

Short communications

First time observations of the earthworm species *Octolasion cyaneum* (Savigny) and *Aporrectodea rosea* (Savigny) (Oligochaeta: Lumbricidae) in northern Norway

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The earthworm species *Octolasion cyaneum* and *Aporrectodea rosea* were observed in northern Norway for the first time in 1989 and 1992 respectively. The observations were made at Tromsø, on the southern part of the island Tromsøya (69° 39'N, 18° 55'E).

Introduction

The most complete description of systematics and zoogeography of earthworms in Norway was published by Stöp-Bowitz (1969). He described 18 species of which 6 were new to Norway. One of these species was *Octolasion cyaneum* (Savigny). A typical characteristic of living *O. cyaneum* is its colour; transparent blue-grey to lilac-blue, anteriorly often rosy, whilst some of the most posterior segments are brightly yellow. The clitellum is liver-brown to orange. Living *O. cyaneum* may immediately be recognized by means of the yellow posterior segments, but the colour vanishes instantaneously when the animal is preserved. However, adult specimens may be easily be determined by means of clitellum and tubercula pubertatis (Stöp-Bowitz 1969).

Stöp-Bowitz found this species in the vicinity of Oslo and at locations near Lillesand, Larvik and Trondheim. *O. cyaneum* has also been found in two woodland localities in the Bergen area, in western Norway (Olsen 1978).

Aporrectodea rosea (Savigny) has pale red or flesh-red colour, especially anterior to the clitellum. Posterior to the clitellum the colour is more greyish and the skin is transparent due to lack of pigment. For this reason the dorsal blood vessel is visible. When *A. rosea* is killed, the body curves like a fish-hook, and this is very helpful in identifying the species (Stöp-Bowitz 1969). *A. rosea* has previously not been found north of the Arctic Circle in Norway. However, this earthworm is widespread in southern Norway.

The two species are recorded from a wide range of habitats, but seem to have a preference for limnic soils (Sims & Gerard 1985).

New observations in northern Norway

The authors of this article found *Octolasion cyaneum* in Tromsø in 1989, near to Holt Research Station (Map ref. 1534 III, UTM 192 292). This species was found together with *Aporrectodea caliginosa* (Savigny) and *Lumbricus rubellus* Hoffmeister. The location had rich vegetation dominated by *Anthriscus sylvestris* L. and *Geranium sylvaticum* L., and the topsoil was rich in organic matter. The area was near to a barn and was grazed by cattle in the summer until the 1950's. The rich vegetation was caused by farmyard manure from the period of grazing. According to reports in the literature, the mould-rich fertile soil at the location is a typical habitat of *O. cyaneum* (Bornebusch 1928, Julin 1949, Stöp-Bowitz 1969, Enckell & Rundgren 1983).

Out of several hundred earthworms collected in 1992 from gardens at the southern part of Tromsøya (Map ref. 1534 III, UTM 198 282), less than ten adults of *A. rosea* were identified. Most of the material consisted of *A. caliginosa* and *L. rubellus*, but *Lumbricus terrestris* L. and *O. cyaneum* were also observed. According to Stöp-Bowitz (1969) *A. rosea* is often found together with *A. caliginosa* and *L. rubellus*, but less frequently with *L. terrestris* and *O. cyaneum*. Both Bornebusch (1928) and Stöp-Bowitz (1969) comment that *A. rosea* is common in gardens.

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Acknowledgements

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Sammendrag

Første observasjon av meitemark-artene *Octolasion cyaneum* og *Aporrectodea rosea* i Nord-Norge.

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Meitemarkartene *Octolasion cyaneum* og *Aporrectodea rosea* er for første gang registrert i Nord-Norge. Funnene ble gjort i Tromsø, på Sør-Tromsøya, i 1989 og 1992.

References

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Enckell, P.H. & Rundgren, S. 1983. Terrestrial invertebrates of the Faroe Islands: V. Earthworms (Lumbricidae): Distribution and habitats. Fauna norv. Ser. A. 4: 11-20.