Recent finds of notable Curculionoidea (Coleoptera) for the province of Limburg

Bart Bosmans

Abstract. The fauna of Curculionoidea in the province of Limburg is, like in the other Flemish provinces, still insufficiently known. In this paper, 17 new species for Limburg are discussed, of which 4 species are first records for Flanders, one is a and three species are rediscovered for the Belgian fauna.

Samenvatting. Recente vondsten van merkwaardige Curculionoidea (Coleoptera) voor de provincie Limburg De Curculionoidea fauna van de provincie Limburg is, net zoals voor de andere Vlaamse provincies, nog slecht gekend. In dit artikel worden 17 nieuwe soorten voor Limburg besproken. Hiervan zijn 4 soorten nieuw voor Vlaanderen, één bevestiging van een nieuwe Vlaamse soort en 3 herontdekkingen voor België.

Résumé. Des observations récentes de Curculionoidea (Coleoptera) dans la province du Limbourg La faune des Curculionoidea est mal connue pour la province du Limbourg. Cet article fait partie d'une initiative destinée à combler cette lacune. Suite à des découvertes récentes, 17 espèces sont présentées comme nouvelles pour le Limbourg, dont 5

espèces nouvelles pour la Flandre (donc une confirmation) et 3 redécouvertes pour la Belgique. Keywords: weevils – Curculionoidea – Curculionidae – Brachyceridae – Nanophyidae – Bagous – Bruchela – Cleopomiarus – Dorytomus – Ellescus – Gronops – Grypus – Mecinus – Nanophyes – Neophytobius – Otiorhynchus – Phytobius – Sitona – Stenopelmus – Tanysphyrus – Tapeinotus – Belgium – Flanders – Limburg Bosmans, B.: Roerstraat 75, B-3600 Genk. bart@insects.be

The "Catalogue des Curculionoidea de Belgique" (Delbol 2011) records 359 species of Curculionoidea (except Scolytinae and Platypodinae) for the Flemish (Belgian) province of Limburg. From the bordering Dutch province of Limburg the "Catalogus van de Nederlandse Kevers" (Vorst 2010) reports 529 species. Although the river Meuse physically separates both provinces, ecologically and in biotope both provinces are in large extent similar. There are no reasons why the totalling number of species should not compare. This article aims at filling the gap and discusses recent notable Curculionoidea for the Flemish province of Limburg. The article presents 17 new finds for Limburg, from which 4 first records for Flanders, one confirmation of a new species for Flanders and 3 rediscoveries for Belgium. All specimens discussed are part of the author's collection.

Species are grouped and discussed per locality. Red list indications for Germany are adopted from Rheinheimer & Hassler (2010). For each species the EDV-Code is used as in the "Verzeichnis der Käfer Deutschlands" (Köhler & Klausnitzer 1998, Köhler 2000). The scientific names mentioned are conform Fauna Europeana (Alonso-Zarazaga 2011). Following abbreviations are used:

- N (Lim) new for the Belgian province of Limburg
- N (VI) new for Flanders
- C (VI) confirmation of a new species for Flanders
- R (BE) rediscovery for Belgium (without records for a minimum of 50 years)

True weevils

93-.090-.016-. **Dorytomus** (**Euolamus**) **nebulosus** (Gyllenhal, 1836) – (Curculionidae, Curculioninae, Ellescini) – N (Lim) While searching mixed stands of *Salix* and *Populus nigra* with a beating tray several specimen of *Dorytomus nebulosus* were found near Maasmechelen (Leut, 06.iv.2010). *D. nebulosus* develops on Poplar (*Populus* sp.) and is considered neither a frequent nor a rare weevil species. The find of *D. nebulosus* is a first record for Limburg. According to the online Curculionoidea catalogue of Belgium (Delbol 2011) this weevil occurs locally in the provinces of Antwerp, West Flanders, Walloon and Flemish Brabant.

93-.128-.001-. *Gronops lunatus* (Fabricius, 1775) – (Curculionidae, Cyclominae, Rhythirrinini) – N (VI)

A pitfall trap set in the Maatheide (Lommel, 11.vi.2010) contained one specimen of Gronops lunatus. This species of weevil is rarely found as it leads a hidden life at the foot of its host plant Spurrey (Spergula sp.). G. lunatus is also reported from Mulleins (velvet plants, Verbascum sp.). Both plants are present in the Maatheide location. Remarkable is the position of the pitfall trap in a shallow vernal pool. However, this exceptionally wet spot is located in a dry and barely grown sandy area. The specimen must have been trapped while migrating. The find of *G. lunatus* is a first record for the province of Limburg and, in a wider perspective, a first record for Flanders. The online Curculionoidea catalogue of Belgium mentions only rare and local finds from the province of Luxembourg. In neighbouring countries G. lunatus is mentioned from Germany by Köhler & Klausnitzer (1998, 2000), from the Netherlands by Heijerman (1993) and from Luxembourg by Braunert (2009). The German red list status is 3 "endangered".

