NOTES ON DUTCH CRYPTOPHAGIDAE (COLEOPTERA)

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Cryptophagidae are not a popular group with Dutch coleopterists. Not surprisingly, as cryptophagid beetles are not only small to very small, their identification is also often problematic. The two largest genera, *Cryptophagus* and *Atomaria,* are among the most species-rich of the Dutch beetle fauna. As their representatives are often very similar and prone to considerable variation, correctly determining them is a challenging task undertaken by only a few Dutch coleopterists during the past century. The last decades the study of this group has been seriously neglected and little has been published. In this paper seven species are added to the Dutch list, and eight are removed. This adds up to a total of 87 species.

INTRODUCTION

The most recent catalogue of the Dutch Coleoptera by Brakman (1966) mentions 85 cryptophagid species and a single subspecies (*Cryptophagus pubescens micaceus,* currently granted specific status) as native. Since then only one species has been added to the faunal list: *Atomaria bella* Reitter, 1875 (Berger & Poot 1970). The genus *Hypocoprus* with its single Dutch species *H. latridioides* Motschulsky, 1839 has since been transferred from Cucujidae to this family.

In the present paper seven species are added to the Dutch fauna: *Cryptophagus puncticollis*, *C. dorsalis*, *C. sporadum*, *Atomaria atra*, *A. scutellaris*, *A. nitidula* and *A. punctithorax*. To be removed from the Dutch list are the following eight species: *Cryptophagus quercinus*, *C. micaceus*, *Atomaria pseudatra*, *A. analis*, *A. diluta*, *A. puncticollis*, *A. alpina* and *Curelius exiguus*. Including these changes the Dutch cryptophagid fauna numbers 87 species. All changes mentioned here (except for the recently discovered *C. sporadum* and *A. punctithorax*) have been incorporated in volume 4 of the Catalogue of Palaearctic Coleoptera (Johnson et al. 2007).

Material from the following collections was studied:
National Museum of Natural History Naturalis, Leiden (RMNH)
Natuurmuseum Brabant, Tilburg (NNKN)
Natuurhistorisch Museum Maastricht (NHME)
Zoölogisch Museum Amsterdam (ZMA)
J.G.M. Cuppen, Ede (CJC)
M.B.P. Drost, Wadenoijen (CBD)
Sj. Tiemersma, Wezep (CST)
O. Vorst, Utrecht (COV)

[*Cryptophagus quercinus* Kraatz, 1852]

This species was recorded for the first time from the Netherlands by Everts (1887), based on material collected at Arnhem: 'Aan schimmelende eikenschors [on mouldy oak bark]. Arnhem 7 (Veth)'. Later *C. quercinus* has been reported from Maarsbergen and Grebbe (Everts 1898), Leuvenum (Everts 1914) and from Haarlem and Terborg (Everts 1922) as well. Brakman (1966) only mentions the province of Noord-Holland. He apparently had the opinion that specimens from Gelderland (Arnhem, Leuvenum, Terborg) and Utrecht (Grebbe, Maarsbergen) were misidentified. The Everts collection (RMNH) has under *C. quercinus* the following misidentified

material: Arnhem (.VII., 1 ♂, Veth, *C. fallax* Balfour-Browne), Terborg (.VI.1910, 1 ♂, Uyttenboogaart, *C. badius* Sturm) and Maarsbergen (.V., 1 ♂, Everts, *C. fallax*). As the remaining Dutch material standing under this name all belonged to other species as well, *Cryptophagus quercinus* has to be deleted from the Dutch list.

[*Cryptophagus micaceus* Rey, 1889]

This species was reported as new to the Netherlands by Everts (Everts 1915, 1917a). Two specimens were found by him near Den Haag among *C. pubescens* Sturm, 1845 trapped in a bottle of sweet beer hidden behind the bark of an oak tree. Both specimens, preserved in the Everts collection (RMNH), are *C. pubescens*. *Cryptophagus micaceus* is to be deleted from the Dutch list.

Cryptophagus puncticollis Lucas, 1846

Friesland Engwierum, 11.IX.1994, 4 ♂, 3 ♀, Vorst (COV). **Zuid-Holland** Den Haag, 26.VI.1973, 1 ♂, A.C. van Dijk (RMNH).

