

It will be interesting to compare the results obtained from the Tetractinellida with those from the Monaxonida and Hexactinellida; the latter are given by Schulze, the former I have obtained by analysing the lists of Messrs. Ridley and Dendy, and the short one of additional Monaxonids given in Appendix II. of this Report.

	Atlantic.	Indo-Antarctic.	Pacific.
Hexactinellida,	19·1	50	47·1
Tetractinellida,	11·6	25	34·71
Monaxonida,	44·2	82·1	76·6

The poverty of the Atlantic as compared with the other two basins is shown by all three groups, but while the Pacific is richer in species than the Indo-Antarctic in the case of the Tetractinellida, the reverse is true in the case of the Hexactinellida and the Monaxonida.

In making these observations we must be careful, however, not to read into them more than the facts justify; thus the relative richness of the three areas we have been considering is not really the relative richness of these areas at all, but merely of the three portions of the track of the Challenger falling within them; the importance of this truistic remark will be seen if we consider how greatly the results we have reached would almost certainly have been modified had the Challenger passed right through the axis of the Caribbean area, and shaped its course through the West Indian Islands, or if it had avoided the East Indies or touched at only one of those islands. To show how favourable the conditions presented by the East Indian and associated islands of the Pacific are to the rich development of species, I have compared the richness of the eastern half of the Pacific with that of the western, the meridian of 170° being chosen as the line of separation between the two parts. We then have:—

	East Pacific, 79 Stations.		West Pacific, 41 Stations.	
	Per cent. of Stations.	Per cent. of Species.	Per cent. of Stations.	Per cent. of Species.
Hexactinellida,	22·79	65·8	24·4	43·9
Tetractinellida,	21·52	45·57	9·75	14·63
Monaxonida,	24	86·1	22	48·8