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## Abstract

72 species of Pipunculidae are reported from Belgium. 29 are new to the Belgian fauna. They are discussed concerning synonymy and distribution with some remarks regarding the identification. The composition of the pipunculid fauna in Belgium is also compared with that of Great Britain and Poland.

## Samenvatting

Er worden 72 soorten Pipunculidae gemeld voor België waarvan 29 nieuw zijn voor de Belgische fauna. Hun synonymie en verspreiding alsook opmerkingen omtrent de identificatie worden besproken. De fauna van België wordt vergeleken met deze van Groot-Brittannië en Polen.

## Introduction

Pipunculidae have never been thoroughly investigated in Belgium as far as we know. There are only sporadic references in the literature and most of these records are quite old. According to the reference system of the 'Koninklijk Belgisch Instituut voor Natuurwetenschappen' (Brussels) no Belgian Pipunculidae have been mentioned after 1958 (Maréchal, 1958) in the literature. Since then, a number of European species new to science, have been described by several authors (Albrecht 1979a, 1979b; Coe 1966a, 1966b; Collin, 1956; Kozánek, 1981a, 1981b).

We have made a preliminary study of the Belgian Pipunculidae (De Meyer, 1983a, 1983b; De Meyer & De Bruyn, 1984) including an investigation of the faunal composition. During 1984, we also made a study of the pipunculid fauna of a specific region in Belgium: the 'Fagne calcaire' of the "Parc naturel Viroin-Hermeton" (De Meyer, 1984) which already resulted in the discovery of 20 species new to the Belgian fauna. From these studies it appears that the pipunculid fauna in our country is still little known.

## Material

Most of the material investigated, is conserved in the collections of the Koninklijk Belgisch Instituut voor Natuurwetenschappen (K.B.I.N.) in Brussels (Belgium) including the collections of M. Goetghebuer and M. Bequaert.

A part of the examined material is preserved dry and another part is stored in alcohol. The latter material is collected with malaise traps at different sites in Belgium: Ottignies (UTM FS. 01) (leg. P. Dessart); Ethe-Buzenol (UTM FR. 80) (leg. P. Grootaert); Turnhout (FS. 38) (leg. L. De Bruyn & M. De Meyer); Ferrières (UTM FR. 88) (leg. P. Grootaert); Sint-Martens Latem (UTM ES. 45) (leg. P. Grootaert); Koksijde (UTM DS. 76) (leg. A. Muylaert); Treignes (UTM FR. 25) (leg. L. De Bruyn, M. De Meyer & K. Hofmans) and Schoten (UTM FS. 08) (leg. L. De Bruyn). At Turnhout, there has also been collected with emergence traps.

In addition we have studied material from the collections of the Instituut voor Taxonomische Zoölogie, Amsterdam (the Netherlands) (leg. V.S. van der Goot), the collection of the Cercle des Entomologistes liégeois, Liège (Belgium) and the private collections of K. Hofmans, L. Marnef, A. Michiels, Ch. Verbeke, L. Verlinden and the authors.

### Observations

All species occurring in Belgium are reported here with notes on their synonymy and distribution. The references of the original descriptions, edited before 1910, are based on Kertész (1910). For all species described after 1910, the original descriptions have been checked. Reports of synonymy are based on several authors. Any discussion in the literature on this matter is reported.

In the references of the examined material, the site, sex and number of the specimen as well as the collecting date and the name of the collector are mentioned (except for the material from the malaise traps (indicated with MT)). The names of the following collectors are abbreviated: M. Bequaert (MB), M. Goetghebuer (MG). In accordance with the European Invertebrate Survey, we have indicated the UTM co-ordinates.

The distribution in Europe is based on the following authors: Kloet & Hincks (1976) and Stubbs (1980) for Great Britain; Bańkowska (1972) for Poland; Collin (1956) for Scandinavia; Hackman (1980) for Finland; Lundbeck (1922), Rald (1976, 1978) and Lyneborg (1975) for Denmark; Kozánek (1981a, 1981b) and Lauterer (1981) for Czechoslovakia. For all other references of distribution in Europe the authors are mentioned.

genus Chalarus WALKER, 1834

Chalarus WALKER, 1834 Ent. Mag. 2: 269.

Type species: Chalarus spurius (FALLEN, 1816)

Synonyms: Ateleneura MACQUART, 1833

Atelenevra MACQUART, 1834

Until Coe's (1966b) handbook was published, only three species were known from the Palaearctic Region (Sack, 1935; Hardy, 1943). Coe raised the number to eight (Coe, 1966a). At the present time Dr. Jervis (Cardiff, Great Britain) is making a revision of the genus. According to him (Jervis, in litt.) all of Coe's, Hardy's and Fallén's species are in fact species complexes. Since the revision is not yet published, it is not possible to make an accurate identification of the Belgian material. We can only mention here the species, identified with Coe's key (Coe, 1966b). No doubt that in future time the following list will have to be enlarged and perhaps corrected:

Chalarus basalis LOEW, 1873

Chalarus fimbriatus COE, 1966

Chalarus latifrons HARDY, 1943

Chalarus pughi COE, 1966

Chalarus spurius (FALLEN, 1816)

Pipunculus holosericeus MEIGEN, 1824

Pipunculus exiguum HALIDAY, 1833

Atelenevra velutina MACQUART, 1834

Pipunculus obscurus ZETTERSTEDT, 1838

All species except for Chalarus spurius are new to the Belgian fauna.

genus Verrallia MIK, 1899

Verrallia MIK, 1899 Wien. Ent. Ztg 18: 137.

Type species: Verrallia aucta (FALLEN, 1816)

Synonyms: Cephalops THOMSON, 1870 nec FALLEN, 1810

Prothechus BECKER, 1897 nec RONDANI, 1856

Prothecus HOUGH, 1899

Jassidophaga ENDERLEIN, 1936

A generic separation has been made between those species with an appendix in vein  $M_{1+2}$  (Verrallia) or without an appendix (Jassidophaga with the type species Jassidophaga pilosa (ZETTERSTEDT, 1838)). In this revision we do not support this division according to the arguments of Collin (1945).

Verrallia aucta (FALLEN, 1816)

Cephalops auctus FALLEN, 1816 Dipt. Suec. Syrphici: 61.1-2.

