

in the south. And since in the northern region 50 localities were explored with dredge and trawl, and in the south 49 localities, the percentage proportion for the former is 36 per cent., as compared with 65·3 per cent. for the latter. The south tropical region thus considerably exceeds the north as regards the abundance of species.

And if in the same way we compare the two temperate zones in relation to the abundance of Hexactinellid localities and species, the northern region shows, when compared with the southern in regard to localities, 14·4 per cent. as against 24·7 per cent., and 26·3 per cent. as against 35·6 per cent. in regard to the number of species.

There is thus a much greater abundance of Hexactinellids in the south temperate than in the north temperate zone, which is doubtless in part referable to the much greater extent of ocean in the former.

In regard further to the distribution of the subdivisions in the different zones, a review of Table VI. yields the following results:—

a. Lyssacina	{	In the north temperate zone,	14 species.
		In the tropics,	26 „
		In the south temperate zone,	29 „
b. Dictyonina	{	In the north temperate zone,	6 „
		In the tropics,	19 „
		In the south temperate zone,	6 „

In relation to the total number of dredgings and trawlings the percentage proportion stands as follows:—

a. Lyssacina	{	In the north temperate zone,	18·4 per cent.
		In the tropics,	26·3 „
		In the south temperate zone,	28·7 „
b. Dictyonina	{	In the north temperate zone,	7·9 „
		In the tropics,	19·1 „
		In the south temperate zone,	5·9 „

It is thus evident that throughout the Lyssacina preponderate, especially in the south temperate zone, where they are almost five times as numerous as the Dictyonina, while they are more than twice as abundant in the north temperate zone, and preponderate by at least 7 per cent. in the tropics.

In regard to the abundance of Lyssacina in the different zones, it is evident that the north temperate zone is considerably poorer than the tropical, and that the latter is excelled by the south temperate zone.

The relation is quite different with the Dictyonina, of which the south temperate zone contains the fewest, while the northern region a few more, and the tropics a relative abundance.

If the Lyssacina of the northern hemisphere be contrasted with those of the south,