

across horns, 86-101  $\mu$ ; breadth of mouth, 23-25  $\mu$ ; thickness of shell, 29-38  $\mu$ .

*Hab.* Plankton of Loch Shiel, Inverness.

This species is readily recognised by the pair of diverging processes or horns, which are sometimes bent upwards almost parallel to the length of the shell. The region of the mouth is also rather peculiar in being almost cylindrical, the actual edge of the mouth showing a slight undulation. The structure of the shell is that of a true species of *Nebela*, the small plates of which it is composed being very irregular with no definite order of arrangement, but mostly disposed with their long axes parallel to the length of the shell.

In the presence of the horn-like processes the shell somewhat resembles that of *Campascus cornutus*, Leidy, but there is no curvature in the region of the mouth, and its structure is quite different.

The specimens were all preserved in 4% formalin, and all the individuals examined were more or less encysted, the body-protoplasm exhibiting the form of a globular mass in the widest part of the shell. The nucleus stained readily with hæmatoxylin or ammonia-carmin. Species of this genus are, however, all discriminated by the characters of the shell, and *N. bicornis* is no exception.

ROYAL AGRICULTURAL COLLEGE,  
CIRENCESTER.

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## MICROSCOPIC LIFE OF ST. KILDA.

BY JAMES MURRAY.

DURING a flying visit paid to St. Kilda in the early summer of 1904, an attempt was made to ascertain what microscopic life was to be found on the island. As our stay was very short, only three hours being spent on shore, there was little time for making natural history collections. As moss everywhere harbours an abundant population of micro-organisms, I gathered a quantity of it with a view of getting some idea of the micro fauna and flora of the island. Very little moss was, however, to be seen, the soil everywhere

having a raw appearance, due no doubt to its being continually cut for fuel. In a little trickle of water issuing from a small corrie above the village, and known, I believe, as the "Glen," I found several species of aquatic and semi-aquatic mosses growing on the stones. These were—*Fontinalis antipyretica*, *Racomitrium aciculare*, *Grimmia apocarpa*.

A small box was filled with these, and they were examined later on the same day, and they were maddly. Twenty species of organisms were observed, including Rotifers, Tardigrades, Rhizopods, Nematodes, Peridiniaceæ, and Desmids.

## LIST OF SPECIES.

<i>Philodina flaviceps</i> (Bryce, M.S.).	<i>Polyarthra platyptera</i> , Ehr.
Abundant.	<i>Diaschiza lacinulata</i> (O. F. Müller).
<i>P. acuticornis</i> , Murray. Few.	<i>Metopidia acuminata</i> , Ehr.
<i>P. macrostyla</i> , Ehr. Several.	<i>Monostyla</i> sp. ?
<i>P. rugosa</i> , Bryce. One.	<i>Macrobotus hufelandi</i> , C. Sch.
<i>P. brevipes</i> , Murray. One, very large.	<i>Echiniscus arctomys</i> , Ehr., variety.
<i>Callidina plicata</i> , Bryce. Few, typical.	<i>Euglypha ciliata</i> , Leidy.
<i>C. angusticollis</i> , Murray. One empty case.	Thread-worm sp.
<i>C. sp.?</i> Several.	<i>Penium</i> sp.
<i>Anuræa cochlearis</i> , Gosse.	<i>Closterium</i> sp.
	<i>Peridinium tabulatum</i> , Ehr.

## REMARKS.

*Philodina flaviceps* was the only abundant species. It is very common at the margins of lakes, all over the Highlands, where it also occurs in streams and rarely in bogs ; it has not yet been found outside of Scotland.

*Callidina* sp. This was one of the pellet-making *Callidinæ*, with a very long neck and a loop formed by the gullet. It is well known and widely distributed on the mainland, and has been thought to be *C. leitgebii*, Zelinka, a species about which there is much doubt.

It was interesting to note the existence of two thoroughly pelagic species of Rotifers, *Anuræa cochlearis* and *Polyarthra platyptera*, which are abundant in nearly every lake in the country, although the largest bodies of water they could find

in St. Kilda were only a few inches deep and less than a foot in diameter.

*Monostyla* sp. This was the most interesting animal found, and may prove to be a new species. It is a small animal, with flexible lorica, perfectly hyaline, and with a clear, non-pigmented eye. Its most remarkable feature is the very large toe, which is broad, tapering to an acute point, and strongly curved towards the right side, at the same time slightly spirally twisted, so that as it swims the whole animal rotates round its long axis in the manner of a *Mastigocerca*.

*Echiniscus arctomys*. The form of this extremely variable species found in St. Kilda had the triangular median plates rather more distinct than usual.

The thread-worm and the Desmids could not be specifically named.

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## ALIEN PLANTS NEAR EDINBURGH.

By JAMES FRASER.

IN pursuance of the plan projected in the late autumn of 1902 and begun in 1903 (the results for which year were published in the "Annals" for April last), I have now to record the result of the observations made by Mr James M'Andrew and myself during 1904, on the "alien" flora of the neighbourhood of Edinburgh.

To enable the effect on our Flora caused by the introduction of so many foreign plants to be easily determined at some future time, the definite localities mentioned in my first paper are closely adhered to and represented by the same numbers in the following list.

Thus all plants with the figure 1 attached were found in the same definite, limited area as those with the same figure in my first list; and so on up to No. 5. But near locality No. 1 (which may be called Slateford) are several spots extending from near Slateford Railway Station to Hailes Quarry, where a number of new plants have been found. These are marked 1A.

District No 2. (Granton) has this year produced nothing additional, but near it also several new plants were seen: on

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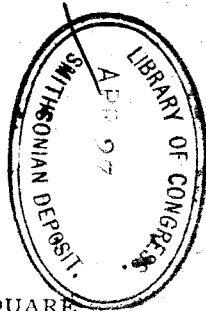
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