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**First record of *Phytomyza milii* Kaltenbach, 1864
(Diptera, Agromyzidae) in Belgium,
an oligophagous leafminer of Poaceae**

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The family Agromyzidae consists of exclusively phytophagous species. The larvae can be found as root-, stem-, flower- or leafminers on a large variety of hostplants. Some feed on cultivated plants, and may cause extensive damage or substantial economic loss (SPENCER, 1973).

Agromyzidae are well represented in the European fauna with nearly 800 recorded species (SPENCER, 1972, 1976). In Belgium, it is a commonly overlooked group, so that here the knowledge of the Agromyzid fauna is rather poor.

In the course of a faunistic and ecological study on the Dipteran parasites of the grass family Poaceae, we collected a number of heavily parasited leaves of the species *Poa trivialis* L., in a suburban garden at Schoten (U.T.M. FS 07), during the spring of 1983. The infested leaves were transported to the laboratory. Here the larvae and puparia of the flies, were dissected from the mines to rear the adults. After identification of the flies, they turned out to belong to *Phytomyza milii* KALTENBACH, 1864, a species which was formerly not known for the Belgian fauna.

The identification of this species is rather difficult. In 1976, SPENCER already mentioned the large variation of several morphological features of the species in question. GRIFFITHS (1980) showed that the species *P. milii* used by the former authors is in fact a superspecies, consisting of a series of closely related species. Reliable identification is only possible after closely examining the male genitalia, and more in particular the aedeagal structure.

P. milii is mostly found on soft-leaved wild grasses in mesic and woodland habitats (GRIFFITHS, 1980). It is an oligophagous leafminer, which was formerly reared from several grasses. Specific host records are: *Millium effusum* L., *Agrostis stolonifera* L., *Holcus lanatus* L., *H. mollis* L., *Poa trivialis* L., *P. annua* L., *P. compressa* L., *P. nemoralis* L. and *P. pratensis* L. (DE MEIJERE, 1924; KARL, 1936; MICHALSKA & NOWAK, 1965; GRIFFITHS, 1963, 1968, 1980; HAASE & UTECH, 1971; SPENCER, 1972, 1978; VON TSCHIRNHAUS, 1981). The hostrange and the actual distribution of mines in the field may

be strongly dependent on the growing conditions of the host (ROTHERAY, 1987).

In the present study, *P. milii* was found in high densities in a small patch ($\pm 1 \text{ m}^2$) of *Poa trivialis*. Practically no mines were found on the surrounding grass species, although some of them were known as a suitable host. The larvae formed narrow linear mines, sometimes slightly broadened due to contiguous channels. The larvae pupate in the mines. The puparium pierces the leaf epidermis with the anterior spiracles. On some occasions the sharply pointed posterior spiracles projected outside through the opposite leaf surface.

The distributional area of *P. milii* is confined to Europe, where it seems to be widely spread (GRIFFITHS, 1980).

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