

## ***Aphelacarus acarinus* (Berlese) new to Finland (Acari, Oribatei)**

Matti Uusitalo

*Suoramantie 5 L 86, SF-36220 Kangasala 2, Finland*

The list of oribatid mites of the northern Palaearctic region (Karppinen & Krivolutsky 1982) has served as a check-list for Finnish oribatids during the 1980s. Laine et al. (1988), Markkula (1986a, 1986b) and Niemi (1988) have referred to it when reporting species new to Finland (1 sp., 9 spp. and 21 spp., respectively).

As a new species has been found, it seems desirable to make a correction to page 4 of the list. The lines

Adelphacaridae Grandjean, 1954  
*Adelphacarus* Grandjean, 1932  
– *acarinus* (Berlese, 1910)

should be replaced as follows:

Adelphacaridae Grandjean, 1954  
*Adelphacarus* Grandjean, 1952  
– *sellnicki* Grandjean, 1952

Aphelacaridae Grandjean, 1954  
*Aphelacarus* Grandjean, 1932  
– *acarinus* (Berlese, 1910): 63, 76, 79

Both species should also be added to the check-list of Swedish oribatids (Lundqvist 1987): the type locality of *Ad. sellnicki* is Abisko, Sweden (Grandjean 1952), and Grandjean (1954) has also reported *Ap. acarinus* from Abisko.

The specimens of *Ap. acarinus* from Finland were found during an examination of the prostigmatid mite fauna of the most common forest type in the country. The specimens were mistaken for prostigmatids during sorting because of their whitish colour, longitudinal shape, long and thin hairs, separate dorsal plates, and three claws on the legs. The sensilli are, however, very characteristic for the species. The samples were taken from a Scots pine stand of *Calluna* type, ca. 50 years old, in Tammela, southern Finland (Grid 27°E 674:32). The thickness of the humus layer

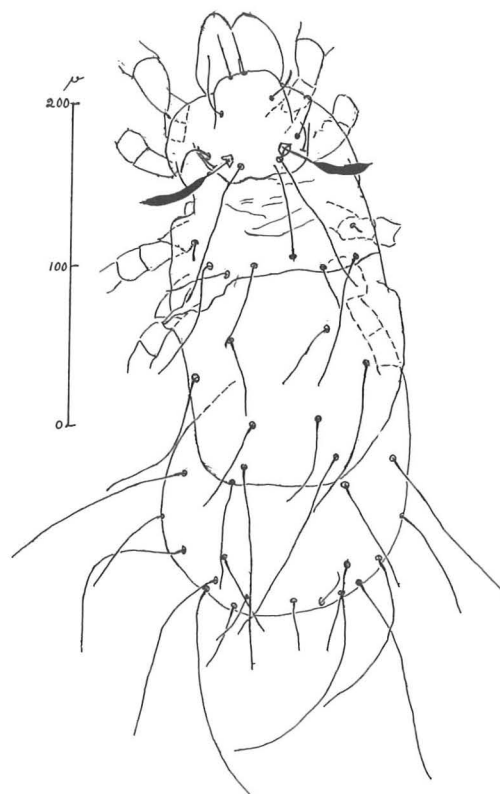


Fig. 1. *Aphelacarus acarinus* (Berlese), specimen from southern Finland.

varied between 3 and 7 cm. A tritonymph was found in a soil sample from 3–6 cm, on 10.V.1980, and a female (Fig. 1) in a sample from 0–3 cm, on 14.VII.1980.

When investigating the oribatid fauna of forest soil, Huhta et al. (1986) did not find *Ap.*

*acarinus*. According to Grandjean (1954), the species is common indoors, occurring on his work table, or even in his lactic acid. Therefore, since only two specimens were found in the soil samples, the possibility cannot be excluded that the specimens dropped into the samples accidentally. This could have happened either at the Zoological Institute (Helsinki 666:38), where the extraction of the soil samples was performed, or in the apartment where I was working with the samples (Kangasala 682:34).

*Ap. acarinus* has an intermandibular gland that is lacking in all other oribatids. The diet of the species is unknown. It is found together with glycyphagids, cunaxids, and cheyletids, among others (Grandjean 1954). I have no information on the mite's ability to cause allergies, but that possibility should be kept in mind in studies of the fauna of granaries, storehouses and house dust.

Karppinen & Krivolutsky (1982) list 251 species of oribatids for Finland. After a critical survey of this list, and with the species recorded by Forsslund (1958), Huhta et al. (1986), Krogerus (1960), Laine et al. (1988), Markkula (1986a, 1986b) and Niemi (1988, 1989), Oudemans (1900), Solhøy & Koponen (1981), and the present one, the total number is now 298 species.

## References

- Forsslund, K.-H. 1958: Notizen über Oribatei (Acari). II. — Entomol. Tidskr. 79(1–2):75–86.
- Grandjean, F. 1952: Observations sur les Palaeacaroides, 2e série. — Bull. Mus. Hist. Nat. Paris, 2e sér. 24:460–467.
- 1954: Étude sur les Palaeacaroides (Acariens, Oribates). — Mém. Mus. Nat. Hist. Nat., N.S. (A, Zool.) 7:179–274.
- Huhta, V., Hyvönen, R., Kaasalainen, P., Koskenniemi, A., Muona, J., Mäkelä, I., Sulander, M. & Vilkkamaa, P. 1986: Soil fauna of Finnish coniferous forests. — Ann. Zool. Fennici 23:345–360.
- Karppinen, E. & Krivolutsky, D. A. 1982: List of oribatid mites (Acarina, Oribatei) of northern palaeartic region I. Europe. — Acta Entomol. Fennica 41:1–18.
- Krogerus, R. 1960: Ökologische Studien über nordische Moorarthropoden. I. — Soc. Scient. Fennicae, Commentat. Biol. 21(3):1–238.
- Laine, A., Orell, M. & Itämies, J. 1988: The distribution and ecology of the mite *Ameronothrus dubinini* Sitnikova 1977 (Acarina, Oribatei) in northern Finland. — Ann. Zool. Fennici 25:253–256.
- Lundqvist, L. 1987: Bibliografi och checklist över Sveriges oribatides (Acari: Oribatei), 1941–1985. — Entomol. Tidskr. 108:3–12.
- Markkula, I. 1986a: Comparison of the communities of the oribatids (Acari: Cryptostigmata) of virgin and forest-ameliorated pine bogs. — Ann. Zool. Fennici 23:33–38.
- 1986b: Comparison of present and subfossil oribatid faunas in the surface peat of a drained pine mire. — Ann. Entomol. Fennici 52:39–41.
- Niemi, R. 1988: Oribatid mites (Acarina, Oribatei) new to the Finnish fauna. — Notulae Entomol. 68:111–113.
- 1989: Mätäjärven punkkijäännökset/Kvalsterrelikterna från Mätäjärvi. — In: Kostet, J. & Pihlman, A. (eds.), Raportteja / Rapport 10, Turun maakuntamuseo / Åbo landskapsmuseum, Turun Mätäjärvi / Mätäjärvi i Åbo: 215–221.
- Oudemans, A. C. 1900: Further notes on Acari. — Tijdschr. Entomol. 43:109–128, pl. 5–6.
- Solhøy, T. & Koponen, S. 1981: Oribatei fauna (Acari) on alpine heath at Kevo, Finland. — Rep. Kevo Subarctic Res. Stat. 17:41–43.

Received 28.VIII.1990, revised 21.II.1991