93-.175-.001-. *Cleopomiarus micros* (Germar, 1821) – (Curculionidae, Curculioninae, Mecinini) – N (Lim)

The dry and sandy roadsides in the broader area of Maatheide (Lommel, 12.vi.2010) have large stands of Sheep's bit scabious (*Jasione montana*). Sweeping the

sparse vegetation at these roadsides resulted in the first find for Limburg of *Cleopomiarus micros*. Delbol (2011) notes this species as local in the Belgian provinces of Antwerp, Flemish Brabant and Namur. The species lives monophagous on Sheep's bit.

93-.174-.004-. *Mecinus pascuorum* (Gyllenhal, 1813) – (Curculionidae, Curculioninae, Mecinini) – N (VI)

The same sweeping sample from the Maatheide roadside (Lommel, 12.vi.2010) as mentioned above, also contained a specimen of *Mecinus pascuorum*. This species develops on Narrowleaf plantain (*Plantago lanceolata*). The find at Maatheide is a first record for Limburg and by extension for Flanders. According to Delbol (2011) *M. pascuorum* occurs localised in the provinces of Namur, Luxembourg, Hainaut and Liège.

93-.044-.014-. *Sitona* (*Sitona*) *puncticollis* Stephens, 1831 – (Curculionidae, Entiminae, Sitonini) – N (VI)

A regularly disturbed site at Maatheide is marked by artificial slopes of fine sand. These dry sandy slopes and ridges are sparsely grown by diverse pioneer vegetation. By searching this pioneer vegetation, two specimen of *Sitona puncticollis* were found (Lommel, 11.vi.2010). *S. puncticollis* develops on a wide range of host within the family of the Fabaceae (Trefoils, Clovers, Lucernes, Broom). Delbol (2011) mentions a localised occurrence in Belgium for the provinces of Namur and Luxembourg. *S. puncticollis* is a new species for Limburg and for Flanders.

93-.087-.024-. **Bagous glabrirostris** (Herbst, 1795) – (Curculionidae, Bagoinae, Bagoini) – N (Lim), R (BE)

Flooding the banks of an artificial lake in Lommel (Sahara, 12.vi.2010), a historic industrial site in Lommel, resulted in the find of several specimen of Bagous glabrirostris. Delbol (2011) mentions local finds in the provinces of Antwerp, East Flanders, Walloon and Flemish Brabant prior to 1960. Since 1960 however, this species has not been recorded anymore nationwide. The species develops on aquatic plants, among which Water (Stratiotes aloides) Pineapple and Hornwort (Ceratophyllum sp.). The find of B. glabrirostris in the flooding sample represents a rediscovery after 50 years for Belgium and a first record of this species for Limburg. The German red list status is 3 "endangered".

Other remarkable weevils from Maatheide, Lommel

Maatheide is characterized by a contrast in biotopes, ranging from dry sandy areas with little vegetation to moist grasslands with acidic shallow vernal pools of water. In the dry area's, the soil of fine sand is often disturbed by industrial activity. Pioneer vegetation profits from this situation. Among others, species of *Verbascum* thrive. The presence of four weevil species with a preference for *Verbascum* was detected: *Cionus hortulanus* (Geoffroy, 1785), *Cionus olens* Fabricius, 1792, *Cionus scrophulariae* (Linnaeus, 1758), and *Rhinusa tetra* (Fabricius, 1792). Remarkable as such is not their presence, but the occurrence of these four weevil species at one location and often at the same time on one specimen of *Verbascum* plant. While in cooccurrence they numbered several specimens of each species. That leads to questions regarding development and food competition strategies.

93-.087-.013-. **Bagous frit** (Herbst, 1795) – (Curculionidae, Bagoinae, Bagoini) – N (Lim)

While sampling the outer edges of a wetland (Maasmechelen, 30.iii.2011) several specimen of *Bagous frit* were collected near stands of Bogbean (*Menyanthes trifoliata*). Sieving samples nearby resulted in further specimens. The discovery of a population of *B. frit* is a first record for Limburg and one of the rare finds of this species for Belgium. Delbol (2011) notes very localised finds in the provinces of East Flanders and Flemish Brabant. The German red list status is 2 "strongly endangered".