Material:

- ANTWERPEN: Hoboken Polder, (ES. 97), 19.VI.1980, 1 male, (K. Hofmans), Hoogstraten, (FS. 29), 18.VI.1918, 1 male, (G. Severin), Schoten, (FS. 07), 6.VII.1918, 1 female, (MG), Schoten, (FS. 08), 3-10.VII.1983, 1 female, (MT)
- BRABANT: Berg, (FS. 04), 5.VII.1984, 1 female, (L. Verlinden), Erps Kwerps, (FS. 04), 27.VI.1976, 6 males 2 females, (A. Michiels), Erps Kwerps, (FS. 04), 1.VII.1984, 1 female, (L. Verlinden), Erps Kwerps, (FS. 04), 21.VII.1984, 1 female, (L. Verlinden), Genval, (FS. 01), 2.VII.1917, 1 female, (A. Tonnoir), Jette, (ES. 93), 18.VII.1978, 1 female, (A. Michiels), Veltem, (FS. 14), 8.VII.1984, 2 females, (L. Verlinden), Veltem, (FS. 14), 22.VII.1984, 1 female, (L. Verlinden)
- LIEGE: Duzo-Moûpas, (KB. 90), 23.VI.1950, 1 male, (R. Tollet), Embourg, (FS. 80), 29.VI.1896, 1 female, (E. Candèze)
- LUXEMBOURG: Freineux-Moûpas, (FR. 87), 3.VII.1938, 1 male, (A. Collart), Virton, (FQ. 89), 5.VII.1913, 1 female, (MG)
- NAMUR: Bossière, (FR. 19), 25.VI.1943, 1 female, (A. Collart), Treignes, (FR. 25), 13.VI-7.VIII.1984, 11 females, (MT)
- OOST-VLAANDEREN: Destelbergen, (ES. 55), 6.VII.1921, 1 male, (MG), Destelbergen, (ES. 55), 1.VII.1926, 1 male, (MG), Destelbergen, (ES. 55), 21.VI.1942, 1 female, (MB), Destelbergen, (ES. 55), 3.VII.1946, 1 male 2 females, (MB), Heusden, (ES. 55), 13.VI.1945, 1 male, (MG), Heusden, (ES. 55), 30.VI.1943, 1 female, (J. Verbeke), Heusden, (ES. 55), 8.VII.1942, 1 female, (J. Verbeke), Heusden, (ES. 55), 20.VI.1944, 1 female, (J. Verbeke), Overmere, (ES. 65), 25.VI.1944, 6 females, (J. Verbeke), St. Amandsberg, (ES. 55), 5.VI.1943, 1 male, (J. Verbeke), St. Amandsberg, (ES. 55), 20-22.VI.1942, 2 females, (J. Verbeke)
- WEST-VLAANDEREN: Koksijde, (DS. 76), 24.VI-8.VII.1983, 6 females, (MT), Nieuwpoort, (DS. 86), 18.VI.1981, 1 male, (A. Michiels), St. Idesbald, (DS. 76), 12.VI.1937, 1 male, (A. Collart), Westende, (DS. 86), 26.VI.1980, 2 females, (A. Michiels)

Literature: de Meijere (1900), Goetghebuer (1943), De Meyer (1984).

This is the most abundant species of the genus Verrallia. It is uncommon but widespread in all areas of the country.

The species is distributed all over Europe (Lauterer, 1981). The occurrence in the Nearctic Region is not certain because all specimen formerly identified as Verrallia aucta and revised by Thompson (1977) belong to Verrallia virginica BANKS, 1915, which is a valid species according to this author.

### Verrallia pilosa (ZETTERSTEDT, 1838)

Pipunculus pilosus ZETTERSTEDT, 1838 Ins. Lappon., Dipt.: 579. 2.

Synonyms: Pipunculus ruralis WALKER, 1834 nec MEIGEN, 1824

Pipunculus fasciatus VON ROSEN, 1840

Pipunculus modestus SCHINER, 1862

#### Material:

ANTWERPEN: Turnhout, (FS. 38), 27. VI-4. VII. 1982, 1 female, (MT)

BRABANT: Ottignies, (FS. 01), 3-10. VII. 1982, 1 male, (MT)

LIEGE: Malmédy, (KA. 89), 27. VI. 1935, 1 female, (A. Collart)

NAMUR: Treignes, (FR. 25), 7. VI-11. VII. 1984, 6 females, (MT)

OOST-VLAANDEREN: Destelbergen, (ES. 55), 29. VI. 1926, 1 male, (MG),  
Destelbergen, (ES. 55), 22. V. 1921, 1 female, (MG), Destelbergen,  
(ES. 55), 21. VI. 1942, 1 female, (MB), Destelbergen, (ES. 55),  
. VII. 1942, 1 male, (MB), Destelbergen, (ES. 55), 18. VIII. 1940, 1 male,  
(MB), Destelbergen, (ES. 55), 2. VII. 1941, 1 male, (MB), Destelbergen,  
(ES. 55), 11. VI. 1942, 1 male, (J. Verbeke), Heusden, (ES. 55),  
30. V. 1934, 1 female, (MG), Heusden, (ES. 55), 3. VII. 1934, 1 female,  
(MG), Melle, (ES. 55), 15. VI. 1944, 1 female, (J. Verbeke), Oostakker,  
(ES. 56), 8. VII. 1945, 1 male, (MG), Overmere, (ES. 65), 9. VII. 1957, 1  
female, (MB), Haarschoot, (ES. 46), 1. VI. 1924, 1 male, (MG)

WEST-VLAANDEREN: Nieuwpoort, (DS. 86), 20. VII. 1981, 2 females, (A.  
Michiels), Nieuwpoort, (DS. 86), 27. VII. 1981, 1 female, (A. Michiels)

Literature: Goetghebuer (1943), De Meyer (1984).

Occurs mainly in the northern part of Belgium (except for Treignes). Not common.

Widespread all over Europe. Also reported from North America (Aczél, 1948).

### Verrallia setosa VERRALL, 1901

Verrallia pilosa var. setosa VERRALL, 1901 British Flies 8: 73.

