Phyllobius fessus Bohem., 1843, a new weevil species in Poland and Lithuania
(Coleoptera: Curculionidae)

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Abstract. Phyllobius fessus Bohem., 1843 is recorded from Poland and Lithuania for the first time. Phyllobius maculatus Tournier, 1877, earlier listed among synonyms of Ph. fessus, is revealed to be a new synonym of Ph. glaucus (Scopoli). A key to Central European species of Phyllobius subgenus Metaphyllobius is given.

Key words: entomology, taxonomy, Coleoptera, Curculionidae, Metaphyllobius, Phyllobius fessus, Phyllobius maculatus, new synonym, key, distribution, new records, Poland, Lithuania.

Weevils of the genus Phyllobius are all polyphagous, often gregarious, easy to observe and collect on plant foliage. Hence, after the last addition of Ph. seladonius Brullé by Wanat (1985), the list of Polish species of this genus long remained unchanged and seemed to be closed. The remaining species included in the key by Smreczyński (1966), or listed from adjacent southern countries (Strejček 1993, Podlussány 1996), represent evidently East Carpathian or Pontic elements, and they are rather unexpected in Poland. However, when the list of Northern European Phyllobius was studied, one species was found which could have possibly entered Poland from the east or north. The candidate was Euro-Siberian Ph. fessus Bohem., in most of the recent papers incorrectly referred to as Ph. maculatus Tournier. It was apparently after Winkler’s Cat. (1932), where Ph. fessus was erroneously placed among synonyms of Ph. calcaratus F. (currently Ph. glaucus (Scopoli)), while Ph. maculatus Tourn. was listed there as a valid species. Under the latter name this weevil species is known from the vast area of
Russia (Arnoldi et al. 1965) and Belarus (Ioannisiani 1972, Alexandrovitch et al. 1996). It was also recorded from the Russian Karelia (Hansen et al. 1939), which was omitted from subsequent editions of the catalogue of Fennoscandian beetles (Silfverberg 1979, 1992). In his comprehensive review of the genus Phyllobius Pesarini (1981) resurrected Ph. fessus Boh. as a valid species, and placed Ph. maculatus Tourn. among its synonyms. A very wide range of Ph. fessus in the Asiatic part of Russia was revealed by Egorov et al. (1996). More recently the species was recorded from the northern lake region of Belarus (Solodovnikov 1999), again as maculatus Tourn.

Considering the above records, the occurrence of Ph. fessus in Baltic countries and NE Poland should not be unexpected. It was confirmed in VI 2003, when one female of this weevil was collected by me on the northern slopes of the river Bug valley, several kilometers from the border with Belarus. A year later my study of weevil collections preserved in Cracow revealed 9 old specimens of Ph. fessus collected at the end of 19th c. in Lithuania by E. Wróblewski. Since Ph. fessus was not included in the key to Polish weevils (Smreczynski 1966), its diagnostic morphological characters are described and illustrated below, accompanied with a key to related species.

1. Phyllobius fessus, female from Mielnik, habitus
Identity of the species was confirmed after examination of the type specimen of *Ph. fessus* Boh. (labelled as lectotype by B. A. Korotyaev), loaned from the Swedish Museum of Natural History in Stockholm. At the same time, examination of one syntype (of the two mentioned in the original description) of *Ph. maculatus* Tour., preserved at the National Museum of Natural History in Paris, revealed its identity with *Ph. glaucus* (Scop.), not with *Ph. fessus* as earlier stated by Pesarini (1981), followed by Egorov et al. (1996). Therefore, a new synonymy is established here: *Ph. glaucus* (Scopoli, 1763) = *Ph. maculatus* Tourrier, 1877, **syn. nov.**

**Phyllobius fessus** Boheman, 1843

*Phyllobius fessus* Boheman, 1843: 14 (type examined).
*Phyllobius maculatus* auct., nec Tourrier, 1877: 5.

**Material examined**


Lithuania, no date nor precise locality [according to Razowski (1984) collected 1870-1885], 7 exs, coll. E. Wróblewski (Museum of Natural History PAS, Cracow), further 2 exs from this series in coll. S. Smreczyński (currently at Jagiellonian University), incorrectly identified as *Ph. faeculentus* Gyll.

**Diagnostic description**

Body length (excluding rostrum) 7.0-8.0 mm. Coloration of integument and vestiture invariable: body black, legs and antennae red-testaceous, recumbent scales all piliform, greyish-coppery, raised elytral setae black (Fig. 1).

Rostrum parallel-sided; dorsum flat, with shallow longitudinal subapical impression; piliform scales in middle directed inwards and almost recumbent, outside semi-erect. Eyes moderately, regularly convex. Entire rostrum and head with very dense, partly confluent punctuation.

Antennae moderately long; funicular segment 2 in both sexes 1.2 × longer than 1, and ca. 3.5 × longer than wide.