93-.087-.009-. **Bagous limosus** (Gyllenhal, 1827) – (Curculionidae, Bagoinae, Bagoini) – N (Lim)

One specimen of *Bagous limosus* was found in a sieving sample from Kinrooi (Grootbroek, 19.ix.2010). This waterbound weevil develops in Pondweed (*Potamogeton* sp.) and has a preference for slow moving water. The sample was collected while sieving plant material bordering a well-planted drainage channel. The find represents the first record of *B. limosus* for the province of Limburg. Delbol (2011) rates the species as occurring localised in the provinces of Antwerp, East and West Flanders, Brussels, Walloon and Flemish Brabant. The German red list status is 2 "strongly endangered".

93-.087-.010-. *Bagous subcarinatus* Gyllenhal, 1836 – (Curculionidae, Bagoinae, Bagoini) – N (Lim), R (BE)

Another first record for Limburg in the genus of Bagous is the find of Bagous subcarinatus in a sieving sample collected from the edges of a well-planted small pool in Maaseik (De Brand, 03.x.2010). A sieving sample from detritus at the bottom of a relict clay pit near Maasmechelen (Maaswinkel, 24.ix.2011) contained another specimen. The water bodies at both locations can be considered vernal pools with fluctuating levels of water. B. subcarinatus is known to develop mainly on Soft Hornwort (Ceratophyllum submersum) and Water Milfoil (Myriophyllum sp.). Records for Belgium are limited to old observations, dating from 1904 to 1945. Few recent finds were made. Based on these data Delbol (2011) notes B. subcarinatus as occurring localised in the provinces of Namur, Antwerp, East Flanders, Walloon and Flemish Brabant. The German red list status is V "pre warning list".

93-.156-.001-. *Tapeinotus sellatus* (Fabricius, 1794) – (Curculionidae, Ceutorhynchinae) – N (Lim)

The occurrence of one specimen in a sieving sample from a wet drainage ditch in Maaseik (De Brand, 30.i.2011) is the first record of *T. sellatus* for Limburg. Since then it has been found at other locations (Bilzen, Bree, Kinrooi, Zutendaal). The species lives oligophagous on Loosestrife (*Lysimachia* sp.). *L. sellatus* is widespread in Belgium and has been recorded from each Belgian province.

Other remarkable waterbound weevils in De Brand, Maaseik

De Brand is a bocage landscape with mixed hedges separating meadows and fields. It is a moist to wet area with seasonal standing water. Livestock drinking pools are common and show a rich variety in aquatic and semiaquatic plants. The October sample contained several specimen of Tanysphyrus (Tanysphyrus) lemnae (Fabricius, 1792) (Erirhinidae, Erirhininae, Tanysphyrini) and one specimen of Grypus brunnirostris (Fabricius, 1792) (Erirhinidae, Erirhininae, Erirhinini). The minute species T. lemnae develops on Duckweed (Lemna sp.). It was also found in Hasselt (Galgenberg, 01.viii.2010) and remarkably at both locations in co-occurrence with the non native Stenopelmus rufinasus Gyllenhal, 1835. Less widespread but present in most of Belgium is Grypus brunnirostris (Fabricius, 1792) which develops on Horsetail (Equisetum fluviatile and E. arvense). The find in De Brand is one of the few known locations for this species in Limburg. G. brunnirostris is otherwise known from Nieuwenhoven (Sint-Truiden) and Bichterweert (Dilsen-Stokkem).

93-.1441.001-. *Neophytobius muricatus* (C. Brisout, 1867) – (Curculionidae, Ceutorhynchinae) – N (Lim), R (BE)

L. Crèvecoeur provided the author with a Ceutorhynchinae specimen captured with a free hanging UV-lighttrap near Tongeren (Riksingen, 07.v.2011). The specimen was identified as *Neophytobius muricatus*. The species is rarely reported and little is known of its biology although Common Knotgrass (*Polygonum aviculare*) is cited as its host plant. The trap was located in an Oak-Beech and fontinal Ash forest. The Riksingen find of *N. muricatus* is the second known location for Belgium. Delbol (2011) mentions one other find for the province of Antwerp (Zoerle-Parwijs, 1945). Next to second known location, this find also represents a rediscovery for Belgium after more than 65 years.