#### Material:

ANTWERPEN: Schoten, (FS. 08), 1. V-12. VI. 1983, 2 males 3 females, (MT),  
Turnhout, (FS. 38), 9. V-6. VI. 1982, 5 males 5 females, (MT),

BRABANT: Ottignies, (FS. 01), 9-23. V. 1981, 1 male 3 females, (MT),  
Ottignies, (FS. 01), 15. V-5. VI. 1982, 4 females, (MT),

HAINAUT: Elzele, (ES. 42), 1. VI. 1958, 1 male, (MB),

LIEGE: Ferrières, (FR. 88), 20. V-11. VI. 1983, 7 males 1 female, (MT),  
Fringshaus, (LB. 01), 5-7. VI. 1954, 1 male, (E. Janssens), Hockai,  
(GR. 19), 7. VI. 1913, 1 female, (MG), Malmédy (Reinhardstein), (KA. 99),  
18. VI. 1934, 3 males, (A. Collart),

LUXEMBOURG: Ethe-Buzenol, (FR. 80), 19.V-2.VI.1981, 1 female, (MT),  
NAMUR: Bois de Cerfontaine, (FR. 05), 12.V.1950, 1 male, (R. Tollet),  
Nismes, (FR. 14), 28.IV.1954, 1 male, (MB),  
OOST-VLAANDEREN: Heusden, (ES. 55), 15.VII.1942, 1 female, (J. Verbeke),  
St. Martens Latem, (ES. 45), 5-12.VII.1981, 1 male, (MT),  
WEST-VLAANDEREN: Knokke, (ES. 18), 16.VI.1948, 1 male, (MB)

According to Coe's key (1966b) the females of Verrallia setosa have a tubercle on the four anterior femora only. On the contrary, all specimen we have examined appear to have a tubercle (or at least a trace) on the posterior femora as well. All the other characters agree with those mentioned by Coe, although the number of setae on the posterior border of the scutellum may differ considerably. Identification of the males causes no problems.

Literature: De Meyer (1984).

Uncommon but widespread all over Belgium.

The distribution in Europe is not well known because the species was often confused with Verrallia pilosa. It occurs in Great Britain, Fennoscandia and Czechoslovakia (Lauterer, 1981).

#### Verrallia villosa (VON ROSEN, 1840)

Pipunculus villosus VON ROSEN, 1840 KorrespBl. Württemberg.  
landwirth. Ver.: 1.55.

#### Material:

BRABANT: Forêt de Soignes, (ES. 92), 23.V.1919, 1 male, (A. Tonnoir),  
Forêt de Soignes, (ES. 92), 21.V.1918, 1 female, (A. Tonnoir),  
Ottignies, (FS. 01), 26.VI-10.VII.1982, 2 females, (MT), Stockel,  
(FS. 03), 31.V.1918, 1 male, (A. Tonnoir)  
LIMBURG: St. Martens Voeren, (FS. 92), 2.VI.1928, 1 male, (P. Maréchal)  
LIEGE: Chôdières, (KB. 90), 19.VI.1951, 1 female, (A. Collart), Ferrières,  
(FR. 88), 20.V-3.VI.1983, 2 males, (MT), Franchorchamps, (GR. 09),  
5.VIII.1916, 1 male, (G. Severin), Hertogenwald, (KB. 91), 8.VI.1950,  
1 female, (R. Tollet)  
LUXEMBOURG: Mirwart, (FR. 64), 17.V.1948, 1 male, (R. Tollet)  
NAMUR: Han s. Lesse, (FR. 55), 3.VI.1959, 2 males, (MB), Han s. Lesse,  
(FR. 55), 9.VII.1957, 1 female, (MB), Nismes, (FR. 14), 6.VI.1984, 1  
female, (K. Hofmans), Nismes, (FR. 14), 10.VI.1984, 1 female, (K.  
Hofmans), Treignes, (FR. 15), 28.VI.1984, 2 females, (M. De Meyer)  
OOST-VLAANDEREN: St. Martens Latem, (ES. 45), 5-12.VII.1981, 1 female, (MT)

Literature: de Meijere (1900), Maréchal (1929), De Meyer (1984).  
Uncommon species. Occurs mainly in West, North and Central Europe and in Italy (Lauterer, 1981).

genus Nephrocerus ZETTERSTEDT, 1838

Nephrocerus ZETTERSTEDT, 1838 Insecta Lappon., Dipt.: 578: 40.  
Type species: Nephrocerus lapponicus ZETTERSTEDT, 1838

The Nephrocerus spp. do not correspond to the typical feature of pipunculid flies. They are rather large and show some resemblance to certain hoverflies like Melanostoma or Platycheirus spp. The occurrence of the European species of this genus and certain difficulties concerning their identification are dealt with in a separate article (Grootaert & De Meyer, in prep.). Remarkable is the fact that the Nephrocerus spp. were very rarely captured in Belgium. However since an intensive sampling project by means of malaise traps has been started some five years ago, they seem to be much more abundant than was previously thought. Perhaps it is due to a specific behaviour pattern that they were not captured in great numbers by other sampling methods.

Nephrocerus flavicornis ZETTERSTEDT, 1844

Nephrocerus flavicornis ZETTERSTEDT, 1844 Dipt. Scand. 3: 945.

Material:

BRABANT: Ottignies, (FS. 01), 3-10. VII. 1982, 1 male, (MT), Tervuren, (FS. 02), 8. VII. 1933, 1 female,  
NAMUR: Treignes, (FR. 25), 27. VI-11. VII. 1984, 2 females, (MT)  
LUXEMBOURG: Ethe-Buzenol, (FR. 80), 16-30. VI. 1981, 1 male, (MT)  
OOST-VLAANDEREN: Melle, (ES. 55), 5. VII. 1942, 2 females, (J. Verbeke)

Literature: Goetghebuer (1939), Maréchal & Petit (1955), De Meyer (1984).

Nephrocerus lapponicus ZETTERSTEDT, 1838

Nephrocerus lapponicus ZETTERSTEDT, 1838 Insecta Lappon., Dipt.: 578. 1.

Material:

LIEGE: Ferrières, (FR. 88), 20. V-15. VII. 1983, 2 males 6 females, (MT)  
LUXEMBOURG: Ethe-Buzenol, (FR. 80), 5. V-2. VI. 1981, 1 male 2 females, (MT)  
NAMUR: Treignes, (FR. 25), 24. V-20. VI. 1984, 1 male 3 females, (MT)

Literature: De Meyer (1984).

Nephrocerus scutellatus (MACQUART, 1834)

Pipunculus scutellatus MACQUART, 1834 Recueil. Soc. Agricul.  
Lille: 356. 9.

