

Agriotella picipennis, a new click beetle for The Netherlands (Coleoptera: Elateridae)

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Abstract: The click beetle *Agriotella picipennis* is recorded for the first time from The Netherlands: one female was taken at the Wooldse Veen in the municipality of Winterswijk, province of Gelderland. Data on biology and distribution of the species are summarized.

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Introduction

Agriotella picipennis (Bach), formerly known as *Idolus picipennis* (Bach), is a small elaterid resembling the common West and Central European *Agriotes pallidulus* (Illiger) and species of the genus *Adrastus* Eschscholtz. The last mentioned genus is easily recognized by its dentated claws. Both *Agriotella picipennis* and *Agriotes pallidulus* are about 5 mm long and black or (dark)brown coloured with often lightbrown elytra. The hairs on the pronotum are bent in caudal direction. The easiest diagnostic difference between both species is the position of the head: prognath in *Agriotella* and orthognath in *Agriotes* (but be aware of pinned specimens in which the position of the head has been changed). *Agriotella picipennis* can be identified with the keys of Lohse (1979), Leseigneur (1972) and Platia (1994); the last two keys also present the characteristic male genitalia of both species.

Apart from the nominate form with dark elytra, a number of varieties of *A. picipennis* have been described on the basis of the presence of lighter spots on the shoulders and/or the apex of the elytra (see Leseigneur, 1972).

One female of the nominate form of *A. picipennis* was found by the second author on 2 August 1992 in the Wooldse Veen near Winterswijk (Amersfoort co-ordinates 248.4-436.9) in the province of Gelderland by sweeping a net over the low vegetation in a wet

Ericetum with dominance of *Erica tetralix* L., *Calluna vulgaris* (L.) Hull, *Juncus effusus* L., *Juncus acutiflorus* Ehrh. ex Hoffm., *Molinia caerulea* (L.) Moench and juvenile *Betula* sp. and *Salix* sp. This open spot was surrounded by oak-birch forest intermixed with *Pinus sylvestris* L.

The identification of *A. picipennis* was confirmed by E. Wenzel. The record represents the first finding of *A. picipennis* in The Netherlands (Brakman, 1966; Huijbregts & Krikken, 1984, 1986). The specimen is deposited in the collection of the National Natural History Museum in Leiden.

Distribution

The genus *Agriotella* Brown is Holarctic with four Nearctic and two Palaeartic species (Platia, 1994). *Agriotella picipennis* is the only European representative of the genus with a wide distribution in Central and Southern Europe and the Caucasus (Horion, 1953; Leseigneur, 1972; Platia, 1994). The species is not known from Scandinavia (Hellén, 1939), Denmark (Hansen, 1966), Great-Britain and Ireland (Mendel, 1988), and southeastern Europe (Horion, 1953). In France, *A. picipennis* is common in the middle and southern part of the country but lacking in the northwestern part (Leseigneur, 1972). According to Pesarini (1984) and Platia (1994) the species occurs everywhere in Italy. *Agriotella picipennis* oc-

curs also in Spain, Switzerland, Austria, Poland, former Czechoslovakia, former DDR (especially in the southern part), Croatia, Hungary, Bulgaria and Russia (Horion, 1953; Lucht, 1987; Rudolph, 1982). In Belgium *Agriotella picipennis* is very rare and confined to the eastern part. Jeuniaux (1995) mentions the Meuse-, Lotharingen- and Ardennes-district, while Everts (1922) mentions the localities Houx, Yvoir, Samson and Chaleux, all in the Meuse-district. In Germany the species seems to be rather common in the south, but is a rarity in the north (Horion, 1953). In the provinces Rheinland-Pfalz, Rheinland and Westfalen, close to the Dutch border, *A. picipennis* is very rare and known only from a few localities with single specimens (Horion, 1953; Koch, 1968; Kroker, 1980; Schimmel, 1989). A record from the former century from Paderborn, which is situated 135 km east of Winterswijk, is the only record from Westfalen (Kroker, 1980). The record is doubtful as the material is lost; moreover there are no recent records. Paderborn is also nearer to the Harz (former DDR), from which the species is reported by Rudolph (1982). The nearest locality in southern direction is Krefeld (Rheinland), at a distance of 65 km from Winterswijk (Everts, 1903; Horion, 1953; Koch, 1968). All references refer to one specimen in the collection Bruck. Both Horion (1953) and Koch (1968) regarded the Krefeld record as doubtful due to mislabelling. A record from Düsseldorf, at a distance of 70 km from Winterswijk, is only mentioned by Everts (1903) and not in German literature. Without these three records the vicinity of Aachen and the Eifel (Horion, 1953; Koch, 1968) form the nearest localities to Winterswijk (130 km). In this way also the limits of the closed Belgian and German distribution area of *Agriotella* are connected with each other.

Habitat and phenology

Generally *A. picipennis* is considered a species of mountainous regions up to a height of 2000 m (Leseigneur, 1972). The species can be collected from (flowering) trees, shrubs,

grasses and umbellifers, especially in the late afternoon. Exposed, sunny slopes in the vicinity of deciduous and coniferous forests seem to be the favorite habitat. Koch (1989) mentions *A. picipennis* as a stenotopic, thermophilic, arboricolous species. The rather broad range of plants on which the species has been collected suggest a rather wide ecological amplitude of at least the adults or simply reflects the aselective landing sites of flying adults. According to Klausnitzer (1994) the larva of *A. picipennis* lives in forest litter.

Most often adults have been taken in the period May - August, with an optimum in May - June at low altitudes and June - July at higher altitudes (Horion, 1953; Leseigneur, 1972). In this respect the August record from Winterswijk at low altitude is remarkable.

Discussion

The discovery of one specimen of *A. picipennis* near Winterswijk, more than 130 km away from its more or less continuous distribution area in Belgium and Germany, offers a new view on the records of Paderborn, Krefeld and Düsseldorf. The new record at least suggests that these German records could be realistic and not caused by mislabelling or other errors. *Agriotella picipennis* then can be considered as a species with a continuous distribution area in mountainous areas in northwestern Europe with some isolated, most probably ephemeral, populations outside this range. However, even inside the continuous distribution area in western Europe the species is rather rare and known only from a limited number of localities and occurs always in low numbers (Horion, 1953; Koch, 1968; Schimmel, 1989). The single specimen from Winterswijk then could be considered as a migrant far outside the normal distribution area of the species.

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