93-.143-.001-. *Phytobius leucogaster* (Marsham, 1802) – (Curculionidae, Ceutorhynchinae) N (Lim)

The coal mining spoil tip at Houthalen-Helchteren was leveled out in 1979. Its main surface got developed as an industrial park (Centrum-Zuid). The surrounding badlands, largely consisting of drainage basins and wetlands, were left undeveloped to nature. A sieving sample at the edge of one wetland basin resulted in the find of one specimen of P. leucogaster (Centrum-Zuid, 06.ii.2011). Its host plant, Myriophyllum spicatum (Eurasian watermilfoil), was present in large quantities near the sieving site. The find at the spoil tip basin is the first record op P. leucogaster for Limburg. The species is reported form the provinces of Namur, Antwerp, Luxembourg, Walloon and Flemish Brabant. The species is considered rare, but this might be biased due to its concealed aquatic lifecycle. However, for Germany its red list status is V "pre warning list".

93-.102-.003-. *Ellescus infirmus* (Herbst, 1795) – (Curculionidae, Curculioninae, Ellescini) – N (VI)

The sieving sample from the spoil tip basin in Houthalen-Helchteren contained two specimen of *E. infirmus* (Centrum-Zuid, 06.ii.2011). *E. infirmus* develops on Willows (a.o. *Salix caprea, purpurea* and *alba*) and is bound to wetlands and river borders. Although considered a widespread species in certain parts of Germany, in other regions it seems to be declining or absent. Hence the German red list status is 3 "endangered". *E. infirmus* is largely absent from Belgian collections. Records are known for the provinces of Namur and Luxembourg (M. Delbol, personal communication). This makes Centrum-Zuid the third known location of *E. infirmus* in Belgium and a first record for Flanders.

93-.087-.022-. **Bagous lutulentus** Gyllenhal, 1813 – (Curculionidae, Bagoinae, Bagoini) – N (Lim)

The wet meadows of Laambroeken are situated in Houthalen-Helchteren, close to Centrum-Zuid. Sieving samples were collected from shallow drainage ditches within the meadows. The sample contained one specimen of B. lutulentus. Recently, a second specimen was found in Houthalen-Helchteren (Mangelbeek, 04.iii.2012). This species develops in Equisetum fluviatile (Water Horsetail). It seems to be sensitive to the quality of its environment. Despite the common presence of its host-plant, B. lutulentus itself is rare and in the German red list this species is scaled in as 3 "endangered". Delbol (2011) notes B. lutulentus as occurring localised in the provinces of Namur, Antwerp, East and West Flanders, Brussels, Walloon and Flemish Brabant. The specimen sieved at Laambroeken is a first record for the province of Limburg.

Brentidae

925.045-.003-. *Nanophyes brevis brevis* Boheman, 1845 – (Nanophyidae, Nanophyini) – C (VI)

A single find of Nanophyes brevis was made in Bilzen on the steep banks of the Albert Canal (Driebunders, 29.iv.2010). The isolated find at Driebunders was described in Phegea 39(3) (Bosmans 2011). Confirmation of a broader occurrence of this species has since occurred by the discovery of another specimen on Purple loosestrife (Lythrum salicaria) in a roadside drainage channel (Munsterbilzen, 24.v.2011). No data are know from other Flemish provinces. In Belgium it has only been reported from the provinces of Hainaut and Namur where it occurs locally. Records for this species along the Rhine in Germany are said to be increasing. Possibly N. brevis is extending its range. The Nanophyini are represented in Limburg by the widespread Nanophyes marmoratus (Goeze, 1777) and isolated populations of Microon sahlbergi (Sahlberg, 1835).

Anthribidae, broad-nosed weevils

891.001-.006-. **Bruchela rufipes** (Olivier, 1790) – (Anthribidae, Urodontinae) – N (Lim)

Bruchela rufipes, formerly known as Urodon rufipes, is a common species developing on Reseda sp. B. rufipes

does not have the characteristic weevil habitus. Delbol (2011) notes *B. rufipes* as widespread throughout Belgium. Despite its status, the occurrences on two coalmining spoil tips in As (Klaverberg, (21.vi.2007) and Genk (Winterslag, 07.vii.2007) mark the first records for Limburg. At present, *B. rufipes* has not been reported for the provinces of Antwerp and East Flanders. This species can be expected at most locations with Reseda.