A small series of this species was collected from a large fruiting body of the fungus *Polyporus squamosus* on a solitary ash tree near Engwierum. A single male was discovered in the RMNH collection standing under *C. scanicus* (Linnaeus, 1758). This species, until recently known as *C. rotundatus* Coombs & Woodroffe, 1955 (Johnson 2007), is closely related to the common *C. dentatus* (Herbst, 1793) and was probably overlooked. Little is known about its ecological preferences.

Cryptophagus puncticollis seems to be widely distributed in southern Europe (Moncoutier 2001). It has been recorded up north from Great Britain and Germany. In Britain it is considered very rare (Johnson 1988), from Germany it was reported from only three regions: Nordrhein, Niederelbegebiet and Schleswig-Holstein (Köhler & Klausnitzer 1998).

This species is closely allied to *C. dentatus* and *C. denticulatus* Heer (= *pseudodentatus* Bruce, 1934) from which it can be reliably separated on parameral characters only. Unassociated females can not be determined. Figures of the parameres are to be found in Coombs & Woodroffe (1955), Johnson (1992) and Reška (1994). The latter also provides figures of the habitus and several morphological details.

Cryptophagus dorsalis Sahlberg, 1819

Overijssel Ootmarsum, Paardenslenkte, 13.VI.2003, 1 ♀, Drost (CBD); Wijhe, Buitenwaarden, 4.V.1997, 1 ♀, J. Cuppen (CJC). **Flevoland** Zeewolde, Wilgenreservaat, 10.V.2003, 1 ♀, Vorst (COV). **Gelderland** Ede, Dr Hartogsweg, 2.IV.1999, 1 ♂, 1 ♀, Vorst (COV); Ommeren, Beldert, 24.IV.1994, 1 ♀, Drost (CBD); Ophemert, Waal, 1.V.2003, 1 ♂, 4 ♀, Vorst (COV); Voorthuizen, 15-30.V.1963, 2 ex., Nonnekens (ZMA); Weurt, Waal, 12.V.2001, 2 ♂, 1♀, Vorst (COV); Wezep, Keizersweg, 5.V.1992, 1 ♀, Tiemersma (CST).

This rather characteristic species (fig. 1). turned up at several locations during the last years, mainly in the central part of the country. Its known distribution is shown in figure 2. Until now only a single older record could be traced: Voorthuizen, 1963. *Cryptophagus dorsalis* is generally believed to be associated with *Pinus*, especially with the flowers (Horion 1960, Reška 1994). This is true for some of the Dutch records. At Ede for instance, the species was collected from under bark of freshly felled *Pinus* trees. Remarkably *C. dorsalis* was found several times along the edge of large water bodies, where it was probably blown ashore after erroneously landing on the water surface. This was the case in Ommeren, Ophemert, Weurt and Wijhe, where all together ten specimens were collected. These localities are all in the Rhine and IJssel valley and far away from any pine forest. This might just indicate that the species is rather abundant and actively flying about under certain conditions.

Figure 1. *Cryptophagus dorsalis*, 1.v.2003, Ophemert. Foto Theodoor Heijerman.
Figuur 1. *Cryptophagus dorsalis*, 1.v.2003, Ophemert. Photo Theodoor Heijerman.

It could also indicate the existence of an alternative habitat, apart from pine forests.

Cryptophagus dorsalis is widespread throughout North and Central Europe, but it is not known from the British Isles or Belgium (Bruce 1936, Hodge & Jones 1995, Horion 1960). In Germany it has been reported from most regions (Köhler & Klausnitzer 1998). Here it is reported for the first time from the Netherlands. The rather large number of recent records suggests that it might be an immigrant rather than an hitherto overlooked species.

This species is characterized within the genus *Cryptophagus* by its rather flat appearance, overall dense puncturation, rather small pronotum and the usually dark colouration of pronotum and the sutural region of the elytra. See Reška (1994) for figures of habitus and aedeagus.

Cryptophagus sporadum Bruce, 1934

Gelderland Hummelo, 22.x.2001, 1 ♂, Drost (CBD).