**Material:**

ANTWERPEN: Turnhout, (FS. 38), 13-20. VI. 1982, 1 female, (MT)  
BRABANT: Ohain, (FS. 01), 16. V. 1948; 1 male, (J. Verbeke)  
HAINAUT: Virelles, (ER. 94), 23. VI. 1982, 1 male,  
LIEGE: Embourg, (FS. 80), 25. V. 1895, 1 female, (E. Candèze), Ferrières,  
(FR. 88), 30. V-3. VI. 1983, 1 male, (MT)  
NAMUR: Maredsous, (FR. 27), 3. VI. 1943, 1 male, Maredsous, (FR. 27),  
23. V. 1947, 1 female, (MB), Treignes, (FR. 25), 11-19. VII. 1984, 1  
female, (MT)

Literature: Maréchal (1929, 1958), De Meyer (1984).

genus Dorylomorpha ACZEL, 1939

Tömösváryella ACZEL, subgenus Dorylomorpha ACZEL, 1939 Zool. Anz. 125: 22.

Type species: Dorylomorpha rufipes (MEIGEN, 1824)

Synonyms: Dorilas MEIGEN, 1800 p. p.

Pipunculus LATREILLE, 1802 p. p.

In 1979 Albrecht has described a series of species new to science. However, according to us, none of these species occur in Belgium. Albrecht is working towards a world revision of the genus and this will include some more European new species (in litt.).

Dorylomorpha albitarsis (ZETTERSTEDT, 1844)

Pipunculus albitarsis ZETTERSTEDT, 1844 Dipt. Scand. 3: 958. 11.

Synonyms: Dorylomorpha haemorrhoidalis ZETTERSTEDT, 1838 sensu ACZEL, 1939

Material:

LIEGE: Baraque Fraiture, (FR. 97), 30. VI. 1954, 2 males, Chôdières, (KB. 90), 7. VI. 1950, 1 female, (A. Collart), Chôdières, (KB. 90), 19. VI. 1951, 1 female, (A. Collart), Fagne de Longloup, (GR. 19), 24. VI. 1938, 1 female, (A. Collart), Fagne de Longloup, (GR. 19), 29. VI. 1938, 1 male, (A. Collart), Ferrières, (FR. 38), 1. VII-15. VII. 1983, 1 male, (MT), Petit Bongard, ?, 2. VI. 1950, 1 female, (A. Collart)

LUXEMBOURG: Bihain, (FR. 96), 6. VI. 1952, 1 female, (R. Tollet), Hockai, (GR. 19), 16. VI. 1939, 2 females, (A. Collart)

New to the Belgian fauna.

This species occurs only in the eastern part of Belgium. According to Lauterer (1981) it occurs in peat-bogs and water logged meadows. This corresponds well with the region where it is found in Belgium.

Because of the former confusion with Dorylomorpha haemorrhoidalis the distribution in Europe is poorly known. Only mentioned with certainty from Fennoscandia, Czechoslovakia and the Transcarpathian Ukraine (Lauterer, 1981).

Dorylomorpha confusa (VERRALL, 1901)

Pipunculus confusus VERRALL, 1901 British Flies 8: 114. 20, fig. 110-111.

Material:

BRABANT: Terhulpen, (FS. 02), 18. V. 1919, 1 male, (A. Tonnoir)

HAINAUT: Elzele, (ES. 42), 19. VI. 1955, 1 male, (MB)

LIEGE: St. Pietersberg, (FS. 82), 13. VI. 1938, 3 males, (A. Collart), St. Pietersberg, (FS. 82), 17. V. 1946, 1 female, (A. Collart), Visé, (FS. 82), 30. V. 1941, 2 males, (A. Collart)

LUXEMBOURG: Ethe-Buzenol, (FR. 80), 2-16.VI.1981, 1 female, (MT), Les Epioux, (FR. 61), 23.VI.1984, 1 male, (L. De Bruyn), Virton, (FQ. 89), 21.V.1952, 1 female, (J. Verbeke)  
NAMUR: Treignes, (FR. 25), 7-27.VI.1984, 2 males 5 females, (MT)  
WEST-VLAANDEREN: De Panne, (DS. 76), 21.V.1934, 1 female, (MG)

Literature: De Meyer (1984)

Uncommon species. According to Lauterer (1981) it is distributed over a major part of Europe. It seems to be abundant in Great Britain and Czechoslovakia.

Dorylomorpha extricata (COLLIN, 1937)

Pipunculus extricatus COLLIN, 1937 Entomologist's mon. Mag. 73: 218, fig. 1A, 3B, 3C.

Synonyms: Dorylomorpha rufipes insignis ACZEL, 1939

Material:

LUXEMBOURG: Ethe-Buzenol, (FR. 80), 19.V-2.VI.1981, 1 female, (MT)  
NAMUR: Fonds de Leffe, (FR. 37), 15.V.1983, 1 male, (L. De Bruyn),  
Treignes, (FR. 25), 24.V-7.VI.1984, 1 male, (MT), Maulsort, (FR. 36),  
23.IV.1981, 1 male, (M. De Meyer)

Literature: De Meyer (1984)

Rare species, only found at a few localities in the southern part of Belgium.

Recorded from Britain, Poland, Czechoslovakia and Scandinavia.

Dorylomorpha hungarica (ACZEL, 1939)

Tömösváryella (Dorylomorpha) hungarica ACZEL, 1939 Zool. Anz. 125: 22-23, fig. 3(A, C).

Material:

ANTWERPEN: Turnhout, (FS. 38), 9-16.V.1982, 1 female, (MT)  
BRABANT: Watermael, (ES. 92), 23.V.1917, 1 male, (A. Tonnoir)  
LIMBURG: Winterslag, (FS. 75), 14.V.1949, 1 male 1 female, (J. Verbeke)  
OOST-VLAANDEREN: Destelbergen, (ES. 55), 6.X.1946, 1 male, (MB),  
Destelbergen, (ES. 55), 14.VII.1915, 1 female, (MG), Drongen, (ES. 45),  
17.VII.1912, 1 male 1 female, (MG), Gent, (ES. 55), 24.VII.1912, 1  
male, (MG), Overmere, (ES. 65), 13.VIII.1944, 1 male, (MG), Sleidinge,  
(ES. 46), 25.V.1944, 1 male, (MG)

New to the Belgian fauna.

