



Cercyon castaneipennis sp. n., an overlooked species from Europe (Coleoptera: Hydrophilidae)

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Abstract

Cercyon castaneipennis sp. n. is recognised as a species distinct from *C. obsoletus* (Gyllenhal). Apart from small differences in the morphology of the aedeagus, both species can be separated by the structure of the mentum, the shape of the antennal club and the structure and colouration of the elytra. *Cercyon castaneipennis* is currently known from Central Europe and the southern part of North Europe. In the Netherlands, at the western border of its range, it is considered a recent immigrant, as records before the year 2000 are lacking. A lectotype for *C. obsoletus* is designated.

Key words: Coleoptera, Hydrophilidae, *Cercyon*, Europe, Palaeartic Region, new species

Introduction

The hydrophilid genus *Cercyon* Leach, 1817, consists of very small to moderate sized (c. 1–6 mm long), oval, more or less strongly convex beetles (Hansen 1991). Hansen (1999) mentions eight subgenera, of which *Cercyon* s. str. is by far the most speciose. Hebauer (2002, 2003) erected three more subgenera. Currently over 250 species are recognised, of which c. 40 species occur in the West-Palaeartic Region (Hansen 1999, 2004, Short & Hebauer 2006), belonging to the following five subgenera: *Arcocercyon* Hebauer, 2003 (2 spp.) (Fikáček 2005), *Cercyon* (c. 35 spp.), *Dicyrtocercyon* Ganglbauer, 1904 (1 sp.), *Paracercyon* Seidlitz, 1888 (1 sp.) and *Paracycreon* d'Orchymont, 1942 (1 sp.). They live in a wide variety of decaying organic material.

The new species described here belongs to *Cercyon* s. str., and is very similar to the Palaeartic *Cercyon obsoletus* (Gyllenhal, 1808). This strong resemblance could explain why it remained unnoticed until now. It certainly does not represent any of the known Palaeartic species. For the same reason it is likely of Palaeartic origin, and hence not conspecific with one of the poorly characterized species from outside this region.

Both *Cercyon obsoletus* and the new species can be easily recognised within European *Cercyon* s. str. by their large size (3.2–4.2 mm) in combination with the presence of a small humeral plica on the elytra (figured by Hansen (1987)). The similar *C. impressus* (Sturm, 1807) is on average smaller (< 3.5 mm), lacks the humeral plica and has a denser punctuation of the metaventral disc. From an extensive (re)description is refrained here, as *Cercyon obsoletus* s. l. has been accurately characterised in several synoptical works (Ganglbauer 1904, Hansen 1987, Huijbregts 1982, Vogt 1971). These descriptions cover both *C. obsoletus* and the new species.

Depositories

cAB Collection A.O. Bieńkowski, Moscow, Russian Federation

cFN Collection F. van Nunen, Vianen, The Netherlands

cJH	Collection J. Huijbregts, Leiden, The Netherlands
cJV	Collection J. Vitner, Prague, Czech Republic
cOV	Collection O. Vorst, Utrecht, The Netherlands
cSS	Collection S. Snäll, Tumba, Sweden
cZS	Collection Z. Švec, Prague, Czech Republic
NMPC	National Museum of Natural History, Prague, Czech Republic (M. Fikáček)
RMNH	National Museum of Natural History, Naturalis, Leiden, The Netherlands (A. van Assen)
UUZM	Museum of Evolution, Uppsala Universitet, Uppsala, Sweden (H. Mejlom)
ZMAN	Zoological Museum, Amsterdam, The Netherlands (B. Brugge)



FIGURES 1–2. Habitus of *Cercyon castaneipennis* (1) and *C. obsoletus* (2). Scale bar 1.0 mm. Photographs by Th. Heijerman.

***Cercyon castaneipennis* Vorst, new species**

(Figs. 1, 3, 5, 7–9, 13)

Diagnosis. A large *Cercyon* s. str., very similar to *C. obsoletus* (Gyllenhal, 1808) with which it has been confused until now. It differs at first glance from this species by the more shining overall appearance, and the usually reddish brown colour of the elytra (Fig. 1). Table 1 summarizes the differences between both species.

Description. Body length: 3.50–4.20 mm (median 3.85 mm, N = 20). Elytral length (apex of scutellum to apex of elytra): 2.55–3.05 mm (median 2.85 mm, N = 20). Elytral width: 2.20–2.60 mm (median 2.40 mm, N = 20). Black; elytra usually reddish brown with a large black triangular scutellar macula pointing backwards along the suture and more or less extending along the basal margin and the anterior portion of the lateral margins (Fig. 3).

