

A NOTE ON THE TERRESTRIAL NEMATODES AROUND  
SYOWA STATION, ANTARCTICA  
(EXTENDED ABSTRACT)

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There are only few reports on minute animals which live in moss and algal vegetation around Syowa Station, Antarctica. MORIKAWA (1962) described briefly two species of tardigrades including a new species from a small clump of algae collected at East Ongul Island, where the Japanese station, Syowa, is located. SUDZUKI (1964) reported four species of tardigrades and ten species of rotifers from moss cushions at Langhovde about 30km south of the Station. These tardigrades were assigned to the separate species in both papers. Meanwhile there has been so far no scientific description of nematodes around Syowa Station up to this time, though the occurrence of nematodes was already confirmed by some biologists.

STEINER (1916) reported the terrestrial nematodes first from the continental Antarctic. He described two species of nematodes, *Plectus belgicae* (= *P. antarcticus*) and *Dorylaimus antarcticus* (= *Eudorylaimus antarcticus*), from Wilhelm II Land and Victoria Land, respectively. Thereafter KIRYANOVA (1958) recorded two species of fresh-water nematodes from Knox Coast. But it was from the 1970's onward that the terrestrial nematodes of the Antarctic were widely studied and precisely described.

At present, 11 species of the terrestrial nematodes are known in coastal areas of the continental Antarctic including Alexander Island, Ross Sea region, Bunger Hills of Knox Coast and Gaussberg of Wilhelm II Land (YEATES, 1970, 1979; TIMM, 1971; MASLEN, 1979). We have isolated some nematode specimens from mosses and algae which were sampled in the vicinity of Syowa Station in 1983, and the following three species were identified. This is the first record of nematodes around Syowa Station.

1. *Plectus antarcticus* de MAN, 1904

This species is endemic to the Antarctic, having been recorded from soil and mosses in the coastal ice-free areas of the Ross Sea region, Bunger Hills and Gaussberg. It has been found not only from the continental Antarctic but also from the maritime Antarctic. In this study, the present species was collected from moss cushions of an ice free-area, Rundvågshetta about 100km south of the Station.

2. *Plectus frigophilus* KIRYANOVA, 1958

This species has the longest and widest body in the genus *Plectus*. As the present species closely resembles *P. antarcticus* in morphology except the body size, it is likely that the former might have been differentiated from the latter through polyploidy in the Antarctic (TIMM, 1971). The species seems to prefer fresh water algae to mosses. In the present study, this nematode was found in mats of blue green algae lying on the bottom

of a lake and in a clump of green algae, *Prasiola*, in a stream of Langhovde. It was further collected from an algal clump on sandy soil near a pond at East Ongul Island.

3. *Scottnema lindsayi* TIMM, 1971

The genus *Scottnema* is endemic to the Antarctic, and might have been differentiated there from the common ancestor sharing with the genus *Acrobeles*. This species was found in a few number from moss cushions at Rundvågshetta. This is the second record of the species from the Antarctic.

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