Until recently Dorylomorpha hungarica has been confused with Dorylomorpha haemorrhoidalis. According to Albrecht (in litt.), Collin (1956) was right in stating that Aczél described D. albitarsis under the name D. haemorrhoidalis but wrong in synomysing D. hungarica with D. haemorrhoidalis. D. haemorrhoidalis is a transpalaearctic boreal species, the southernmost records being from Denmark, South Sweden and the Baltic countries (USSR). D. hungarica occurs in Central Europe, Great Britain, Denmark and South Sweden. This distribution pattern is confirmed for we only found specimen of D. hungarica in Belgium and none of D. haemorrhoidalis.

Dorylomorpha imparata (COLLIN, 1937)

Pipunculus imparatus COLLIN, 1937 Entomologist's mon. Mag. 73: 216-217, fig. 3A, 6.

Material:

ANTWERPEN: Turnhout, (FS. 38), 9-16.V.1982, 1 male 1 female, (MT)

BRABANT: Ottignies, (FS. 01), 30.V-6.VI.1982, 1 male, (MT)

LIEGE: Ferrières, (FR. 88), 13.V-11.VI.1983, 1 male 1 female, (MT)

LUXEMBOURG: Ethe-Buzenol, (FR. 80), 7.IV-2.VI.1981, 4 males 3 females, (MT)

OOST-VLAANDEREN: Schelderode, (ES. 44), 16.V.1941, 1 male, (J. Verbeke)

New to the Belgian fauna.

It is reported from Great Britain, Finland and Czechoslovakia. Remarkable is that all the specimen found in the collections were collected by means of malaise traps. Perhaps this is due to a specific behaviour pattern of the species.

Dorylomorpha incognita (VERRALL, 1901)

Pipunculus incognitus VERRALL, 1901 British Flies 8: 113-19, fig. 109.

Synonyms: Pipunculus geniculatus ZETTERSTEDT, 1838 nec MEIGEN, 1824 nec COLLIN, 1920

Dorylomorpha incognita incognita ACZEL, 1939 male nec female

Material:

In the collections examined, only one specimen was found: a female, collected at Colombré (this specimen is deposited in the Belgian collection of the K. B. I. N.). Unfortunately we did not find any place in Belgium called Colombré and so the occurrence of this species is still doubtful.

There are records from North and Central Europe (Lauterer, 1981) and Great Britain.

Dorylomorpha infirmata (COLLIN, 1937)

Pipunculus infirmatus COLLIN, 1937 Entomologist's mon. Mag. 73: 214-215, fig. 5.

Material:

BRABANT: Ganshoren, (ES. 93), 29.VII.1976, 1 female, (A. Michiels), Ganshoren, (ES. 93), 11.V.1976, 2 males, (A. Michiels)

HAINAUT: Chimay, (ER. 94), 17.V.1947, 1 female, (A. Collart)

NAMUR: Dourbes, (FR. 14), 8.VI.1984, 1 male 1 female, (K. Hofmans), Oignies, (FR. 14), 16.V.1947, 1 male, (A. Collart), Vaucelles, (FR. 25), 9.VI.1984, 1 male, (K. Hofmans)

OOST-VLAANDEREN: Destelbergen, (ES. 55), 22.V.1946, 1 female, (MB), Destelbergen, (ES. 55), 3.VIII.1947, 1 male, (MB), Destelbergen, (ES. 55), 20.V.1915, 1 female, Destelbergen, (ES. 55), 29.VII.1934, 1 male, (A. Collart), Destelbergen, (ES. 55), 12.VIII.1915, 1 male, (MG), Destelbergen, (ES. 55), 5.VIII.1915, 1 male 1 female, (MG), Destelbergen, (ES. 55), 11.V.1915, 1 male, (MG), Heusden, (ES. 55), 30.VII.1918, 1 male, (MG), Heusden, (ES. 55), 6.VIII.1940, 1 female, (MG)

Literature: De Meyer (1984)

A rare species, until now only found in a few localities in Belgium.

Further known from Fennoscandia, Poland, Czechoslovakia and Great Britain.

Dorylomorpha maculata (WALKER, 1834)

Pipunculus maculatus WALKER, 1834 Ent. Mag. 2: 264. 1.

Synonyms: Pipunculus lateralis MACQUART, 1833

Pipunculus fulvipes MACQUART, 1834

Pipunculus annulipes ZETTERSTEDT, 1838

Material:

?, Garches, ?, 30.VIII.1951, 1 male, (J. Villeneuve)

Only one specimen in the collections: collected by Villeneuve at Garches. This place is unknown to us. However there exists a place called Garches near Paris (France). The specimen is deposited in the collection of the K.B.I.N., where Belgian and European material is separately stored. This is why we presume it is originated from Belgium. But, as is the case with D. incognita there is still no certainty that the species occurs in Belgium.

The species seems to be widely distributed throughout Europe.

Dorylomorpha rufipes (MEIGEN, 1824)

Pipunculus rufipes MEIGEN, 1824 Syst. Beschr. 4: 21. 4.

Synonyms: Dorylomorpha rufipes xanthoceroides ACZEL, 1939

Material:

BRABANT: Ottignies, (FS.01), 15.V-5.VI.1982, 1 male 1 female, (MT)

LIEGE: Eben-Emael, (FS.83), 9.VI.1984, 1 male, (L. De Bruyn)

LUXEMBOURG: Ethe-Buzenol, (FR.80), 2-16.VI.1981, 1 female, (MT)

NAMUR: Anseremme, (FR.36), 7.VI.1945, 1 female, (J. Verbeke) Treignes, (FR.25), 24.V-27.VI.1984, 2 males 2 females, (MT)

OOST-VLAANDEREN: Melle, (ES.55), 2.VI.1941, 1 male, (MB) Schelderode, (ES.44), 25.V.1947, 1 male, (MB) Schelderode, (ES.44), 29.V.1944, 1 male, (J. Verbeke)

Literature: De Meyer (1984)

Uncommon species found in a few localities, scattered all over Belgium.

D. rufipes seems to be found almost all over Europe but has formerly been confused with other Dorylomorpha spp. so the distribution is not exactly known.

Dorylomorpha xanthocera (KOWARZ, 1887)

Pipunculus xanthocerus KOWARZ, 1887 Wien. ent. Ztg 6: 153.17.