Head, pronotum and elytra with fine and dense punctuation, but somewhat sparser than in *C. obsoletus* and as a result more shining than in this species. Elytral striae well defined, somewhat more pronounced and slightly deeper impressed than in *C. obsoletus*, especially in the parascutellar region. Elytra rather wide, slightly more convex than in *C. obsoletus*, more strongly narrowed posteriorly, lateral margins halfway sub-

linear over about one third of its length, while regularly curved in *C. obsoletus*. Lateral margin of elytra immediately behind anterior angle with a tiny transverse plica, as in *C. obsoletus*.

Raised middle portion of mesoventrite narrow (length: width = 4.2–5.3, median 4.7, N = 10), somewhat more slender than in *C. obsoletus*. Metaventrite without femoral lines.

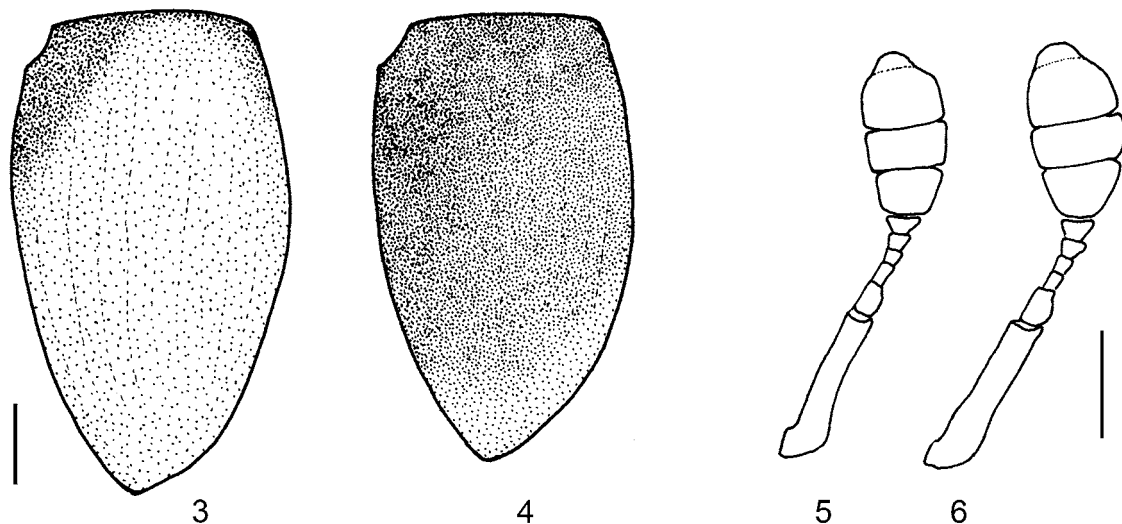
Maxillary palpi and antennae dark piceous to black. Antennal club somewhat more elongate (length: width = 1.8–2.1, median 1.9, N = 10) and as a rule slightly darker than in *C. obsoletus* (Fig. 5). Mentum with punctuation clearly fused to form transverse wrinkles. Legs piceous to brown, tibia paler than femora, tarsi paler than tibia; in general slightly darker than in *C. obsoletus*.

Male genitalia (Figs. 7–9) similar to that of *C. obsoletus*, but relative length smaller (aedeagal length: elytral length = 0.36–0.38, median 0.38, N = 6), and relative length of basal piece (BP) less than in *C. obsoletus* (parameral length: BP length = 0.68–0.75, median 0.72, N = 6). BP with a more extensive asymmetrical emargination basally.

