, very solid and compact, livid, tips of branches sometimes yellow or white, lateral furrows and tips of smaller branches bright red or orange. Branches almost cylindrical, stout, rugose, very finely vermiculate, many projecting branchlets, the central stem often disproportionately thicker than the branches and smooth. Lateral furrows conspicuous

from their color. Gastropores large, irregular. Dactylopores small, situate on a moderately projecting, broad margin. Style very long and spinous. Ampullæ in slightly swollen, pale, livid masses, in which the separate cells are not easily distinguished.

The position and character of the ampullæ renders it probable that only male stocks have been seen by me since the female gonangia, after the researches of Moseley are in swollen and larger receptacles. At least this is true with regard to *Distichopora violacea*, Pallas, which is the only member of the genus whose soft tissues he was able to examine. It cannot be too often impressed on collectors to preserve such specimens as these in spirits when they are found in a living state. In reality very little is known about this genus which for so long a time puzzled naturalists. Mr. Moseley in his brilliant researches on the family of *Stylasteridæ* has established the connexion of *Distichopora* with those interesting and wonderful Hydro-corallines. The mode of reproduction is yet a problem. The organs have been most carefully studied, but the way in which the ova are fertilized is not yet known. Mr. Moseley's Croonian lecture published in the Proceedings of the Royal Society for 1878 is one of the triumphs of modern discovery in natural science. I hope it will not be invidious for me to point out one or two slight omissions to those students who may have recourse to it for reference. The species of Dana, *Distichopora gracilis* is not mentioned (See report on Zoophytes, second edit., p. 151 and Atlas pl. 60, fig. 4. &c.). It is also stated that *Millipora violacea*, Pallas, was classed by him among his *Madrepora*, which is probably a misprint. The reference to Plate 1. fig. 5. (p. 480, line four from top) is plate 35, fig. 5.

The following is a list of the species of *Distichopora* common in the Pacific, and all of which may occur on the coasts of Australia in the tropics. Those marked with an asterisk have been already found.

\**Distichopora violacea*, Pallas, Elenchus Zoophytorum, first edition Hague, 1766. p. 258, as a *Millepora* with reference to

Rumphius which is probably incorrect, as Rumphius calls his species *Lithodendrum saccharaceum rubrum*. Color violet.

*Distichopora gracilis*, Dana, loc. cit. Color pale rose.

*coccinea*, Gray, Proc. Zool. Soc., 1860, p. 244. Color blood red with yellow tips.

\**rosea*, Saville-Kent, Proc. Zool. Soc., 1871, p. 281. Color deep rose carmine.

*livida*, nobis. Color livid with orange pores.

I have never seen Dana's species, but the others are common, *D. coccinea* especially.

I am at present engaged on a review of the whole genus, including its bibliography, which I hope to publish shortly. A marked difference between the present species and *D. coccinea* is that the latter has a small line of branchlets projecting at right angles from the main stem, while the stems of *D. livida* are smooth.