Material:

BRABANT: Ottignies, (FS. 01), 27.VI-3.VII.1982, 1 female, (MT)

LIEGE: Duzo-Moupas, (KB. 90), 2.VII.1938, 1 female, (A. Collart), Hockai, (GR. 19), 1.VII.1920, 1 female, (MG), Malmedy Marche, (KA. 89), 29.VI.1935, 2 males 3 females, (A. Collart)

LUXEMBOURG: Ethe (Etang de Claireau), (FQ. 89), 30.VII-1.VIII.1919, 1 male 2 females, (A. Tonnoir), Ethe-Buzenol, (FR. 80), 30.VI-14.VII.1981, 1 female, (MT), Virton, (FQ. 89), 14-15.VII.1949, 1 female, (MB)

New to the Belgian fauna.

Mainly reported from the eastern and southern regions of the country.

Records from several countries in Central Europe as well as the Netherlands (van der Goot, 1981) and Scandinavia.

Dorylomorpha xanthopus (THOMSON, 1869)

Pipunculus xanthopus THOMSON, 1869 Opusc. Ent. 2: 111.5.

Synonyms: Pipunculus semimaculatus BECKER, 1898

Some authors (Collin, 1937; Coe, 1966b) consider D. semimaculata as a distinct species. According to Albrecht (in Lauterer, 1981) they are synonyms.

Material:

ANTWERPEN: Antwerpen, (ES. 97), 21-24.VIII.1984, 1 female, (K. Hofmans), Turnhout, (FS. 38), 18.VII-15.VIII.1982, 1 male 9 females, (MT), Wilrijk, (ES. 96), 26.V.1982, 1 female, (M. De Meyer)

BRABANT: Ganshoren, (ES. 93), 7.VI.1979, 1 male, (A. Michiels), Neder-over-Heembeek, (ES. 93), 26.V.1917, 1 male, (A. Tonnoir), Neerpede-Aa, (ES. 93), 28.V.1920, 1 female, (A. Tonnoir), Overijse, (FS. 02), 9.VI.1950, 2 males, (J. Verbeke)

NAMUR: Treignes, (FR. 25), 20.VI-4.VII.1984, 2 males 2 females, (MT)

OOST-VLAANDEREN: Destelbergen, (ES. 55), 4.VIII.1915, 1 male, (MG), Destelbergen, (ES. 55), .VII.1939, 1 male, (MB), Destelbergen, (ES. 55), 3.VIII.1945, 1 female, (J. Verbeke), Destelbergen, (ES. 55), 6.VIII.1940, 2 males, (MB), Gent, (ES. 55), 4.VIII.1912, 1 male, (MG), Heusden, (ES. 55), 9.VIII.1944, 3 males, (MG), Heusden, (ES. 55), 30.V.1934, 1 female, (MG), Heusden, (ES. 55), 2.VIII.1944, 4 females, (MB), Overmere, (ES. 65), 24.V.1944, 2 males, (MG), Overmere, (ES. 65), 28.V.1944, 1 female, (J. Verbeke), St. Amandsberg, (ES. 55), .VII.1942, 1 female, (J. Verbeke), Haarschoot, (ES. 46), 31.VII.1948, 1 female, (MG)

WEST-VLAANDEREN: De Panne, (DS. 76), 23.V.1934, 1 male, (MG)

Literature: Goetghebuer (1943), De Meyer (1984).

Mostly found in the northern part of Belgium except for the specimen collected at Treignes. D. xanthopus occurs in Central, northern and western Europe.

A note on the phenology: in Belgium, the species occurs from May until August and two peak periods can be distinguished (De Meyer & De Bruyn, 1984), whereas Lauterer (1981) mentions only one peak period.

genus Alloneura RONDANI, 1856

Alloneura RONDANI, 1856 Dipt. It. Prod. 1: 140. 4.

Type species: Alloneura sylvatica (MEIGEN, 1824)

Synonyms: Dorilas MEIGEN, 1800 p. p.

Pipunculus LATREILLE, 1802 p. p.

Tömösváryella ACZEL, 1939 s. s.

Alloneura cilitarsis (STROBL, 1910)

Pipunculus cilitarsis STROBL, 1910 Mitt. Ver. Steiermark 46: 113.

Synonyms: Pipunculus Forsiusi FREY, 1932

Material:

LIEGE: Duzo-Moûpas, (KB. 90), 28. V. 1937, 1 female, (A. Collart)

New to the Belgian fauna.

Only once found in the 'Hautes Fagnes', a montaneous area in the east of Belgium, mostly consisting of moors, peat-bogs and forests.

It seems to be a boreoalpine or boreomontane species (Lauterer, 1981).

Alloneura geniculata (MEIGEN, 1824)

Pipunculus geniculatus MEIGEN, 1824 Syst. Beschr. 4: 20. 2.

Synonyms: Pipunculus nigritulus ZETTERSTEDT, 1844

Pipunculus geniculatus var. griseifrons STROBL, 1899

Pipunculus griseipennis VERRALL, 1901

Material:

ANTWERPEN: Hoogstraten, (FS. 29), 31. VII. 1918, 1 female, (G. Severin), Postel, (FS. 58), 14. X. 1922, 1 male, (G. Severin), Postel, (FS. 58), 18. VII. 1922, 1 male, (G. Severin)

LIEGE: Comblain-Tour, (FR. 89), 17. VIII. 1932, 1 male, (P. Maréchal), Loën, (FS. 82), 4. VI. 1930, 1 male 1 female, (P. Maréchal), St. Pietersberg, (FS. 82), 13. VI. 1938, 1 male, (A. Collart), St. Pietersberg, (FS. 82), 25. V. 1947, 2 males, (A. Collart)

LUXEMBOURG: Herbeumont, (FR. 61), 8. VIII. 1942, 1 male, (J. Verbeke), Ortheuville, (FR. 85), ?, 1 male, ?lx, Virton, (FQ. 89), 2. VIII. 1919, 1 male, (A. Tonnoir)

NAMUR: Falaën, (FR. 27), 8. VIII. 1921, 1 male, (MG), Gedinne, (FR. 33), . VIII. 1920, 4 males 1 female, (A. Tonnoir), Louette St. Pierre, (FR. 33), summer 1870, 1 female, (Gravet), Nismes, (FR. 14), 6. VI. 1984, 1 female, (K. Hofmans), Olloy-s.-Viroin, (FR. 14), 1. VI. 1984, 2 males, (K. Hofmans), Philippeville, (FR. 57), 8. VIII. 1937, 1 female, (J. Verbeke), Treignes, (FR. 15), 28. VI. 1984, 1 male, (K. Hofmans), Treignes, (FR. 15), 28. VI. 1984, 1 female, (M. De Meyer), Treignes, (FR. 15), 9. VIII. 1984, 1 male, (K. Hofmans), Vaucelles, (FR. 25), 28. VI. 1984, 1 male, (M. De Meyer)