Type material. Holotype: ♂, "Elst, Plantage Willem III / 164.3-444.0 V3974H / 3.v.2008 / leg. O. Vorst / koemest" (RMNH), collected near Elst (The Netherlands, Province of Utrecht). **Paratypes: SWEDEN:** Småland: 1 spec., Huskvarnaberget, 30.vii.2002, S. Snäll (NMPC). **THE NETHERLANDS:** Province of Groningen: 4 spec., Sellingen, 22.vi.2001, cattle dung in meadow, J. Huijbregts (cJH); Province of Drenthe: ♂, ♀ (Fig. 1), Anderen, Eexterveld, 29.v.2005, cattle dung in grazed heath land, O. Vorst (cOV); 1 spec., Anloo, Westerholt, 2.ix.2000, dung of large herbivores in meadow, J. Huijbregts (cJH); ♂, ♀, Balooërveld, 29.v.2005, pony dung in meadow, J. Huijbregts (cJH); ♀, Uffelte, Oosterzand, 26.viii.2006, cattle dung in grazed heath land, O. Vorst (cOV); Province of Overijssel: ♂, ♀, Springendal, 14.vi.2003, horse dung in meadow in forest, J. Huijbregts (cJH); Province of Gelderland: 3 ♂♂, 3 ♀♀, De Imbosch, Nieuwe Kamp, 20.v.2008, cattle dung in meadow, O. Vorst (cOV); Province of Utrecht: ♀, 2 spec., Austerlitz, Traayweg, 16.iv.2007, horse dung in mixed forest, O. Vorst (cOV); 2 ♂♂, 5 ♀♀, 1 spec., Elst, Plantage Willem III, 3.v.2008, cattle dung in meadow, O. Vorst (2 ♂♂, 5 ♀♀), F. van Nunen (1 spec.) (cFN, cOV, RMNH, ZMAN); Province of Noord-Holland: 1 spec., Amsterdam, Amsterdamsche Bosch, 8.v.2004, F. van Nunen (cFN); Province of Noord-Brabant: ♀, Biesbosch, Aakvlaai, 8.iv.2008, cattle dung in meadow, O. Vorst (cOV); 3 ♀♀, Biesbosch, Lange Plaat, 10.v.2008 (♀), 17.ix.2008 (2 ♀♀), horse dung in meadow, O. Vorst (cOV). **CZECH REPUBLIC:** Jihočeský kraj: 4 spec., Kvilda, 23.vii.2003, Z. Švec (cZS); Hlavní město Praha: 1 spec., Praha, Kosoř, 25.vi.2003, S. Snäll (cSS); Zlínský kraj: 1 spec., Halenkov, 17.vii.1983, J. Vitner (cJV). **SLOVAKIA:** Košický kraj: 1 spec., Plešivecká Planina, 18.viii.1985, cattle dung, J. Vitner (cJV); 2 spec., Silická Brezová, 21.v.1986, cattle dung, J. Vitner (cJV); 2 spec., Turňa [nad Bodvou], 18.vii.1985, Sejkora (NMPC); 1 spec., Zádiel, 25.iv.1986, cattle dung, J. Vitner (cJV); Žilinský kraj: 2 spec., Pribylina, 19.vii.1998, A. Bieńkowski (cAB); 1♂, Turček, 23.vii.1991, Martinová & Znamenáček (NMPC). **POLAND:** Warmińsko-Mazurskie: 2 spec., Pelnik, 16.v.1996, A. Bieńkowski (cAB). **LATVIA:** Tukums District: 1 spec., Klapkalnciens, 15.vi.2005, coastal refuse on the beach, O. Vorst (cOV).

TABLE 1. Diagnostic characters separating *Cercyon castaneipennis* and *C. obsoletus*.

	<i>C. castaneipennis</i>	<i>C. obsoletus</i>
punctuation of upper side	fine, somewhat sparser (Fig. 1)	fine, somewhat denser (Fig. 2)
elytral striae	well defined, somewhat more pronounced, especially in the parascutellar region (Fig. 1)	poorly defined, inner striae almost obsolete anteriorly (Fig. 2)
elytral colouration	usually reddish brown with a large black triangular scutellar macula (Fig. 3)	usually piceous black, paler towards the apex, apical fifth usually reddish brown (Fig. 4)
antennal club	somewhat more elongate (Fig. 5), as a rule darker	somewhat less elongate (Fig. 6), as a rule paler
punctuation of mentum	fused to form transverse wrinkles	clearly separated, not or only to very limited extent fused



FIGURES 3–6. Elytral colour pattern and antennae of *Cercyon castaneipennis* (3, 5) and *C. obsoletus* (4, 6). 3–4. Elytral colour pattern, scale bar 0.5 mm; 5–6. Antenna, scale bar 0.2 mm.

Distribution. Currently known from Central Europe (The Netherlands, Czech Republic, Slovakia and Poland) and the southern part of North Europe (Sweden and Latvia) (Fig. 13).

Bionomics. All but one specimen were collected from dung of large herbivores as cattle and horse, in both open and enclosed habitats. The single Latvian specimen collected from coastal refuse on the beach probably was astray. Specimens were collected from April through September.

Etymology. The specific epithet is an adjective derived from the Latin *castaneus* [chestnut coloured] and *penna* [wing], referring to the chestnut coloured elytra.

