

Vulva (fig. 8) : The entrances of the bursa copulatrix connected with the spermathecae by relatively short, upwards-downwards oriented semi-circular spermducts.

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A NOTE ON EMPIDIDAE (Diptera), UNCOMMON OR NEW FOR THE BELGIAN FAUNA*

by Patrick CROOTAERT**

The family Empididae is well represented in Belgium. The catalogue of M. Goetghebuer (1931) covering the whole Belgian fauna listed 126 species. In comparison to the well known British fauna (Collin, 1961) the species number is estimated to be near 350. Actually 290 species were positively identified in our country.

Recently only the genus *Platypalpus*, represented by 70 species, and a few smaller genera have been studied in some detail (Grootaert, 1981). The large genera *Hilara*, *Rhamphomyia* and *Empis* still need a thorough revision.

The present note deals with some uncommon Empididae, 14 being new for our fauna (marked with asterisk) and a checklist is given for the treated genera. The study is based on the collections of the « Institut royal des Sciences naturelles de Belgique » (IRSNB) including the collections of J. CH. Jacobs, M. Goetghebuer and M. Bequaert. Synonyms are given for Belgian literature.

Atelestus WALKER, 1837

* 1. *Atelestus dissonans* COLLIN, 1961

Luxembourg : Ethe (Centre d'Ethe-Buzenol), 14.VII-28.VIII. 1981 1 ♂ (leg. P. Grootaert). Namur : Houyet, 6.VII.1928 1 ♂ (coll. M. Goetghebuer, det. Oldenberg as *A. pulicarius* FALLÉN).

This species has only recently been described by Collin (1961).

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The male can be distinguished from *A. pulicarius* by its smaller size, absence of the long bristles on the middle tibiae and a slight difference in the hypopygia.

2. *Atelestus pulicarius* FALLÉN, 1816

Brabant : Ottignies, 6-12.VI.1918 1 ♂ (leg. P. Dessart).
Liège : Lixhe, 1.VI.1947 1 ♂ (coll. det. M. Bequaert). Luxembourg : Mirwart, 6-12.VI.1946 1 ♂ ; Herbeumont 26.VI.1052 1 ♂ ; Durbuy, 18.VI.1962 1 ♂ (coll. det. M. Bequaert).
Namur : Nismes, 24.VI.1981 1 ♀ (by P. Grootaert).

Dryodromia RONDANI, 1856

* *Dryodromia testacea* RONDANI, 1856

Hainaut : Ellezelles, 7.VI.1958 1 ♂ ; 25.V.1958 1 ♂, 1 ♀ (coll. M. Bequaert). Luxembourg : Florenville, 10.VI.1956 3 ♀ (leg. A. Collart) ; Lesternay (Ruisseau de la Taille), 14.V.1948 1 ♂ (leg. R. Tollet). Namur : Bois de Cerfontaine, 12.V.1950 1 ♂, 1 ♀ (leg. R. Tollet). A rare species but apparently widespread throughout Europe : Italy, Germany, Denmark and Great-Britain.

Chelifera MACQUART, 1823

* 1. *Chelifera aperticauda* COLLIN, 1927

Brabant : Ottignies, 23-30.V.1981 1 ♂ (leg. P. Dessart). Hitherto this species was only known from Great-Britain (Collin, 1961 ; Vaillant, 1978).

* 2. *Chelifera concinnicauda* COLLIN, 1927

Liège : Büllingen, 10.VIII.1923 1 ♂, 2 ♀ (leg. G. Severin, det. A. Collart).
According to Collin (1961) a rare species but widely distributed throughout Europe (Vaillant, 1978).

* 3. *Chelifera diversicauda* COLLIN, 1927

Hemerodromia stigmatica SCHINER, GOETGHEBUER, 1931 *syn. nov.* Luxembourg : Virton, 2.IV.1920 2 ♂, 1 ♀ (coll. M. Goetghebuer as *H. stigmatica* SCHINER). Hitherto only known from Great-Britain.

