

## First records of *Paraleptophlebia submarginata* (Ephemeroptera, Leptophlebiidae) within the present boundaries of Finland

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### Abstract

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One nymph of *Paraleptophlebia submarginata* (Stephens, 1835) has been taken in Kaavi (*Kb*), three nymphs in Kuusamo (*Ks*), one nymph in Salla (*Ks*), two subimagines in Kilpisjärvi (*Le*), one nymph in Inari (*Li*) and one nymph in Utsjoki (*Li*). In addition, one locality is recorded from Norway, Kautokeino (*Fi*), 1 ♀ and ♂ — imagines.

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The mayfly *Paraleptophlebia submarginata* was found by TIENSUU (1935 ja 1939) in a couple of brooks in Rytty and Kurkijoki (*Kl*), but since it had not been recorded within the present boundaries of Finland, HULDÉN et al. (1977) excluded the species from the checklist of Finnish insects.

While determining the mayfly material in Kuopio museum, collected mainly in eastern and northern Finland, I found *P. submarginata* samples from the following localities:

1. *Kb*: Kaavi, 699:59, Vaikkojoki, Pitkäkoski, 1974-07-10, one nymph, A. Lyytikäinen leg. The Pitkäkoski rapids are ca. 10 m broad; the flow is rapid and the bottom is stony.

2. *Ks*: Kuusamo, 736:60, Putaanoja, 1977-06-09, one nymph, E. Savolainen leg. At the sampling site the Putaanoja is a shallow, stony, rapidly flowing stream, 2—5 m broad, with abundant mosses, but only a few vascular plants.

3. *Ks*: Salla, 7372:596, a brook running into the NW end of Savilampi, 1977-06-11, one nymph, E. Savolainen leg. The brook is ca. 1.5 m broad, stony, with little water. At the sampling site the water flows rapidly, and aquatic mosses are very abundant, but there are no vascular plants.

4. *Li*: Inari, 761:42, Kietsimäjoki, 1969-07-28, one nymph, E. Savolainen leg. At the sampling site the stream is rapid and ca. 5 m broad.

5. *Li*: Utsjoki, 7702:463, Karigasniemi, 1977-07-18, one nymph, E. Savolainen leg.

The sample was collected in a ca. 1—2 m broad stony brook in a bog, in a place where the current is rapid.

6. Norway, *Fi*: Kautokeino, 772:36, a river running into Stuoro Suolajavrre, 1978-07-07, one ♂ and one ♀, E. Savolainen leg. At the sampling site the river is ca. 3—5 m broad, stony, with little water, abundant aquatic mosses, but few sedges.

In addition, I have determined the following samples:

7. *Ks*: Kuusamo, 736:60, Putaanoja, 1969-07-24, two nymphs, Ev. Course leg. Coll. Zoological Museum of the University of Oulu. Sampling site same as that of sample no. 2.

8. *Le*: Kilpisjärvi, 767:25, the river Saana-joki, 1965-07-28, one subim. ♀ and ♂, M. Meinander leg., Coll. Zoological Museum of Helsinki University.

*P. submarginata* is found almost throughout Europe (LANDA 1969, SOWA 1975, PUTHZ 1978), and has been collected in all the countries adjoining Finland (see e.g. TIENSUU 1939, BREKKE 1965, REMM 1970 and JENSEN 1974). The finds recorded in this paper were made in eastern and northern Finland, but in view of the general distribution in Europe the species may be expected to occur all over the country.

According to the literature, the nymphs of *P. submarginata* live in various kinds of running waters (see e.g. SOWA 1975). TSHERNOVA (1964) mentions that they also inhabit lakes. The

samples presented in this paper have been collected in small, rapidly flowing brooks or rivers with a scanty vascular plant vegetation. However, aquatic mosses were abundant at most of the sampling sites, and all the nymphs were captured among mosses. The species seems to be small in number. Only one to two individuals were caught at each site, though other mayfly species were collected abundantly at most of the localities.

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#### Selostus

##### **Paraleptophlebia submarginata, Nyky-Suomelle uusi päivänkorentolaji**

*P. submarginata* ilmoitetaan uutena lajina Nyky-Suomelle Kaavilta (*Kb*; 1 toukka), Kuusamosta (*Ks*; 3 toukkaa), Sallasta (*Ks*; 1 toukka), Kilpisjärveltä (*Le*; 2 subimagoa), Inarista (*Li*; 1 toukka) ja Utsjoelta (*Li*; 1 toukka). Lisäksi ilmoitetaan yksi löytöpaikka Norjasta, Kautokeinosta (*Fi*; ♂- ja ♀-imago).

#### Referat

##### **Paraleptophlebia submarginata funnen i det nuvarande Finland**

Dagsländan *P. submarginata* anmäls som ny för det nuvarande Finland från *Kb*: Kaavi (1 larv), *Ks*: Kuusamo (3 larver), *Ks*: Salla (1 larv), *Le*: Kilpisjärvi (2 subimagines), *Li*: Enare (1 larv) och *Li*: Utsjoki (1 larv). Dessutom anmäls ett fynd från Norge, *Fi*: Kautokeino (imagines, ♂ och ♀).

#### Kirja-arvostelu — Bokrecension

FRÖHLICH, G. 1979: Wörterbücher der Biologie: Phytopathologie und Pflanzenschutz. — VEB Gustav Fischer Verlag, Jena, 295 s., pris M 15:50.

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