This table brings out very forcibly—first, the great preponderance of Ascidians in the southern over the northern hemisphere, there being about six times as many entries on the right hand side of the table as on the left; and secondly, the abundance of Tunicata in the far south, the two last divisions on the right hand side (30° to 40° and 40° to 55°) 25° in all, containing each of them more entries than all the other divisions, both north and south latitude, taken together.

Consequently, it appears from the Challenger investigations that Simple Ascidians are not abundant in the northern hemisphere, and are comparatively scarce in tropical latitudes, while they attain their greatest numerical development in southern temperate regions.

Taking up particular groups of species, we find that the Challenger Molgulidæ were all obtained in the southern hemisphere, and between the latitudes of 30° and 55° S. Two species of *Molgula* were found between 30° and 40° S., while all the rest, including the genera *Ascopera* and *Eugyra*, and most of the species of *Molgula*, are from latitudes between 40° and 55° S.

The Cynthidæ range over both hemispheres, extending from between 40° and 45° north latitude, to between 50° and 55° south latitude. The sub-family Bolteninæ has an equally extended range, but is most abundant in the far south. The number of species found in the extreme right hand column (40° and 55° south latitude) equal those in all the other columns put together.

In the genus Boltenia, one species occurs in the extreme north, while the other two are from far south, the genus being unrepresented in intermediate latitudes.

The genus Culeolus has also a very considerable horizontal range, two of the species, Culeolus murrayi and Culeolus perlatus, being found in the northern hemisphere, while the remaining four are from the southern. Those in the northern seas are from the temperate zone, while of the southern forms, one, Culeolus moseleyi, is from near the equator; one, Culeolus wyville-thomsoni, from between 20° and 30° south latitude, and the remaining two species are from much further south. The nearly allied Fungulus cinereus is also from high latitudes in the southern hemisphere.

The sub-family Cynthinæ is, with the exception of Cynthia papietensis, confined to the southern hemisphere, but none extend beyond the parallel of 40°. Microcosmus has one species near the equator, while the remaining two are from much further south. In the genus Cynthia, also, most of the species are from the Southern temperate zone, three only being found in tropical latitudes.

The sub-family Styelinæ is represented by three species north of the equator, while the remaining twenty-two are from the southern hemisphere, and the great majority of them from south of 30° S. latitude.

In the genus Styela, all the species, with the exception of one (Styela clava) from the northern hemisphere, are from the southern temperate region, and most of them are from between the parallels of 30° and 40° S.