

a depth of 450 fathoms, while all the others are comparatively shallow water species, their stations varying from 9 to 70 fathoms in depth.

*Desmoscyphus* has yielded four species which, with the exception of *Desmoscyphus gracilis* from the West Indian Region, have all been found in the South Atlantic. Two of these, however, *Desmoscyphus pectinatus* and *Desmoscyphus obliquus*, afford an instance of unusually wide distribution, *Desmoscyphus pectinatus* having another station in the Australian Region, and *Desmoscyphus obliquus* also another in the East Indian.

*Syntheceum*, hitherto known only as a New Zealand genus, has yielded to the dredge of the Challenger two new species obtained off the south-west coast of Australia.

*Idia pristis*, the only species as yet known of this remarkable genus, would seem to be widely distributed in the seas lying to the south of the equator. The Challenger obtained it from two stations, one in the South Atlantic Region and the other in the East Indian. In neither of these stations did the depth exceed 20 fathoms.

The Plumularinæ have yielded thirty-one species. As stated in the first part of this Report, it may be generally asserted of the Plumularinæ that they have their greatest development in the warmer seas of both hemispheres, and that in tropical and subtropical regions they attain their maximum in multiplicity of forms, in the size of the colonies, and in individual profusion.

Among the species of this group brought home few had been obtained from any considerable depth. *Cladocarpus*, however, which of all the genera of the Plumularinæ would seem to be that which inhabits the greatest depth, is represented in the collection by two species, *Cladocarpus pectiniferus*, which was dredged from a depth of 900 fathoms in the Azoric Region, and *Cladocarpus formosus*, which was obtained by the trawl from a depth of 775 fathoms in the seas lying to the south of Japan. The depth of 900 fathoms from which *Cladocarpus pectiniferus* was dredged is the greatest depth from which any member of the Plumularinæ has as yet been obtained; *Polyplumaria pumila*, *Aglaophenia filicula*, and *Aglaophenia acacia* are also deep-water species, having been all dredged in the Azoric Region from a depth of 450 fathoms. *Plumularia insignis* and *Plumularia abietina* were dredged off Marion Island, in the Region of the Cape of Good Hope, from a depth of from 150 to 310 fathoms; but none of the remaining species of the Plumularinæ came from greater depths than 150 fathoms, most of them from depths under 100 fathoms, while many are quite littoral and came from depths ranging between 8 and 20 fathoms.

The discovery of *Cladocarpus formosus* in the Japanese Region is a fact of considerable interest. This species had previously been obtained by the "Porcupine" from the deep cold area which lies between Shetland and the Færøe Islands, where it was dredged from a depth of 167 fathoms. *Cladocarpus formosus* thus affords an instance of the same species inhabiting two widely separated regions, with its absence, so far as we yet know, from all intervening stations.