4. *Chelifera flavella* (ZETTERSTEDT, 1838)

Hemerodromia melanocephala HALIDAY, GOETGHEBUER, 1931 [partim].

Liège : Hockai, 11.VI.1914 1 ♂ (coll. det. Goetghebuer as *H. melanocephala* HAL.). Luxembourg : Ethe (Centre d'Ethe-Buzenol), 2-16.VI.1981 3 ♂, 10 ♀ ; 16-30.VI 1 ♂, 5 ♀ (leg. P. Grootaert).

We suppose that Goetghebuer (1931) really recognized *C. flavella* (ZETT.) although he put it as a synonym of *H. melanocephala* HAL. and his specimens consisted of both *C. flavella* and *C. trapezina*. To elucidate this confusion we refer to Collin (1961 p. 711-713). In *C. flavella* both lobes of the upper lamellae of the hypopygium are equally long and brown. The lower lamellae are more truncate, not pointed as in *C. obscura* VAILLANT (1968, Figs 8, 9).

* 5. *Chelifera precabunda* COLLIN, 1961

Brabant : Forêt de Soignes (Rouge-Cloître), 2.VII.1941 1 ♂ ; 24.VI.1941 1 ♂ ; 24.VI.1942 1 ♂, 1 ♀ ; 27.VIII.1942 1 ♂ ; 7.V.1942 1 ♂ ; 2.VI.1942 1 ♀ (leg. A. Collart) ; 16.V.1918 1 ♂ ; 13.VII.1919 1 ♂ (leg. A. Tonnoir). Liège : Pepinster (Ruisseau de fond des 3 bois), 13.VII.1949 1 ♂ (leg. R. Tollet) ; Malmédy (Ruisseau de Coreux), 25.VII.1935 1 ♂ (leg. A. Collart). Hainaut : Ellezelles, 1.VI.1960 1 ♂ (coll. M. Bequaert as *C. precatoria*). Luxembourg : Lesternay (Ruisseau de la Taille), 14.V.1948 1 ♂ (leg. R. Tollet) ; Mirwart (Bords du Parfondry) 1 ♂, 1 ♂ (leg. P. Vanschuytbroeck). Namur : Cerfontaine (L'eau de l'heure), 2.VI.1950 1 ♂ (leg. R. Tollet).

As stated by Collin (1961), *C. precabunda* is clearly an overlooked species and is nearly as common as *C. precatoria*.

6. *Chelifera precatoria* (FALLÉN, 1815)

Brabant : Melsbroek, 3.VI.1918 1 ♂ (leg. A. Tonnoir) ; Forêt de Soignes, 7.V.1942 2 ♀ ; 16.V.1918 1 ♂, 1 ♀ (leg. A. Tonnoir) ; Forêt de Soignes (Vuylbeek), 28.VII.1917 2 ♀ ; Rouge-Cloître, 14.VII.1917 1 ♂ ; Linkebeek, 6.X.1917 1 ♂ (leg. A. Tonnoir). Hainaut : Ellezelles, 13.IX.1959 2 ♂ ; 1.VI.1960 1 ♂, 1 ♀ (coll. det. M. Bequaert). Liège : Sy, 24.VI.1924 1 ♀ (coll. det. M. Goetghebuer) ; Bevercé (Val de la Warche), 3.VI.1949 1 ♂ (leg. A. Collart) ; Ombret-