Non-native weevils

93-.085-.001-. *Stenopelmus rufinasus* Gyllenhal, 1835 – (Brachyceridae, Erirhininae, Stenopelmini) – N (Lim)

A sieving sample of litter from a former fishery pond in Hasselt (Galgenberg, 01.viii.2010), with reeds, grasses, thicket and tree's overgrown, resulted in a find of *Stenopelmus rufinasus*. A sieving sample collected some weeks later from the edges of a small pool in Maaseik (De Brand, 03.x.2010) resulted in a second location for this non-native weevil species. *S. rufinasus* originates from the North-American region where it develops on duckweed fern (*Azolla filiculoides =A. caroliniana*), an introduced plant species occurring since 1912 in Belgium. *S. rufinasus* is an introduced species that can be considered naturalised. Both finds represent the first record of this species for Limburg. Delbol (2011) notes *S. rufinasus* as occurring in isolated populations in the provinces of Namur and Antwerp. 93-.# Otiorhynchus (Otiorhynchus) apenninus Stierlin, 1883 – (Curculionidae, Entiminae, Otiorhynchini) – N (Lim)

Otiorhynchus apenninus, formerly known as O. salicicola Heyden, 1908, has Mediterranean origins (France, Italy, Switzerland) but has been able to disperse over larger parts of Europe through the horticultural trade. The first specimen for Limburg, found in a major garden centre in Genk (Winterslag, 11.vii.2009) is conform the supposed dispersion route. The earliest find of O. apenninus in Belgium dates from 1943, later finds range from 1995 through 2003. Delbol (2012) notes its occurrence in isolated populations in the provinces of Namur, Luxembourg, Walloon Brabant and West Flanders. O. apenninus is considered a naturalised nonnative species in the Netherlands (Heijerman et al. 2003).

Acknowledgements

Gratitude to M. Delbol from Gembloux Agro-Bio Tech, Unité d'Entomologie fonctionnelle et évolutive, for confirming *N. muricatus* and for verifying and correcting determinations on specimens from Maatheide, De Brand and Zolliken, especially *Bagous* and *Gronops*. Thanks to Jonas Köhler, Karl Hadulla and Luc Crèvecoer in regard to *B. frit* and *N. muricatus*.

References

Alonso-Zarazaga M. A. 2011. Fauna Europaea: Coleoptera, Curculionoidea. — Fauna Europaea version 2.4, www.faunaeur.org Anonymous 2012. Recent species checklists with map representations for the Flemisch provincie of Limburg. Provincie Limburg, Likona, Biodiversiteit Limburg, online: www.biodiversiteitlimburg.be/atlas/

Bosmans B. 2011. Nanophyes brevis (Coleoptera: Nanophyidae) new for Flanders. - Phegea 39(3): 84.

Braunert C. 2009. Verzeichnis der Rüsselkäfer Luxembourgs (Coleoptera, Curculionoidea) mit Ausnahme der Borkenkäfer (Scolytinae) und Kernkäfer (Platypodinae). — Bulletin de la Société des Naturalistes Luxembourgeois **110**: 125–142.

Delbol M. 2011. Catalogue des Curculionoidea de Belgique. — online: www.curculionidae.be

Heijerman T. 1993. Naamlijst van de snuitkevers van Nederland en het omliggende gebied (Curculionoidea: Curculionidae, Apionidae, Attelabidae, Urodontidae, Anthribidae en Nemonychidae). — *Nederlandse Faunistische Mededelingen* **5**: 19–46.

Heijerman T., Moraal L., Burgers J. & de Goffau L. 2003. *Otiorhynchus apenninus*, een nieuwe snuitkever voor Nederland (Coleoptera: Curculionidae). — *Nederlandse Faunistische Mededelingen* **19**: 41–48.

Köhler F. & Klausnitzer B. (Eds.) 1998. Verzeichnis der Käfer Deutschlands. — Entomologische Nachrichten und Berichte, Dresden, Beiheft **4**, 185 p.

Köhler F. 2000. Erster Nachtrag zum Verzeichnis der Käfer Deutschlands. — Entomologische Nachrichten und Berichte, Dresden 44: 60–84.

Rheinheimer J. & Hassler M. 2010. *Die Rüsselkäfer Baden-Württembergs.* — Naturschutz-Spectrum, Ubstadt-Weiher, Themen vol. 99, Landesanstalt für Umwelt, Messungen und Naturschutz Baden-Württemberg, 944 p.

Vorst O. (Ed.) 2010. Catalogus van de Nederlandse kevers (Coleoptera). — Monografieën van de Nederlandse Entomologische Vereniging **11**: 1–317.