A single male specimen of this species was sifted from a heap of mouldy old hay and straw next to a barn at the edge of a forest. Its aedeagus enables the unmistakable identification as *C. sporadum*, a species named after the type locality on the Sporades (Greece). The species was readily recognized as such by its collector Bas Drost. Not much is known about its bionomics, but Horion (1960) reports it from almost identical conditions: 'aus faulendem, stark verschimmeltem Heu und Strohabfall an einer Feldscheune gesiebt'. Reška (1994) does mention it from haystacks, dry dung, game feeding troughs (in numbers) and singletons from the base of trees.

Cryptophagus sporadum is rare throughout its range. Bruce (1936) in his *Cryptophagus* revision only recognized a handful of specimens. It seems restricted to Central and South Europe, and so far not known from the British Isles, Fennoscandia or Belgium (Bruce 1936, Hodge & Jones 1995, Horion 1960). In Germany there are only old records, dating from before 1950 (Bayern, Baden, Brandenburg) or before 1900 (Hessen) (Horion 1960, Köhler & Klausnitzer 1998). None of these regions borders the Netherlands.

Externally this species is similar to *C. laticollis* Lucas, 1846, from which it can be easily separated on aedeagal characteristics. Detailed figures of habitus and aedeagus are given by Reška (1994).

[*Atomaria pseudatra* Reitter, 1888]

The first mentioning of this species for the Netherlands was by Everts (1920, as *A. reitteri* Løvendal, 1893): 'Van deze soort ontving ik, met mijn dank, van Prof. Max Weber een exemplaar, dat in aanspoelsel van de Roer gevangen werd [from this species I received … a specimen

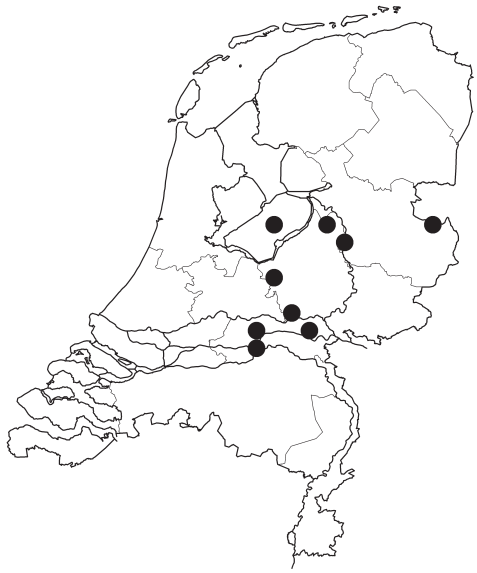

Figure 2. Distribution of *Cryptophagus dorsalis* in the Netherlands. Small dots = only records prior to 1900.
Figuur 2. Verspreiding van *Cryptophagus dorsalis* in Nederland. Kleine stippen = slechts waarnemingen van vóór 1900.

Figure 3. Distribution of *Atomaria scutellaris* in the Netherlands.
Figuur 3. Verspreiding van *Atomaria scutellaris* in Nederland.

collected from flood refuse of the river Roer]'. This specimen, preserved in the Everts collection (RMNH), is in fact a male *A. gutta* Newman, 1834 (Roermond, .I.1920, Weber). Horion mentions a second Dutch locality on the authority of Brakman: Oisterwijk (Horion 1960, as *A. reitteri*). It appears that this record has never been published, and also the catalogue of Brakman (1966) does not mention the province of Noord-Brabant where Oisterwijk is situated. A corresponding specimen kept at ZMA (Oisterwijk, 28.v.1949, Van der Wiel) is *A. atra,* a species hitherto not known from the Netherlands (vide infra). As no other Dutch specimens are known *A. pseudatra* is to be deleted from the Dutch faunal list.

Atomaria atra (Herbst, 1793)

Noord-Brabant Oisterwijk, 28.v.1949, 1 ♀, Van der Wiel (ZMA).

This species was first - erroneously - mentioned for the Netherlands by Snellen van Vollenhoven (1858). *Atomaria atra* was removed from the Dutch list by Everts (1898). Later he mentions that its former presence was based on misidentifications (Everts 1922).

