Cyllodes ater (Coleoptera, Nitidulidae) found again in Finland

Evgeny Yakovlev & Timo J. Hokkanen

Yakovlev, E. & Hokkanen, T. J. 1995: *Cyllodes ater* (Coleoptera, Nitidulidae) found again in Finland. — Entomol. Fennica 5:203–204.

Cyllodes ater (Herbst), which has been considered extinct in Finland, and is very rare in the other North European countries, was found in eastern Finland in 1993.

Yakovlev, E., Forest Research Institute of Karelian Center of Russian Academy of Sciences, Pushkinskaya Str.11, 185610, Petrozavodsk, Russia Hokkanen, T. J., University of Joensuu, Mekrijärvi Research Station, FIN-82900 Ilomantsi, Finland

Received 30 November 1993, accepted 5 February 1994

Twelve individuals of *Cyllodes ater* were found in the summer of 1993 at Ilomantsi (62°52'N, 31°30'E), in the easternmost part of Finland near the River Koitajoki, next to the Russian border. The spruce dominated old growth forest studied, totalling 103 ha, is composed of several fragments and it is surrounded by mires. In the north the area is attached to "Tapionsuo", the southern part of the Hanhisuo — Ruosmesuo peatland protection area. The average age of the conifers in the area is 140–180 yrs, and the forest is growing on former agricultural land. Birch is abundant in the stands and a high proportion of dead trunks are infested with *Fomes fomentarius* and other wood destroying fungi.

Trapping was performed using standard window traps (70 ex.) with two crossed acrylic sheets of 70×40 cm, and window traps (30 ex.) specially designed for insects associated with fungi growing on wood (Kaila 1993). The traps were exposed from 14.6. to 26.8.1993, and they were checked on 7.7., 28.7., 11.8. and 26.8.1993.

Four examples of *Cyllodes* were caught with three standard window traps (two 7.7.93; two 28.7.93). Seven individuals were caught with four

traps set up on sporophores of *Fomes fomentarius* on dead birch trunks (one 7.7.93; six 28.7.93). The twelfth individual was found on 28.7. on a hymenophore of *Pleurotus pulmonarius* growing on a birch trunk with a trap.

According to the old data (Jakobson 1905–13), the distribution area of *Cyllodes ater* has covered almost the whole of continental Europe and Siberia "... from Finland to Tbilisi and Batumi at the Caucasus ..." and "... from France to Amur region at the Far East ..." at the beginning of this century. Nowadays the species seems to be extremely rare in Nordic countries.

Only two records of *Cyllodes ater* are known from Finland: *U*: Pohja, Fiskars 1918, and *U*: Tuusula 1833 (Rassi et al. 1986). Now *Cyllodes* is considered extinct in Finland (Rassi et al. 1992) and it has also declined in other parts of Fennoscandia. In Sweden, during the past few decades it has only been found in Skäralid, Skåne, in a beech forest (Palm 1959, Ehnström et al. 1993). In Denmark it is considered extinct (Asbirk & Sogaard 1991). There are no records from Norway, and in the Baltic countries it has been recorded only from the Latvian Republic (Silfverberg 1992).

In Russian Karelia, Cyllodes ater was recorded for the first time on 12.9.1941 in the Olonets region near the Swir river in the village of Megrozero by V. Karvonen (1941), who collected it on a polypore fungus growing on an aspen trunk in wet spruce forest. A recent survey on insects associated with soft macrofungi (Yakovlev 1986, 1988) and polypores (Kaila et al. 1994) showed that, at least in the southern part of Russian Karelia, Cyllodes ater is still common. In Kivach Nature Reserve (62°17'N, 33°59'E), Vendjury (62°11'N, 33°17'E), and Mashezero (61°41′N, 34°18′E) adults can easily be found on clumps of Pleurotus pulmonarius growing on dead birch. In 1992-93 adults were also found in the forest by the river Swir near Lachta (60°39'N, 33°05'E) by Risto Iivarinen (personal comm.), in old grown forest near Kaskesniemi (61°36'N, 33°20'E) by Ilpo Mannerkoski (personal comm.), in Kuganavolok (62°10'N, 36°45'E) under loose plates of bark on the base of a large dead aspen left on the clearcut area (Siitonen et al., in press), in old growth forest near Gomselga (62°05'N, 33°54'E) and in young deciduous forest on abandoned fields at Bolshoi Klimetsky Island (62°04′N, 35°19′E). The species has not been recorded north of Kivach.