Yernée, 27.VI.1952 1 ♀ (leg. R. Tollet). Luxembourg : Virton, 16.IX.1920 1 ♂; 23.VI.1934 1 ♀ (coll. det. M. Goetghebuer); Virton (Rabais), 2.VII.1919 1 ♂ (leg. A. Tonnoir); Lesternay (Ruisseau de la Taille), 14.V.1948 2 ♂ (leg. R. Tollet); Mirwart (Bords du Parfondry), 11.VI.1948 1 ♂, 5 ♀ (leg. R. Tollet); Poix St. Hubert, 18.VI.1937 1 ♀ (leg. A. Collart); Barvaux, 26.VI.1955 1 ♂ (coll. det. M. Bequaert); Herbeumont, 28.VI.1952 1 ♂ (coll. det. M. Bequaert); Virton, 5.VII.1914 3 ♂, 1 ♀ (coll. det. M. Goetghebuer). Namur : Falaën, 12.VI.1921 1 ♂ (coll. det. M. Goetghebuer) Willerzie, 18.VI.1958 1 ♂ (leg. A. Collart); Han-sur-Lesse, 27.VI.1955 1 ♀ (coll. det. M. Bequaert). Oost-Vlaanderen : Schelderode, 29.V.1944 2 ♀; Munte 21.V.1939 1 ♀; St. Denijs-Westrem, 23.VI.1949 (coll. det. M. Bequaert).

7. *Chelifera stigmatica* (SCHINER, 1860)

Hemerodromia stigmatica SCHINER, non GOETGHEBUER, 1931
Brabant : Brussel, 5.V.1919 1 ♂ (leg. A. Tonnoir). Liège : Pepinster (Fraïty), 13.VII.1949 1 ♂ (leg. R. Tollet); Malmédy (Rheinhardstein), 18.VI.1934 1 ♂ (leg. A. Collart); Goffontaine, 13.VI.1949 2 ♂ (leg. R. Tollet).

* 8. *Chelifera subangusta* COLLIN, 1961

Luxembourg : Ethe (Centre d'Ethe-Buzenol, 2-16.VI.1981 2 ♂, 13 ♀; 16-30.VI.1981 1 ♀ (leg. P. Grootaert). Described from Great-Britain, this species has only once been recorded on the continent (Alps, Vaillant, 1978). Females are reported for the first time.

9. *Chelifera trapezina* (ZETTERSTEDT, 1838)

Hemerodromia melanocephala HALIDAY, GOETGHEBUER, 1931 [partim]
Liège : Goffontaine (Station), 13.VII.1949 1 ♂; Pepinster, (Fraïty), 13.VII.1949 3 ♂, 5 ♀ (leg. R. Tollet); Hockai (Pont des Forestiers), 3.VII.1952 1 ♂ (leg. A. Collart); Butgenbach, 4.VIII.1923 1 ♂; Losheimergraben, 9.VIII.1923 1 ♂ (leg. G. Severin). Luxembourg : Mirwart (Bords du Parfondry), 3.VIII.1943 1 ♂, 3 ♀ (leg. P. Vanschuytbroeck); 13.VII.1943 1 ♀ (leg. R. Tollet); Ethe (étangs de Claireau), 3.VII.1919 1 ♂ (leg. A. Tonnoir); St. Mard,

28.VII.1919 1 ♀ (leg. A. Tonnoir); Poix St. Hubert, 18.VII.1937 1 ♂ (leg. A. Collart); Chiny, 23-26.VII.1934 1 ♂ (coll. det. M. Goetghebuer as *H. melanocephala* HAL.).

Hemerodromia MEIGEN, 1822

Actually 4 species of *Hemerodromia* were found in Belgium. The single female labeled *H. oratoria* Fallén, 1815 from the collection J. Jacobs is another species but is too damaged to be positively identified. So, *H. oratoria* is temporarily removed from the Belgian fauna list.

* 1. *Hemerodromia baetica* COLLIN, 1927

Luxembourg : Chiny, 23-26.VII.1934 1 ♀ (coll. M. Goetghebuer under *H. oratoria* FALLÉN); Godinne, 1-15.VII.1970 3 ♀ (leg. G. Marlier). Namur : Falmignoul (Ravin du Colibri), 9.VII.1943 1 ♀ (leg. A. Collart).

2. *Hemerodromia laudatoria* COLLIN, 1927

Namur : Ciergnon, 15.VII.1937 1 ♂ (leg. A. Collart). Houyet, 18.VI.1936 1 ♀ (leg. L. Giltay, det. A. Collart).