Remarks. The name *Cercyon obsoletus a. rubridorsis* Reitter, 1909 was proposed for a colour form with the elytra “rot, eine dreieckige gemeinschaftliche Basalmakel an der Naht, die Basis schmal, die S[eiten] vorne länger schwarz gefärbt” [red, a common triangular basal macula along the suture, the basis narrow, the sides anteriorly more extensive black]. This is actually an accurate description of *C. castaneipennis*, to which it might refer. As an infrasubspecific name it is however not available (Art. 45.5, 45.6, ICZN 1999). There are no other names available that could potentially be applied to the new species (*vide infra*).

Cercyon obsoletus (Gyllenhal, 1808)

(Figs. 2, 4, 6, 10–12, 14)

Sphaeridium lugubre: Olivier 1790: (No.15) 7. (misinterpretation of *Dermestes lugubris* Fourcroy, 1775).

Sphaeridium atomarium: Paykull 1798: 58. (misinterpretation of *S. atomarium* sensu Fabricius, 1792, being itself a misinterpretation of *Silpha atomaria* Linnaeus, 1767).

Sphaeridium obsoletum Gyllenhal, 1808: 107. Type locality: ‘Suecia’ [Sweden].

? *Cercyon obsoletum* var. *tristis* Dalla Torre, 1877: 73.

? *Cercyon obsoletum* var. *obscurus* Dalla Torre, 1877: 73.

Diagnosis. A large *Cercyon* s. str., very similar to *C. castaneipennis* **sp. n.** It differs at first glance from this species by the more dull overall appearance, and the usually piceous black colour of the elytra (Fig. 2). Table 1 summarizes the differences between both species.

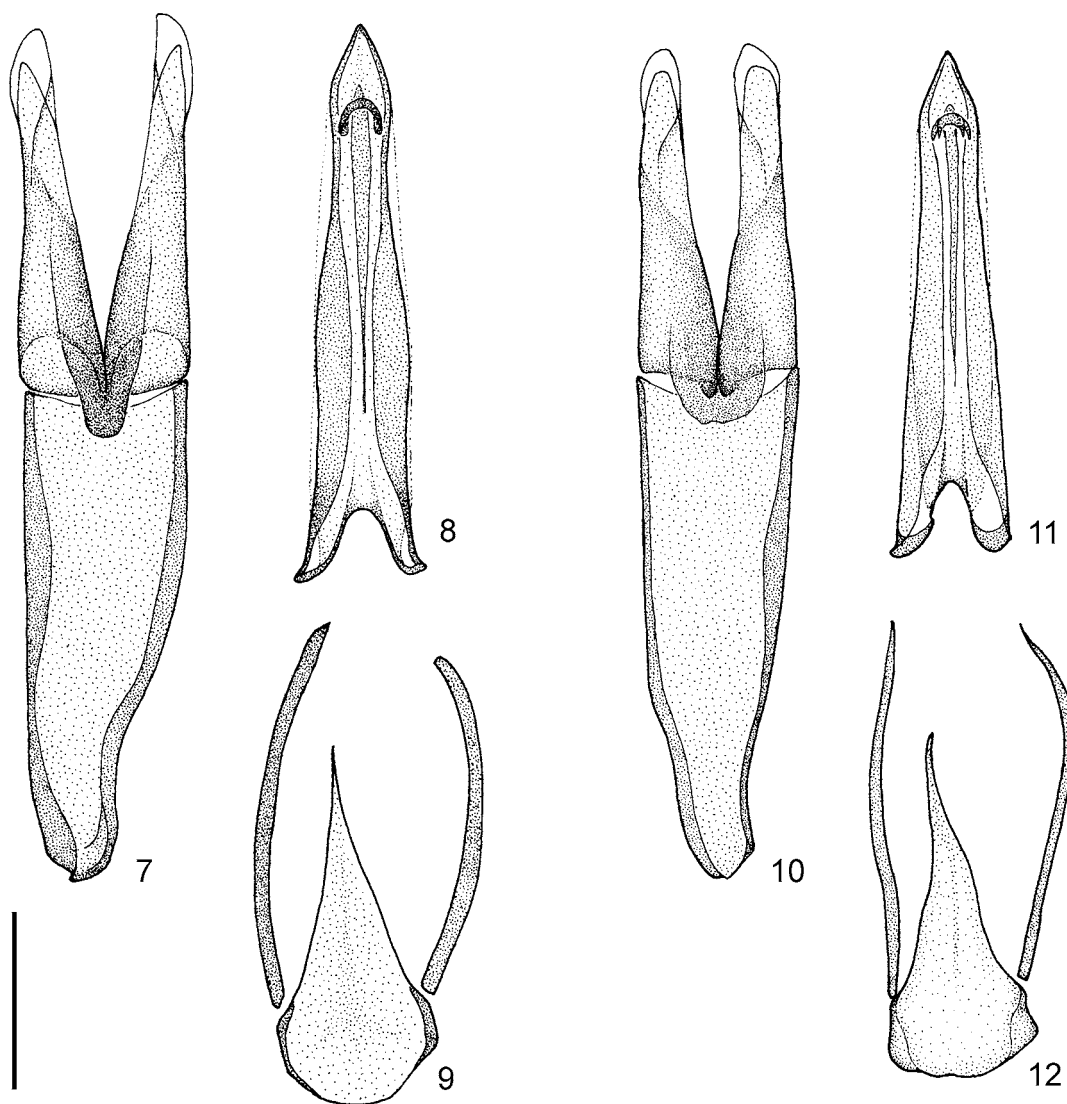
Description. Body length: 3.25–4.20 mm (median 3.75 mm, N = 20). Elytral length (apex of scutellum to apex of elytra): 2.25–2.80 mm (median 2.55 mm, N = 20). Elytral width: 2.05–2.45 mm (median 2.20 mm, N = 20). Black; elytra usually piceous black, paler towards the apex, apical fifth usually reddish brown