The population of *Cyllodes ater* in the Koitajoki area seems to be unique in Finland and is also the northernmost known. Urgent conservation measures for old growth forests containing the dead wood of deciduous trees impregnated with fungal mycelia and producing sporophores of *Pleurotus* are necessary to save *Cyllodes*.

Acknowledgements. The determination of Cyllodes ater was confirmed by both Juha Siitonen (Finnish Forest Research Institute, Kolari Research Station) and Petri Martikainen (Department of Zoology, University of Helsinki). Ilpo Mannerkoski and Risto Iivarinen kindly informed us about their findings in Karelia. This work is part of a Finnish-Russian cooperative project to study the insect fauna of the North Karelian biosphere reserve, and it was funded by the Finnish Forest and Park Service and the University of Joensuu Mekrijärvi Research Station. The latter also provided equipment and an excellent atmosphere for the work.

References

- Asbirk, S. & Sogaard, S. (eds.) 1991: Rodliste '90. Särskilt beskyttelsekraevende planter og dyr i Danmark. — Miljoministeriet, Skov- og Naturstyrelsen, Horsholm. 222 pp.
- Ehnström, B., Gärdenfors, U. & Lindelöw, Å. (eds.) 1993: Rödlistade evertebrater i Sverige 1993. — Databanken för hotade arter. SLU, Uppsala. 69 pp.
- Ehnström, B. & Walden, H. M. 1986: Faunavård i skogsbruket — den lägre faunan. — Skogstyrelsen, Jönköping. 351 pp.
- Jakobson, G. G. (Яκοбсон, Γ., Γ.) 1905–13: Beetles of Russia and Western Europe. (In Russian). — A. F. Devriene Publishers, St. Petersburg. 1024 pp.
- Kaila L. 1993: A new method for collecting quantitative samples of insects associated with decaying wood or wood fungi. — Entomol. Fennica 4: 21–23.
- Kaila, L., Martikainen, P., Punttila, P. & Yakovlev, E. 1994: Saproxylic beetles (Coleoptera) on dead birch trunks decayed by different polypore species. — Ann. Zool. Fennici 31: 97–107.
- Karvonen, V. J. 1941: [Aphodius tessulatus Payk. and Cyllodes ater Hbst, found in Aunus] — Notulae Entomol. 21: 143.
- Palm, T. Die Holz- und Rinden-Käfer der süd und mittelschwedischen Laubbäume. — Opusc. Entomol., Suppl. 16: 1–375.
- Rassi, P., Alanen, A., Kemppainen, E., Vickholm, M. & Väisänen, R. (eds.) 1986: Uhanalaisten eläinten ja kasvien suojelutoimikunnan mietintö. [Report of the Conservation Committee of threatened animals and plants in Finland] (In Finnish) Komiteanmietintö 1985: 43. Ympäristoministeriö, Helsinki. 466 pp.
- Rassi, P., Kaipiainen, H., Mannerkoski, I. & Ståhls, G. (eds.) 1992: Report on the monitoring of threatened animals and plants in Finalnd. (In Finnish with English summary) Komiteanmietintö 1991: 30. Ympäristöministeriö, Helsinki. 328 pp.
- Siitonen, J., Martikainen, P., Mannerkoski, I. Rassi, P. & Rutanen, I. Records of tree-living Coleoptera, Aradus (Heteroptera) and Diptera from Karelian Republic. Entomol. Fennica (in press).
- Silfverberg, H. 1992: Enumeratio Coleopterorum Fennoscandiae, Daniae et Baltiae. Helsingin Hyönteisvaihtoyhdistus, Helsinki. 94 pp.
- Yakovlev, E. B. (Яковлев, Е. Б.) 1986: Insects-mycetobionts of Karelia: faunistic list and ecology. (In Russian) In: Yakovlev, E. B. & Uzenbajev, S. D. (eds.), Fauna and ecology of arthropods of Karelia: 61–86. Karelian branch of USSR Academy of Sciences, Petrozavodsk.
- 1988: Insect infestation of edible mushrooms in Soviet South Karelia and bioecological characteristics of the pests. Acta Bot. Fennica 136: 99–103.