3. *Hemerodromia raptor* MEIGEN, 1830

Antwerpen : Postel, VII.1922 1 ♂ (det. A. Tonnoir).

4. *Hemerodromia unilineata* ZETTERSTEDT, 1842

H. oratoria FALLÉN, GOETGHEBUER, 1931.

Brabant : Mont St. Guibert, 19.VI.1932 1 ♀ (coll. M. Goetghebuer). Liège : Sy, 24.VI.1933 2 ♀ (coll. M. Goetghebuer); Streupas-Colonster, 2.VII.1943 1 ♀ (leg. A. Collart). Luxembourg : St. Mard, 28.VII.1919 1 ♂, 1 ♀ (leg. A. Tonnoir); Virton, 23.VI.1934 1 ♀ (coll. det. M. Goetghebuer as *H. oratoria* FALLÉN); Torgny, 2.VII.1980 1 ♂ (leg. P. Grootaert). Namur : Villers sur Lesse, 31.V.1934 6 ♂ (leg. L. Giltay, det. A. Collart); Falaën, VI.1921 2 ♂ (leg. A. Tonnoir); 1.VI.1921 1 ♂, 2 ♀ (coll. det. M. Goetghebuer as *H. oratoria* FALLÉN); Houyet, 27.VI.1927 1 ♀ (coll. M. Goetghebuer); Moha, 4.VII.1980 1 ♂; 24.VI.1981 1 ♂, 5 ♀ (leg. R. Detry); Houyet, 18.VI.1936 2 ♂ (leg. L. Giltay).

Leptopeza MACQUART, 1927

Represented in Belgium by only 2 species : the « common » *flavipes* MEIGEN and the « rare » *borealis* MEIGEN. *L. sphenoptera* cited in Belgian literature belongs to the genus *Orophezella* COLLIN.

* *Leptopeza borealis* ZETTERSTEDT, 1842

Hainaut : Ellezelles, 24.V.1959 1 ♀ (coll. det. M. Bequaert as *L. flavipes*). Luxembourg : Mirwart, 18-14.VI.1946 1 ♀ (coll. det. M. Bequaert as *L. flavipes*); Châtillon, 19-29.V.1981 1 ♀ (leg. J. Jacob).

The female captured at Châtillon has an aberrant wing venation : a cross vein is present between R 2 + 3 and cubitus posterior to the vein closing the discal cell and this in both wings. Comparison with a male and female from Berlin (det. Oldenberg in coll. Villeneuve, IRSNB) showed that it was identical. *L. borealis* was known to Collin (1961) from only 1 female from Great-Britain.

Leptopeza flavipes (MEIGEN, 1820)

Liège : Hockai, 18.VI.1932 2 ♂, 1 ♀ (coll. det. M. Goetghebuer). Namur : Falaën, 12.VI.1921 1 ♂; Houyet, 3.VI.1927 1 ♀ (coll. det. M. Goetghebuer); Hastière, VI.1904 1 ♀ (coll. det. A. Guillaume). Oost-Vlaanderen : Destelbergen, 11.VII.1943 1 ♂; 8.VI.1947 1 ♀; 18.VI.1955 2 ♂, 1 ♀; 24.V.1958 1 ♂ (coll. det. M. Bequaert); Heusden, 29.VI.1949 1 ♂ (leg. J. Verbeke, det. M. Bequaert); Vinderhoute, 17.VI.1920 1 ♂ (coll. det. M. Goetghebuer). West-Vlaanderen : Knokke, 16.IX.1921 1 ♂ (coll. det. M. Goetghebuer, date correct ?).

In 1820, Meigen described the same species as *flavipes* and *ruficollis* on the same page. Collin (1961, p. 273-274) retained the name *flavipes*. Since Collin (loc. cit.) can be considered as the first reviser (Chvála, pers. comm.) the name *flavipes* is also retained here.

Oedalea MEIGEN, 1820

Six species of *Oedalea* are actually known in Belgium but the collections were only partially revised. *Oedalea tibialis* MACQUART reported by J. Jacobs (1906) has not been seen. However, according to its distribution in Europe (Chvála, 1981) it should be present in our country.