A single specimen of this species was discovered in the collection of ZMA. It had been misidentified as *A. pseudatra* (vide supra). Unfortunately nothing is known about the conditions at the collecting site. It is generally considered a wetland species occurring in fens and marshes, where it has been collected from marsh litter and river flood refuse (Johnson 1993). Apart from the extreme north and south the species is recorded

Figure 4. Distribution of *Atomaria nitidula* in the Netherlands.
Figuur 4. Verspreiding van *Atomaria nitidula* in Nederland.

from scattered localities in Europe (Johnson 1993). On the British Isles it is predominantly observed in the south, in Germany it is rare and in decline as post-1900 records are lacking for several regions (Horion 1960, Köhler & Klausnitzer 1998).

Atomaria atra should not be difficult to identify using Johnson's key (Johnson 1992) because of its blacker colouration of the dorsum, as well as the reddish-yellow dilution of the elytral apex and suture. It is likely that careful examination of dry-mounted series of wetland specimens of very dark *Atomaria* will reveal more specimens.

Atomaria scutellaris Motschulsky, 1849

Zeeland Scharrendijke, 4.VII-18.VII.2006, 1 ♀, Alterra/PRI (COV); Sint Kruis, 1.IX.2002, 1 ♀, Vorst (COV); Zonnemaire, 4.VII-18.VII.2006, 1 ♀, Alterra/PRI (COV). **Noord-Brabant** Goirle, Gorp en Rovert, 9.VI.2006, 1 ♀, Vorst (COV); Tilburg, Kaaistoep, at light, 19.VI.2000, 1 ♂, Spijkers & Van Wielink (NNKN); Ibid., 6.III-17.IV.2004, 1 ♀, Van Wielink & Felix (NNKN); Ibid., at light, 1.X.2004, 1 ex., Spijkers (NNKN); Ibid., at light, 31.X.2005, 1 ex., Van Wielink (NNKN).

The first Dutch specimen of *Atomaria scutellaris* was caught on 19 June 2000 at light near Tilburg by H. Spijkers and P. van Wielink, who correctly recognized it. Since, it has been discovered at several other localities in the southwestern part of the country (fig. 3). *Atomaria scutellaris* is considered a species with a rather broad ecological taste. In southern England it has been reported from a range of habitats, especially salt marshes and grasslands, but also from broadleaved woodlands. It has been found at roots and by sweeping, in tidal refuse, piles of grass and fungus-infested wood (Johnson 1993). At Kaaistoep near Tilburg two more specimens were caught at light, and a single example was obtained by pitfall trapping. Other Dutch specimens were found by sifting heaps of old hay at a road verge amidst of farm land near Sint Kruis, by flushing the banks of a brook running through an old broadleaved forest near Goirle and by operating window traps at the edge of wheat fields near Scharrendijke and Zonnemaire.

Atomaria scutellaris is a mediterranean species, occurring in southern Europe, Turkey, Israel, North Africa and the Atlantic Islands (Johnson 1993). It is has so far not been reported from Belgium or Germany (Köhler & Klausnitzer 1998, Köhler 2000). The species does reach the northern limits of its range in southern England and the Netherlands. The relatively large number of recent records, all since the year 2000, clearly suggest that it is a recent immigrant. This is

corroborated by the situation on the British Isles where it was discovered on the Scilly Isles and has since been spreading in southern and south-eastern England and recently reached Wales (Allen 1968, Johnson 1993, 2002).

This species can be confused with several other *Atomaria* species. It is probably most similar to *A. atricapilla* Stephens, 1830, from which it can be separated by its slightly larger size, somewhat wider appearance, more transverse pronotum and - in typical specimens - the presence of an ill-defined dark spot on the middle of each elytron. Spermatheca and aedeagus also offer good characters to separate both species. From *Atomaria fuscata* (Schönherr, 1808) it is can be separated by its colouration and by the pronotum and the basal half of the elytra being similarly and rather finely punctate. A key is given by Johnson (1992).