(Fig. 4); sometimes elytra completely brown, anteriorly darkened, but never with a distinct basal macula as in *C. castaneipennis*. Humeri with a tiny unobtrusive brown spot at the base of 6th elytral stria.

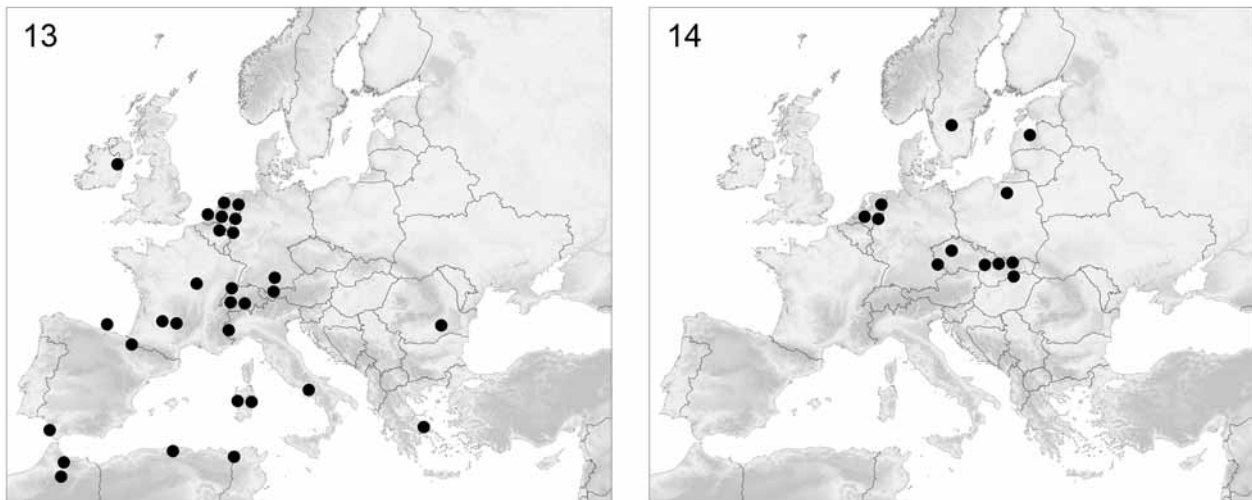
Head, pronotum and elytra with fine and dense punctuation, somewhat denser than in *C. castaneipennis* and as a result more dull than in this species. Elytral striae poorly defined, inner striae becoming almost obsolete anteriorly; as a result striae less clear than in *C. castaneipennis*. Elytra rather wide, slightly less convex than in *C. castaneipennis*, less strongly narrowed posteriorly, lateral margin regularly curved, unlike in *C. castaneipennis*. Lateral margin of elytra immediately behind anterior angle with a tiny transverse plica, as in *C. castaneipennis*.

Raised middle portion of mesoventrite narrow (length: width = 3.4–4.4, median 4.1, N = 10), somewhat less slender than in *C. castaneipennis*. Metaventrite without femoral lines.

