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***Pelenomus velaris* (Gyllenhal, 1827) new to the Belgian fauna (Coleoptera: Curculionidae)**

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Abstract

Pelenomus velaris (Gyllenhal, 1827) (Coleoptera Curculionidae) is recorded for the first time in Belgium from Sint-Truiden. Comments on biology, identification and habitat preferences are discussed.

Keywords: Coleoptera, Curculionidae, Ceutorhynchinae, *Pelenomus velaris*, Belgium, record new species

Samenvatting

We vermelden hier de eerste waarneming van *Pelenomus velaris* (Gyllenhal, 1827) (Coleoptera Curculionidae) in België te Sint-Truiden. Verder bespreken we de habitat, biologie en identificatie van deze soort.

Résumé

Pelenomus velaris (Gyllenhal, 1827) (Coleoptera Curculionidae) est cité pour la première fois de Belgique à Saint-Trond (Limbourg). En outre, nous informons sur l'habitat, la biologie et l'identification de cette espèce.

Introduction

Our knowledge about Curculionidae in Belgium is steadily growing. Entomologists, specialising in weevils, exchange information and are getting more and better organised. Still, many species remain yet to be discovered to our fauna. Recent research on distribution patterns of Curculionidae in the Belgian province of Limburg, resulted in interesting records.

In May 2011 a male and female of *Pelenomus velaris* (Coleoptera, Curculionidae, Ceutorhynchinae) were found near Sint-Truiden (province Limburg, Flanders, Belgium). The online Curculionoidea catalogue of Belgium (DELBOL, 2011) lists this specimen as "yet to be found in Belgium" ("A découvrir en Belgique"). The discovery of a male and female specimen in Sint-Truiden (provincial Domain Nieuwenhoven) in the spring of 2011 can be considered

as the first record of *Pelenomus velaris* to the Belgian fauna. Both specimens were collected by hand sampling while they were walking on open patches of wet soil.

Record and description of the habitat

Record: one male and female 21/V/2011, Domein Nieuwenhoven, Sint-Truiden, leg. and coll.: B. Bosmans, hand sampling near dry and old fish pond.

Habitat: The habitat where the species was found is a shallow pond, a former fish pool, in the provincial Domain Nieuwenhoven. The slightly sloping pond is bordered by forest except on one side where it is separated by a dyke from a moist meadow. The forest is dominated by mixed beech, oak and chestnut with shrubs at the edge. The pond shows several transitional states. The lower part has developed into a forested swamp with mainly willow species (*Salix* sp.). The wettest and deepest part of the open space is filled with a thick layer of black mud with only a few aquatic plants (*Potamogeton* sp.). Towards the highest part, vegetation varies and evolves from semi-aquatic marsh-vegetation to wetland with grasses, rushes (*Juncus* sp.) and reeds. In terms of moisture the soil gradually changes from wet to moist. At the time of the record, due to a prolonged period of warm and dry weather, large parts of the pond were dry.

Biology and identification

In general plant diversity in the pond is high. *Pelemonus velaris* is known to develop on *Polygonum* species (amongst others *Persicaria maculosa*, *Polygonum bistorta* and *Polygonum amphibium*). Of its known host plants only *Persicaria maculosa* was found in the pond. Dieckmann (1972) mentions the species presence near *P. amphibium* at the boundary where the plant evolves from forma '*natans*' towards forma '*terrestre*'. Although imagos have been observed on host plant leaves, the species is almost impossible to collect by sweeping (DIECKMANN, 1972). In his article, STERRENBURG (1989) cites Hoffmann and Dieckmann who describe the adults on the muddy soil walking in between or near their host plants. A productive method of catching *P. velaris* seems to be by flooding the soil at the base of the host plants. Both Dieckmann as well as Sterrenburg mention success with this flooding technique



Fig.1. The Zwarte Vijver in provincial Domain Nieuwenhoven (May 21th, 2011). Pond transition towards wetland with grasses, rushes and reeds.



Fig.2. Detail of the transition zone; the site were both specimens of *Pelenomus velaris* were found.

(DIECKMANN, 1972; STERRENBURG, 1989). On October the 9th 2011 the pond in Nieuwenhoven was visited a second time. This time, detritus and parts of soil at the spot where both specimens were collected, were sieved again. The samples, however, did not contain any specimens.

Pelenomus species are rather easily to identify (DIECKMANN, 1972 or RHEINHEIMER & HASSLER, 2010). The *P. velaris* male can be recognised by its arc like ridge in the centre of its second sternite, which is compactly bordered with yellow scales. The colour of the femora is yellow-brown with darkened apex. The latter characteristics, in combination with a dense cover of metallic scales, helps sorting out female specimen from other *Pelenomus* species.

Both specimens are presently part of the author's collection.

Distribution and status

Pelenomus velaris is known from our neighbouring countries. In Germany, the species

is collected in the bordering federated states of North Rhine-Westphalia (KÖHLER & KLAUSNITZER, 1998) and Rhineland-Palatinate (BENISCH & REIßMANN, 2010). BRAUNERT (2009) lists *P. velaris* as present in his checklist for Curculionoidea from Luxemburg. For the Netherlands, Sterrenburg made captures in 1985 and in 1988 at the same location in Udenhout. Data on these captures were published in 1989 (using its former taxonomic name *Phytobius velaris*) (STERRENBURG, 1989) and at that time no data from Belgium and Luxemburg were known to him (STERRENBURG, 1989). The presence in the Netherlands is further confirmed in the Dutch Curculionoidea checklist where a second location for this species is mentioned near Rhenen (HEIJERMAN, 1993). As to its status, literature in general mentions this species as rare. On the German red list *P. velaris* is scaled in as 2 "strongly endangered" despite the general occurrence of its host plants (RHEINHEIMER & HASSLER, 2010). At the same time however, it is remarked that this species might be under-sampled due to its hidden biology. Another reason for its endangered status is the increasing scarceness of open ponds and wetlands of sufficient quality.

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