[*Atomaria analis* Erichson, 1846] and *A. nitidula* (Marsham, 1802)

Atomaria nitidula – **Friesland** Mantgum, .v., 1 ♀, Swierstra (RMNH-Everts, under *A. analis*); Piaam, 1 ♀, 9.VIII.1967, A.C. van Dijk (RMNH). **Groningen** Haren, 2.VI.1942, 1 ♂, Van Nidek (ZMA); Noord-polderzijl, .II.1989, 1 ♀, Sterrenburg (ZMA). **Drenthe** Assen, .VI., 1 ♀, Everts (RMNH-Everts, under *A. analis*); Ibid., 28.VI.1930, 1 ♀, Kempers (ZMA). **Overijssel** Delden, 16.VI.1933, 1 ♀, Valck Lucassen (RMNH). **Gelderland** Doorwerth, .I.1925, 1 ♂, Besseling (ZMA); Laag-Soeren, .VI., 1 ♀, Everts (RMNH-Everts, under *A. analis*). **Utrecht** Soest, 7.VII.1918, 1 ♀, Van de Vaart (RMNH). **Noord-Holland** Amsterdamse Bos, 18.VII.1952, 1 ♀, Nonnekens (ZMA; Nonnekens 1961 as *A. analis*); Hilversum, 6.V.1929, 1 ♂, I.VI.1935, 1 ♀, Reclaire (ZMA); Naardermeer, 2.XI.1926, 1 ♂ (ZMA); Zeeburg, .I.1905, 1 ♀, Uyttenboogaart (RMNH-Everts, under *A. analis*). **Zuid-Holland** Den Haag, .II., 1 ♀, .III., 1 ♂, Everts (RMNH-Everts, under *A. analis*); Vianen, .III.1965, 1 ♀, Berger (RMNH). **Zeeland** Cadzand, .V.1963, 1 ♂, Berger (RMNH); Nisse, .VIII.1962, 1 ♀, Berger (RMNH). **Noord-Brabant** Drimmelen, 28.XI.1974, 1 ♀, Van der Krift (RMNH). **Limburg** Meerssen, 17.III.1901, 1 ♂ 1 ex., Kempers (ZMA); St Pieter, .X., 1 ♀, Maurissen (RMNH-Everts, under *A. cognata*); Valkenburg, .VII., 2 ♂, Everts (RMNH-Everts, under *A. analis*).

Sjöberg (1947) was the first to separate *Atomaria analis* and *A. nitidula* by describing the latter as subspecies *borealis* of *A. analis*. Since then this subspecies has been granted specific status and has had its name changed into *A. nitidula* (Johnson 1976a). It is not to be confused with *Atomaria nitidula* Heer, 1841 - a junior homonym of Marsham's *nitidula* - which is widely used in older literature for what is nowadays known as *A. basalis* Erichson, 1846 (e.g. Everts 1898, 1925).

Atomaria analis was first mentioned for the Netherlands by Everts (1877). It was considered widespread and locally not uncommon by Everts (1898). Brakman (1966) records its occurrence in eight of the eleven Dutch provinces. However, revision of the available material under this name reveals that it does not occur in the Netherlands. All male specimens belong to its relative *A. nitidula*. Although unassociated females can not be identified with certainty they are tentatively treated as *A. nitidula*, as evidence for the occurrence of *A. analis* in the Netherlands is currently lacking. The known distribution of *A. nitidula* is summarized in figure 4. Material corresponding to a record of *A. analis* from the West-Frisian island of Vlieland by Reclaire (1930) could not be traced.

Males of *Atomaria nitidula* can be easily separated on the parameral plate which in this species has a more rounded apex than in the similar *A. analis*. The latter has the central part of the plate membranous, while it is evenly sclerotized in *A. nitidula*. Aedeagal figures are to be found in Sjöberg (1947) and Johnson (1992).

Atomaria rubida Reitter, 1875

Zeeland Cadzand, 28.IV.1957, 1 ♀, Brakman (NHME).

This species was reported as new to the Dutch fauna by Everts (1924, as *A. cognata*): 'in mijne collectie, herkende ik een exemplaar, door wijlen Mr. A.H. Maurissen, bij St. Pieter, Oct., gevangen [I recognized an example in my collection, caught by the late A.H. Maurissen, near St. Pieter in October]'. Brakman (1962, as *A. cognata*) mentions additional records from Bemelen (11.ix.1956, 1 ex., Van der Wiel) and Vaals (.v.1960, 1 ex., Berger). The specimen from St. Pieter, that is kept in the Everts collection (RMNH), is a female *A. nitidula*. The other two records are based on misidentified specimens, from Vaals (RMNH) and Bemelen (NMHE, leg. Brakman!), as well: both are *A. apicalis* Erichson, 1846. Hence a single specimen misidentified as *A. gibbula* Erichson, 1846 in the Poot collection (NHME) is in fact the only known Dutch example of *A. rubida*.