OOST-VLAANDEREN: Heusden, (ES. 55), 6.VIII.1944, 1 male, (J. Verbeke),  
Oostakker, (ES. 56), 4.VII.1945, 1 female, (MB)  
WEST-VLAANDEREN: De Panne, (DS. 76), 6-9.VI.1935, 3 females, (MG), De  
Panne, (DS. 76), 1-12.IX.1931, 1 male, (MG), Knokke, (ES. 18),  
25.VII.1948, 1 female, (MB), Koksijde, (DS. 76), 10.VI.1924, 1 female,  
(G. Severin), Koksijde, (DS. 76), 18.VII.1933, 1 female, (A. Collart),  
Koksijde, (DS. 76), 27.V-19.VIII.1983, 38 males 22 females, (MT)

Literature: Jacobs (1905), Meunier (1905), Maréchal (1931);  
Goetghebuer (1943), De Meyer (1984).

A species frequently found all over Belgium but not abundant.  
It occurs all over Europe.

#### Alloneura kuthyi ACZEL, 1944

Tömösváryella Kuthyi ACZEL, 1944 Annls hist.-nat. Must natn.  
hung.: 97-102, texttaf. 3 (fig. I-II).

Synonyms: Pipunculus geniculatus MEIGEN, 1824 sensu COLLIN, 1920

#### Material:

ANTWERPEN: Duffel, (FS. 06), 14.IX.1949, 1 male, (V. Hendrickx)  
BRABANT: Terhulpen, (FS. 02), 4.IX.1881, 1 male, (J. Jacobs)  
LIEGE: Losheimergraben, (LA. 18), 8-11.VIII.1921, 1 male 3 females, (G.  
Severin), St. Pietersberg, (FS. 82), 7.VIII.1947, 1 male, (A.  
Collart), Visé (Britchebeau), (FS. 82), 21.VIII.1936, 2 males, (A.  
Collart)  
LUXEMBOURG: Chiny, (FR. 61), 25.VI-8.VII.1945, 1 female, (R. Laurent),  
Torgny, (FQ. 78), 10.VIII.1959, 1 female, (L. Marnef), Virton,  
(FQ. 89), 2.IX.1920, 1 male, (MG), Virton, (FQ. 89), 2.IX.1920, 2  
males, (A. Tonnoir)  
NAMUR: Nismes, (FR. 14), 6.VI.1984, 1 female, (K. Hofmans), Nismes,  
(FR. 14), 10.VIII.1984, 1 male, (K. Hofmans), Vaucelles, (FR. 25),  
24.V.1984, 1 male, (L. De Bruyn)  
WEST-VLAANDEREN: Koksijde, (DS. 76), 22.VII-7.IX.1983, 2 males 2 females,  
(MT)

Literature: De Meyer (1984).

This species is mostly found in the eastern part of the country  
except for the records from Koksijde.

A. kuthyi is mentioned from several Central European countries,  
as well as Great Britain and Kreta (Aczél, 1944).

#### Alloneura littoralis (BECKER, 1897)

Pipunculus littoralis BECKER, 1897 Berl. ent. Z. 42: 86. 44.

#### Material:

WEST-VLAANDEREN: De Panne, (DS. 76), 1-12.IX.1931, 1 male 2 females, (MG),  
De Panne, (DS. 76), 15.VI.1960, 2 males 1 female, (MB), Knokke,  
(ES. 18), 17.IX.1925, 1 male, (MG), Knokke, (ES. 18), 26.V.1929, 1 male  
1 female, (MG), Knokke, (ES. 18), 3.VI.1951, 1 male, (MB), Knokke,  
(ES. 18), 23.V.1948, 1 female, (MB), Knokke, (ES. 18), 18.VI.1939, 1  
female, (MB), Knokke, (ES. 18), 15.VIII.1947, 1 female, (MB), Knokke,  
(ES. 18), 23.V.1948, 1 male, (MB), Knokke (Zwin), (ES. 29), 23.V.1937,  
1 male, (MB), Koksijde-Bad, (DS. 76), 17.VII.1933, 2 males 4 females,  
(A. Collart), Koksijde-Bad, (DS. 76), 19.VII.1933, 4 males 3 females,  
(A. Collart), Koksijde-Bad, (DS. 76), 20.VII.1933, 4 males 1 female,

(A. Collart), Koksijde-Bad, (DS. 76), 22.VII.1933, 1 male, (A. Collart), Koksijde-Bad, (DS. 76), 15.VI.1937, 3 males 2 females, (A. Collart), Koksijde-Bad, (DS. 76), 18.VI.1937, 1 female, (A. Collart), Nieuwpoort, (DS. 86), 21.V.1952, 1 male, (MB), Nieuwpoort, (DS. 86), 16.VI.1981, 2 females, (A. Michiels), Nieuwpoort, (DS. 86), 16.VI.1937, 2 males 1 female, (A. Collart), Nieuwpoort, (DS. 86), 3.IX.1934, 1 female, (J. Verbeke), Wenduine, (ES. 08), 15.VIII.1954, 1 female, (MB), Zeebrugge (Fonteintjes), (ES. 18), 3.VI.1981, 1 male, (Ch. Verbeke)

Literature: Goetghebuer (1925, 1928).

A littoral species found at most sites of the Belgian coast.  
Recorded from Denmark, Great Britain, Poland and Scandinavia.

Alloneura minima (BECKER, 1897)

Pipunculus minimus BECKER, 1897 Berl. ent. Z. 42: 85. 43.

Synonyms: According to some authors (Sack, 1935; Aczél, 1944) Alloneura minima is a synonym of A. littoralis. More recent authors however recognize it as a distinct species (Coe, 1966b; Bańkowska, 1973).

Material:

WEST-VLAANDEREN: De Panne, (DS. 76), 1-12.IX.1931, 1 male, (MG)

New to the Belgian fauna.

Only one specimen found at the Belgian coast, captured together with some specimen of A. littoralis.

Found in Great Britain, Poland and Scandinavia.

Alloneura palliditarsis (COLLIN, 1931)

Pipunculus palliditarsis COLLIN, 1931 Dipt. Patagon. S. Chile 6(2): 56.