Maxillary palpi and antennae dark piceous to black. Antennal club somewhat less elongate (length: width = 1.6–1.9, median 1.8, N = 10) and as a rule slightly paler than in *C. castaneipennis* (Fig. 6). Mentum with punctuation clearly separated, not or only to very limited extent fused to form transverse wrinkles. Legs piceous to brown, tibia paler than femora, tarsi paler than tibia; in general a trifle paler than in *C. castaneipennis*.



FIGURES 7–12. Male genitalia of *Cercyon castaneipennis* (7–9) and *C. obsoletus* (10–12), dorsal aspect. 7, 10. Basal piece and parameres; 8, 11. Penis; 9, 12. Sternite IX. Scale bar 0.2 mm.



FIGURES 13–14. Distribution of *Cercyon castaneipennis* (13) and *C. obsoletus* (14) on a 100 km UTM grid. The record of *C. obsoletus* from northern Iran is outside the area shown.

Male genitalia (Figs. 10–12) similar to that of *C. castaneipennis*, but relative length larger (aedeagal length: elytral length = 0.39–0.43, median 0.41, N = 15) and relative length of basal piece (BP) more than in this species (parameral length: BP length = 0.53–0.67, median 0.61, N = 15). BP with a more limited asymmetrical emargination basally.

Type material. *Sphaeridium obsoletum* Gyllenhal: **Lectotype** (by present designation) (in poor condition, lacking head, left elytron and all inner tissues): [no original label], "*Sphaeridium obsoletum* / GYLL #5979 / 161: 51", "Lectotypus / *Sphaeridium obsoletum* Gyllenhal, 1808 / design. O.Vorst 2008" (UZM, Collection L. Gyllenhal).

Material examined. IRELAND: Monaghan: ♂, Ballybay, 17.viii.1961, P. Staffeleu (RMNH). **THE NETHERLANDS:** Province of Drenthe: 1 spec., Ansen, 14.iv.1979, F.C.F. Sterrenburg (ZMAN); Province of Gelderland: 1 spec., Arnhem, Terletsche Heide, 17.iv.1997, carcass of Highland cattle, J. Huijbregts (cJH); 3 spec., Driel, 6.viii.1968 (♂, ♀), 4.vi.1979 (1 spec.), S. van Heijnsbergen (ZMAN); 2 ♂♂, Imbosch, Lamsgroen, 18.iv.2003, carcass of Highland cattle in forest, O. Vorst (cOV); 1 spec., Nunspeet, .iv.1920, D. MacGillavry (ZMAN); 1 spec., Wageningen, 4-9.vi.1963, A.C. Nonnekens (ZMAN); ♂, Zaltbommel, Kil van Hurwenen, 18.i.2004, flood refuse, F. van Nunen (cFN); Province of Noord-Holland: 1 spec., Amsterdam, Amsterdam CS, 1.vi.1993, J.H. Woudstra (ZMAN); 1 spec., Hilversum, 16.iv.1922, P. van der Wiel (ZMAN); 1 spec., Koedijk, Kleimeer, 26.vi.1982, manure heap, H. Vallenduuk (ZMAN); 1 spec., Vogelenzang, 24.iv.1965, v.d. Laan (ZMAN); Province of Zuid-Holland: ♂, ♀, Rozenburg, Landtong van Rozenburg, 5.v.2008, cattle dung in meadow, O. Vorst (cOV); Province of Noord-Brabant: ♂, 2 ♀♀ (Fig. 2), Biesbosch, De Dood, 18.iv.2007, carcass of roe deer, O. Vorst (cOV); ♀, 1 spec., Biesbosch, Verschurepolder, 8.x.2005, cattle dung in meadow, O. Vorst (cOV); ♂, Woudrichem, River Waal, 20.ii.2005, flood debris, F. van Nunen (cFN); Province of Limburg: 1 spec., Epen, 1914, A.J. Zöllner (ZMAN); 1 spec., Gronsveld, 22.iv.1962, P. Poot (ZMAN); 1 spec., Maastricht, 27.v.1938, C.M.C. Brouéius van Nidek; 3 ♀♀, 1 spec., 't Rooth, 9.vi.2007, flood refuse in limestone quarry, O. Vorst (cOV). Some further 51 Dutch specimens were examined. **FRANCE:** Département Cantal: ♂, Yolet, 26.vii.1985, E.A.M. Speijer (RMNH); Département Hautes-Alpes: ♂, Reotier, 26.vii-8.viii.1987, 1000 m ASL, A. Teunissen (RMNH); Département Lot: ♀, Gourdon, 21.ix.1983, P. Kanaar (RMNH); Département Pyrénées-Atlantiques: ♀, Harambeltz, 16.vii.1990, E.A.M. Speijer (RMNH); Département Yonne: ♂, Tonnerre, 7.vii.1975, A.C. van Dijk (RMNH). **FRANCE or SWITZERLAND:** 1 spec., Jura, Piaget (ZMAN). **SWITZERLAND:** Kanton Uri: ♂, Maderanertal, 22.vi.1938, Excursie Leidsche Biologen (RMNH); Kanton Waadt: 1 spec., Chesières, 7-13.vi.1897 (NMPC); 1 spec., Chesières, 13.vi.1905, Hlisnikowski (NMPC). **SPAIN:** Cantabria: ♂, 15 spec., Santillana, 4-5.v.1958, Excursie Spanje (RMNH); Navarra: ♂, ♀, Burguete, 24.vii.1988, E.A.M. Speijer (RMNH); Sevilla: ♀,