Pronotum distinctly transverse, regularly rounded at sides (Fig. 1), with extremely dense, adjoining punctures; scales moderately dense, evenly distributed on dorsum and sides, directed towards mid-line. Scutellum slightly denser covered with scales.

Elytra densely and almost evenly clothed in scales, not variegated; raised setae usually based on minute bare fields, hence in non-abraded specimens elytral intervals have numerous, indistinct black dots; raised setae numerous, well visible in both dorsal and side views also on elytral base, in 2-3 confused rows along each
2-4. *Phyllobius fessus*, 2 - male profile (type specimen), 3 - male head (type specimen), 4 - female head
interval, as long or slightly longer than half interval’s breadth; striae narrow and shallow, punctured, largely obscured by elytral scales.

Male. Rostrum \(1.2 \times\) longer than wide. Antennae longer and thicker; segment 2 of funicle as long as eye height; club ca. \(3.8 \times\) longer than wide. Legs with longer and more protruding pilosity; femora more inflated, with larger and broader teeth, particularly on profemur. (Figs 2, 3). Elytra parallel-sided. Ventrite 1 with large median depression.

Female. Rostrum shorter, as long as wide. Antennae shorter and thinner; segment 2 of funicle at most 0.80-0.85 as long as eye height; club ca. \(3.0 \times\) longer than wide. Legs more slender, with much smaller and narrower teeth (Fig. 4). Elytra widening apicad, widest distinctly behind mid-length (Fig. 1). Ventrite 1 convex.

**Bionomics**

Polyphagous species, like other members of *Phyllobius*. Earlier authors (e.g. Arnoldi et al. 1965) suggested that adults feed primarily on willows, but Ioannisiani (1972) found this species on various trees, including willow, poplar, pear, lime-tree, alder, birch, hornbeam, rowan, and even pine. The first specimen from Mielnik was beaten from *Prunus spinosa* L. growing on a gentle slope, in one of several natural hedges crossing open grassland area. Most of the specimens collected in 2005 were found on a hag berry bush (*Padus avium* Mill.) growing under old willow tree in a very wet place, but two of them were beaten from willow branches (*Salix fragilis* L.) about 50 meters from that place. It seems that in Mielnik Ph. fessus prefers humid arborous habitats typical for the bottom of river valley, and its first finding on xerothermophilous slopes in 2003 was accidental.

**Distribution**

Poland (E), Lithuania, Belarus, Russia (N European part, W Siberia, Yakutskaya A. R., Chitinskaya obl., Buryatskaya A.R), Caucasus.

*Ph. fessus* has been placed by Pesarini (1981) in the subgenus *Metaphyllobius*, together with four species, two of which are widespread in Central Europe, and the remaining two are endemic to Caucasus. After recent synonymisation of the long recognised subgenus *Hoplophyllobius* with *Metaphyllobius* (Alonso-Zarazaga & Lyal 1999), the latter comprises 4 species living in Poland (Wanat & Mokrzycki 2005), which are keyed below. They all differ from the remaining Polish members of *Phyllobius* in having a combination of the following characters: large body size (usually well over 6 mm in length); rostrum slightly to distinctly longer in males, with convex dorsum and parallel, shallowly impressed scrobes; narrow head, with the frons only slightly broader than rostrum between antennal pits; recumbent scales on elytra all piliform and pointed apically; long and slender antennae; dentate femora.
KEY TO SPECIES OF PHYLLOBIUS SUBGENUS METAPHYLLOBIUS OCCURRING IN CENTRAL AND EASTERN EUROPE

1. Elytra with long and dense erect pilosity, setae as long as maximum interval’s breadth. Inner margin of male hind tibia deeply emarginate subapically, with a short comb of yellow setae at upper margin of emargination. Antennae with funicular segments 1 and 2 equally long, each 0.80-0.85 as long as the club. In Poland locally in the Carpathians (Pieniny Mts, Słonne Mts) and in the Ojców National Park (Burbanowski et al. 1993). Dendrophilous, most often on Corylus avellana L.

- Ph. (M.) pilicornis Desbrochers

2. Protruding dark pilosity obsolescent, visible only in side view on declining apical part of elytra. Common throughout Poland; usually on herbs, most often on Urtica dioica L.

- Ph. (M.) pomaceus Gyllenhal

3. Protruding dark pilosity on elytra sparse, in one, more or less regular row per each interval; in basal part of the interval setae more than their own length apart. Rostrum slightly widening apicad. Eye strongly, asymmetrically convex, its posterior declivity almost vertical. Antennae long; funicle with 2nd segment in male 4.5-5.0 ×, in female 4.0-4.5 × longer than wide, in male 1.2 ×, in female 1.1 × longer than eye height. Large species, body length up to 10.0 mm. Body vestiture and coloration extremely variable, usually with green scales. Common throughout Poland; on various trees and bushes, most often on Alnus spp.

- Ph. (M.) glaucus (Scopoli)

- Ph. (M.) fessus Boheman

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REFERENCES