[*Atomaria diluta* Erichson, 1846]

Van der Wiel (1962) reported this species as new to the fauna of the Netherlands, based on a single specimen collected at Vijlen (2.vi.1956, Van der Wiel). This specimen, kept at the ZMA, turned out to be an aberrant specimen of *A. nigrirostris* Stephens, 1830. Hence *Atomaria diluta* is to be removed from the Dutch faunal list.

Atomaria punctithorax Reitter, 1888

Limburg Heerlen, 6.IX.1969, 1 ♀, Poot (NHME).

A single specimen of this species was discovered in the Poot collection (NHME), where it was standing as *A. nigriventris* Stephens, 1830. *Atomaria punctithorax* is a grassland species, found especially near farms and in gardens, where it occurs mostly in fungus-infested hay bales. It has also been collected in glasshouses, among compost and grass, in flight, and once in the debris of a hornet (*Vespa crabro*) nest (Johnson 1976b).

Originally it has been described from Dalmatia (Reitter 1888). Since the 1950's it has been expanding its range into Central Europe, north to southern Sweden (Johnson 1993). In West and Central Europe it now has been reported from Great Britain, France, Germany, Czech Republic, Slovakia, Poland and Denmark (Johnson et al. 2007). It is considered a rare and local species throughout its range, that is usually present in low numbers (Johnson 1993), but also can be abundant: 'oft in Anzahl' (Johnson 1992). In view of its known distribution the discovery of *A. punctithorax* in the Netherlands was to be expected.

It is very closely allied to *A. nigriventris*, from which it differs by the flatter body and broader pronotum. From *A. pulchra* Erichson, 1846 (= *barani* Brisout, 1863) it can be separated by the less dense puncturation of the pronotum and the more transverse antennomere 9 and 10. An extensive comparative description of this species is given by Johnson (1976b, as *A. consanguinea*), a key by Johnson (1992).

[*Atomaria puncticollis* Thomson, 1868]

Atomaria puncticollis has long been treated as a form or variety of *A. nigriventris*, as did Everts in his last catalogue of the Dutch beetles (Everts 1925), where he does mention *A. nigriventris* as indigenous but not its forma major *puncticollis*. Reclaire & Van der Wiel (1936) are the first to report this taxon for the Netherlands as *A. nigriventris* var. *puncticollis* from Terborg. Van der Wiel collected two specimens on 19 May 1935 by beating bundles of pine twigs. However, a single corresponding male from Terborg (19.v.1935, Van der Wiel, ZMA) proved to be an example of *A. longicornis* Thomson, 1863 (= *procerula* auct.). *Atomaria puncticollis* is therefore to be deleted from the Dutch list.

[*Atomaria alpina* Heer, 1841]

This species is reported for the first time by Everts (1922): 'De typische *A. alpina* Heer werd door mij bij Leuvenum (det. Holdhaus) gevangen [the typical *A. alpina* Heer was collected by me near Leuvenum]'. At that time *A. wollastoni* Sharp, 1867 was already recognized as indigenous and treated as a subspecies of *A. alpina* (Everts 1898, 1922). In the Everts collection (RMNH) both forms are united under the name *A. alpina*.
A specimen from Leuvenum (.vi.1913, leg. Uyttenboogaart) bears a label '*A. alpina* det. Holdhaus'. It is however a male of *A. vespertina* Mäklin, 1853 (= *pulchra* auct.). There is one other specimen from Leuvenum that has indeed been collected by Everts himself. This is a somewhat aberrant example of *Cryptophagus scutellatus* Newman, 1834! The ZMA keeps another specimen from Leuvenum (20.vii.1918, 1♀, MacGillavry) under the name *A. alpina*. It is a misidentified female of *A. vespertina*. As a result *A. alpina* has to be removed from the list of Dutch Cryptophagidae.