Lebrija, 9-10.v.1960, Excursie Spanje (RMNH). **ITALY:** Campania: 1 spec., 'Neapel' [Napoli], 13.v.1903, Hlisnikowski (NMPC); Sardegna: ♀, 4 spec., Bonarcado, 1.v.1982, P. Kanaar (RMNH); ♂, Laconi, 24.iv.1982, P. Kanaar (RMNH); ♂, Nurallao, 24.iv.1982, P. Kanaar (RMNH). **GERMANY:** Bayern: ♂, 3 spec., 'Bavaria', F.C. Visser (RMNH). **AUSTRIA:** Tirol: 1 spec., 'Tirol', .vi.1959, v.d. Laan (ZMAN). **ROMANIA:** 1 spec., 'Rumaenia', Reitter (ZMAN). **GREECE:** Attiki: 2 spec., 'Attika', Emge (ZMAN). **MOROCCO:** Meknès-Tafilalet: 1 spec., Ifrane, 11.v.1995, J. Hájek (NMPC); Tangier-Tétouan: 1♂, 2 spec., between Bad Berret and Bad Bessen, 3-6.vi.2007, around *Fagus* trees near rock (sifted), P. Hlaváč (NMPC); 8 spec., Bad Bessen, 3.vi.2007, around *Fagus* trees (sifted), P. Hlaváč (NMPC). **ALGERIA:** Alger: ♀, Alger, Richt[er]? (RMNH). **TUNISIA:** Jendouba: ♂, 9 spec., Ain Draham, B. von Bodemeyer (NMPC, RMNH). **IRAN:** 2 spec., 'Elburs-Gebirge' [Alburz mountains], B. von Bodemeyer (ZMAN).

Distribution (Fig. 14). Confirmed records from a large part of the Mediterranean (including North-Africa), Ireland, Central Europe (The Netherlands, Germany, Switzerland and Austria) and Iran (not mapped). *Cercyon obsoletus* s. l. has further been reported from several other Central and East European countries (e.g. Czech Republic, Poland, Belarus, Russia), as well as from the southern part of Fennoscandia, the Azores, Canary Islands and Armenia (Hansen 2004, Palm 1977). Hansen (1999) reports this species as doubtfully introduced into Argentina. However the publication of Bruch (1927) that he refers to, does not mention this species. The supposed occurrence in the Neotropical Region is thus erroneous.

Bionomics. Mainly in dung of larger herbivores, but also recorded from carrion and manure. Most examined specimens were collected from April through October. In addition two specimens were collected from riverine flood refuse in January and February, indicating the species overwinters (at least in part) as an adult.

Remarks. The Gyllenhal collection kept at UUZM holds a single pinned specimen standing as *Sphaeridium obsoletum*, which clearly fits his original description (Gyllenhal 1808). It is in poor condition, probably damaged by Psocoptera. The elytral punctuation however suffices to determine its identity.

For a long time this species was named *Cercyon lugubris* (Olivier, 1790) (Huijbregts 1982, Knisch 1924, Porta 1929, Vogt 1969, 1971). This name is, however, not available as Olivier did not describe it as new, but attributed it to Fourcroy (1785), by referring to Fourcroy's *Dermestes lugubre*. It is believed that Olivier misinterpreted Fourcroy's species (Mulsant 1844, Hansen 1987, 1999) and was actually the first to recognize the species. His interpretation is here listed as synonym of *C. obsoletus*, not *C. castaneipennis*, based on the description: "Le corps est noir ..." [the body is black ...] (Olivier 1790).