1. *Oedalea flavipes* ZETTERSTEDT, 18422. *Oedalea holmgreni* ZETTERSTEDT, 1852

This species is very common in Belgium and is an exclusively north-western European species which does not occur in Central Europe (Chvála, 1981).

* 3. *Oedalea hybotina* (FALLÉN, 1816)

Oost-Vlaanderen : Heusden, 18.V.1943 1 ♀ (leg. J. Verbeke). Widely distributed throughout Europe but uncommon. Not yet reported from Great-Britain so it is not in the key of Collin (1961).

4. *Oedalea stigmatella* ZETTERSTEDT, 19425. *Oedalea tibialis* MACQUART, 18276. *Oedalea zetterstedti* COLLIN, 1926**Trichina** MEIGEN, 1820

Only four species of *Trichina* are actually known in Belgium.

* 1. *T. bilobata* COLLIN, 1926

T. clavipes MEIGEN, JACOBS, 1906 [partim]

T. clavipes MEIGEN, GOETGHEBUER, 1931 [partim]

Luxembourg : Durbuy, 18.VI.1962 1 ♂ (coll. M. Bequaert). Namur : Vedrin, IX.1887 1 ♂ (coll. J. Jacobs as *T. clavipes* MEIGEN). Oost-Vlaanderen : Schelderode, 12.V.1948 1 ♂ (coll. M. Bequaert). It is clear that *T. bilobata* COLLIN was an overlooked species in Belgium.

2. *Trichina clavipes* MEIGEN, 1830

non M. GOETGHEBUER, 1931 [partim]

non J. JACOBS, 1906 [partim]

- * 3. *Trichina elongata* HALIDAY, 1833
Brabant : Ottignies, 2-9.V.1981 3 ♂, 6 ♀ (leg. P. DESSART).
4. *Trichina pallipes* ZETTERSTEDT, 1838
Oedalea pallipes ZETTERSTEDT, MÉUNIER, 1908
Oost-Vlaanderen : Heusden, 25.VI.1944 1 ♂ ; 16.VII.1942
1 ♂ (coll. M. Goetghebuer as *T. clavipes* MEIGEN) ; St. Mar-
tens-Latem, 28.VI-5.VII.1981 1 ♀ (leg. P. Grootaert).

Symballophthalmus BECKER, 1889

Two of the three well-known species of *Symballophthalmus* occur in Belgium. *S. dissimilis* (FALLÉN, 1815) a species with northern distribution (Chvála, 1975), reported from Flanders by Goetghebuer (1943) was in fact a *S. fuscitarsis* ZETTERSTEDT.

- * 1. *Symballophthalmus fuscitarsis* (ZETTERSTEDT, 1859)
S. dissimilis (FALLÉN), GOETGHEBUER, 1943
Luxembourg : Herbeumont, 1.V.1957 1 ♂ (coll. M. Bequaert) ; Ethe (Ruisseau de Frèchi), 19.V.1981 1 ♂ (leg. P. Grootaert). Namur : Furfooz sur Lesse : 22.V.1955 2 ♂, 2 ♀ (coll. M. Bequaert). Oost-Vlaanderen : Melle, 25.V.1938 1 ♂ ; 3.VI.1938 1 ♀ (coll. det. M. Goetghebuer as *S. dissimilis* (FALLÉN) ; 5.V.1943 1 ♂ (coll. M. Bequaert).
- * 2. *Symballophthalmus pictipes* (BECKER, 1889)
Brabant : Ottignies, 30.V-6.VI.1981 1 ♂, 1 ♀ (leg. P. Dessart - Malaise trap).

Summary

Fourteen species of Empididae are reported for the first time in Belgium. The female of *Chelifera subangusta* COLLIN is recorded for the first time.

Résumé

Quatorze espèces d'Empididae sont nouvelles pour la faune belge. La femelle de *Chelifera subangusta* COLLIN est rapportée pour la première fois.

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