[*Curelius exiguus* (Erichson, 1846)]

Everts reports this species as new to the Netherlands on the basis of a single specimen collected at Valkenburg, which he received from Rüschkamp (Everts 1917b, as *Ephistemus exiguus*). Nonnekens reported the species from his extensive survey of the Coleoptera of Amsterdamse Bos during the years 1948-1960 (Nonnekens 1961, as *Ephistemus exiguus*). Brakman (1966) also mentions the province of Gelderland, in addition to the provinces of Limburg and Noord-Holland.

All available material (95 ex.) under this name appeared to be misidentified examples of *Ephistemus globulus* (Paykull, 1798). The studied material stems from the following localities: Dwingeloo, Hengelo, Doorwerth, Herwen, Lobith, Nunspeet, Renkum, Amsterdam, Hilversum, Wognum, Den Haag, Noordwijk aan Zee, Geulhem, Schin op Geul, Steijl and Valkenburg. A specimen collected at Valkenburg by Rüschkamp, corresponding to the publication of Everts (1917b), is preserved in the Everts collection (RMNH). Material from Amsterdamse Bos mentioned by Nonnekens (1961) could not be traced. *Curelius exiguus* has to be deleted from the Dutch list.

CONCLUDING REMARKS

The present paper adds seven species of Cryptophagidae to the Dutch faunal list. Several of these species are authentic elements, but have been overlooked, e.g. *Atomaria atra*, of which the single known Dutch example was collected back in 1949. This is also the case with *A. nitidula* of which the Dutch material until now had been misidentified as *A. analis*, a species to be deleted from the list. On the other hand, there are two species whose discovery seems to reflect a real immigration, as there are several records, all of them fairly recent: *Cryptophagus dorsalis* and *A. scutellaris*. The latter is a southern species also extending its range on the British Isles. The discovery of *Atomaria punctithorax*, of which the only record dates from 1969, is probably the result of recent immigration as well, as this species is known from Central Europe since the 1950's only. More difficult to interpret is the discovery of *C. puncticollis* and *C. sporadum*, as the number of records - although all of recent date - is very limited, and both have been recorded from neighbouring countries since long. These species might be simply overlooked because they are very scarce.

A total of eight species has to be removed from the Dutch list, as their presence was based on misidentifications. These are - apart from the above mentioned *A. analis* - the following: *Cryptophagus quercinus, C. micaceus, Atomaria pseudatra, A. diluta, A. puncticollis, A. alpina* and *Curelius exiguus*.

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SAMENVATTING

Aantekeningen over Nederlandse Cryptophagidae (Coleoptera)
Zeven soorten cryptophagiden worden hier voor het eerst gemeld voor de Nederlandse fauna. Van twee soorten is duidelijk dat ze hier al geruime tijd voorkomen. Zo werd het enige Nederlandse exemplaar van *Atomaria atra* al in 1949 verzameld, maar niet eerder herkend. Iets dergelijks is ook het geval voor *A. nitidula*: al het Nederlands materiaal werd tot nu toe aangezien voor *A. analis*, een soort die komt te vervallen voor de fauna. Bij twee soorten lijkt er werkelijk sprake te zijn van nieuwkomers: *Cryptophagus dorsalis* en *A. scutellaris*. Van beide soorten zijn namelijk meerdere recente waarnemingen bekend, terwijl oudere vangsten ontbreken. *Atomaria scutellaris* is een zuidelijke soort die zich ook in Groot-Brittannië uitbreidt. Daarnaast is ook *Atomaria punctithorax*, waarvan slechts één vondst uit 1969 bekend is, waarschijnlijk een recente immigrant, aangezien deze soort pas sinds de jaren 1950 uit Midden-Europa bekend is. Onduidelijker is de situatie bij *C. puncticollis* en *C. sporadum*. Weliswaar zijn van beide soorten slechts recente records voorhanden, maar het aantal is (zeer) beperkt. Mogelijk betreft het hier soorten die vanwege hun (grote) zeldzaamheid tot nu toe onopgemerkt bleven.

Acht soorten dienen van de Nederlandse lijst afgevoerd te worden. Alle beschikbare exemplaren bleken namelijk fout gedetermineerd te zijn. Naast de bovenvermelde *A. analis* gaat het om de volgende soorten: *Cryptophagus quercinus, C. micaceus, Atomaria pseudatra, A. diluta, A. puncticollis, A. alpina* en *Curelius exiguus*.

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