Gyllenhal (1808) introduced the name in current use, *Sphaeridium obsoletum*. He not only considered it conspecific with Olivier's *Sphaeridium lugubre*, but also with Paykull's (1798) interpretation of *Sphaeridium atomarium* sensu Fabricius, 1792, being itself a misinterpretation of *Silpha atomaria* Linnaeus, 1767 (now in *Stilbus* Seidlitz, 1872). Paykull's descriptions fits *C. obsoletus* not *C. castaneipennis*: "Elytra ... nigra, apice indeterminate rufescente ..." [Elytra ... black, apex diffusely reddish] (Paykull 1798).

Recent catalogues (Hansen 1999, 2004) mention just two junior synonyms of *Cercyon obsoletus*: *Cercyon obsoletus* var. *tristis* Dalla Torre, 1877 and *C. obsoletus* var. *obscurus* Dalla Torre, 1877. Dalla Torre introduced these names for specimens with black, respectively brown elytra: "Fld. schwarz (var. *obscurus* m.) oder braun (var. *tristis* m.), ... Spitze der Fld. rothbraun" [Elytra black (var. *obscurus* m.) or brown (var. *tristis* m.), ... apex of elytra reddish brown] (Dalla Torre 1877). Dalla Torre's concept of *C. obsoletus* might be erroneous as he mentions a body length of 2–3 mm only. The interpretation of both names as doubtful synonyms of *Cercyon lugubris* is based on Knisch (1924). The first is a secondary homonym of *Sphaeridium triste* Illiger, 1801, the second of *Hydrophilus obscurus* Fabricius, 1792, a junior synonym of *Cercyon haemorrhoidalis* (Fabricius, 1775) (Hansen 1999), rendering both names unavailable. Types are most probably lost, as the Dalla Torre collection was destroyed during the Second World War (Jäch 1988).

Discussion

The present study shows that *Cercyon castaneipennis* **sp. n.** is a separate species, distinct from *C. obsoletus* (Gyllenhal). Until now it is only known from Central Europe (The Netherlands, Czech Republic, Slovakia and Poland) and the southern part of North Europe (Sweden and Latvia). The oldest known example dates back from the year 1983. Although a considerable number of older specimens, originating from a wide geographic range, was studied, those were all the true *C. obsoletus*. In the Netherlands *C. castaneipennis* is only known since 2000. Here it currently is the more common of both: since its discovery *C. castaneipennis* has been recorded thirteen times (35 specimens), while *C. obsoletus* was seen from seven records (15 specimens) only. The lack of older records from the Netherlands together with its current abundance suggest that *C. castaneipennis* is a recent immigrant here. From this country also a considerable number of older *C. obsoletus* was at hand. It is not clear whether the species extended its range from a nearby area, e.g. Central or East Europe, or that its origin is to be sought outside the (West) Palaearctic Region. In view of its close resemblance to the Palaearctic *C. obsoletus* the latter seems less probable. Whether *C. castaneipennis* is to be considered an immigrant in the remainder of Central Europe remains to be seen. Although from this area no *C. castaneipennis* was seen dating from before 1984, older material was scarce and only at hand from Bavaria and Tirol. The study of more material is needed to solve this problem.

Amongst terrestrial hydrophilids there are some examples of species that have successfully invaded the Central European fauna: *Dactylosternum abdominale* (Fabricius, 1792), *Cercyon laminatus* (Sharp, 1873) and *Cryptopleurum subtile* (Sharp, 1884) (Hansen 1999, 2004). Of those, *Dactylosternum abdominale* is considered a species of Afrotropical origin, while the other two originate from the East Palaearctic Region (Hansen 1999, 2004, Knisch 1924). In Central Europe all three species are for their development more or less dependent on man-made accumulations of organic material, such as manure, compost and decaying hay. Although *C. subtile* is sometimes to be encountered in animal droppings, none of them can be considered a typical dung dweller, as *C. castaneipennis* is. On the other hand a remarkable number of Palaearctic *Cercyon* species have been established in the Nearctic Region, most of them typical dung species: *Cercyon haemorrhoidalis* (Fabricius, 1775), *C. impressus* (Sturm, 1807), *C. lateralis* (Marsham, 1802), *C. nigriceps* (Marsham, 1802), *C. pygmaeus* (Illiger, 1801), *C. quisquilius* (Linnaeus, 1760), *C. terminatus* (Marsham, 1802) and *C. unipunctatus* (Linnaeus, 1758) (Hansen 1999, 2004, Smetana 1978). This shows the invasive potential of many representatives of the genus *Cercyon*.

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