Synonyms: Pipunculus flavitarsis COLLIN, 1920 nec WILLISTON, 1892

Collin described the species under the name of Pipunculus flavitarsis but later noted that this name was preoccupied by a species formerly described by Williston and thus became a junior homonym. He therefore changed the name into palliditarsis.

Material:

LIEGE: Chôdières, (KB. 90), 19.VI.1951, 1 female, (A. Collart), Chôdières, (KB. 90), 7.VI.1950, 1 female, (A. Collart), Sy, (FR. 78), 15.IX.1949, 1 male, (A. Collart)

NAMUR: Treignes, (FR. 25), 20-27.VIII.1984, 1 male, (MT)

New to the Belgian fauna.

A rare species, only found in a few localities.

As far as we know, it is only recorded in Great Britain and Czechoslovakia.

Alloneura sylvatica (MEIGEN, 1824)

Pipunculus sylvaticus MEIGEN, 1824 Syst. Beschr. 4: 20. 3.

Synonyms: Pipunculus scoparius CRESSON, 1911

According to Sack (1935) is A. hirticollis (BECKER, 1910) a synonym of A. sylvatica. According to Aczél (1944) it is a distinct species and A. zernyi (COLLIN, 1938) a synonym of A. hirticollis.

Material:

ANTWERPEN: Antwerpen, (ES. 97), 24-28.VIII.1984, 1 female, (K. Hofmans), Antwerpen (LO), (ES. 97), 4.VIII.1944, 1 male, (J. Verbeke), Dessel, (FS. 47), 27.VII.1984, 1 female, (P. Baert), Duffel, (FS. 06), 14.IX.1949, 1 male, (V. Hendrickx), Herentals-Lichtaart, (FS. 37), 24.VI.1948, 1 female, (A. Collart), Hoogstraten, (FS. 29), 19.VIII.1918, 1 male, (A. Tonnoir), Hoogstraten, (FS. 29), 22.VIII.1918, 2 males, (A. Tonnoir), Postel, (FS. 58), 28.V.1922, 1 male, (G. Severin), Postel, (FS. 58), 18.V.1922, 1 male, (G. Severin), Postel, (FS. 58), 18.VIII.1922, 1 female, (G. Severin), Turnhout, (FS. 38), 6.VI.1982, 3 males, (M. De Meyer), Turnhout, (FS. 38), 25.VII.1982, 1 male, (M. De Meyer), Turnhout, (FS. 38), 23.V.-26.IX.1982, 27 males 8 females, (MT)

BRABANT: Brussel, (ES. 93), spring. 1916, 1 male 1 female, (A. Tonnoir), Erps Kwerps, (FS. 04), 24.VII.1976, 2 males, (A. Michiels), Erps Kwerps, (FS. 04), 8.VIII.1976, 1 male, (A. Michiels), Ganshoren, (ES. 93), 29.VIII.1973, 1 female, (A. Michiels), Gelrode, (FS. 24), 28.VII.1946, 1 male, (A. Collart), Genval, (FS. 01), 19.VII.1917, 1 male, (A. Tonnoir), Genval, (FS. 01), 19.VII.1917, 1 female, (A. Tonnoir), Haacht, (FS. 14), 5.VII.1928, 1 female, (A. Ball), Laarbeekbos, (ES. 93), 29.VIII.1977, 1 male, (A. Michiels), Oudergem, (FS. 03), 24.VII.1952, 1 male, (P. Gravez), Overijssse, (FS. 02), 16.VII.1949, 1 male, (J. Verbeke), Schiplaken, (FS. 05), 13.VII.1970, 1 female, (J. Verbeke), Vilvoorde, (ES. 94), 8.VI.1945, 1 male, (A. Collart), Vilvoorde, (ES. 94), 13.VII.1945, 2 males, (A. Collart), Vilvoorde, (ES. 94), 1.VI.1945, 2 males 1 female, (A. Collart)

HAINAUT: Anderlues, (ER. 88), .VIII.1921, 1 female, (MG), Virelles, (ER. 94), 29.VII.1984, 1 male, (L. De Bruyn)

LIMBURG: Genk, (FS. 74), 7.VII.1953, 2 males, (A. Collart)

LIEGE: Baraque Fraiture, (FR. 97), 30.VI.1954, 1 female, Baraque Michel, (KB. 90), 20.VI.1951, 1 female, (A. Collart), Botrange, (KA. 99), 2.IX.1921, 1 male, (G. Severin), Chôdires, (KB. 90), 7.VI.1950, 1 female, (A. Collart), Comblain Tour, (FR. 89), 17.VIII.1932, 1 male, (P. Maréchal), Fond de Forêt, (FS. 80), 15.VIII.1946, 1 male, (A. Collart), Hermalle sous Argenteau, (FS. 82), 6.IX.1934, 1 female, (A. Collart), Hockai, (GR. 19), 26.VI.1926, 1 female, (MG), Hockai, (GR. 19), 16.VI.1939, 1 female, (A. Collart), Liège, (FS. 81), 17.VIII.1932, 1 male, (MG), Losheimergraben, (LA. 18), 8-11.VIII.1921, 1 female, (G. Severin), Losheimergraben, (LA. 18), 8-11.VIII.1921, 1 male, (G. Severin), Ouren, (KA. 96), 3.VIII.1982, 3 males 2 females, (P. Van Laethem), Sougné-Rem., (FR. 99), 1.VI.1947, 1 male, (A. Collart), Visé, (FS. 82), 8.V.1941, 1 male, (A. Collart)

LUXEMBOURG: Chiny, (FR. 61), 17-22.VIII.1933, 2 males 1 female, (MG), Les Epioux, (FR. 61), 23.VI.1984, 2 males 1 female, (L. De Bruyn), Mirwart, (FR. 64), 8-14.VI.1946, 1 male, (MB), Torgny, (FQ. 78), 4.VIII.1982, 1 male, (L. De Bruyn), Torgny, (FQ. 78), 19.VIII.1984, 1 male, (Dupain Ysebaert), Torgny, (FQ. 78), 20.V.1952, 1 female, (J. Verbeke), Virton, (FQ. 89), 4.IX.1920, 1 male, (A. Tonnoir), Virton, (FQ. 89), 21.V.1952, 1 male, (J. Verbeke)

NAMUR: Dourbes, (FR.14), 16.VIII.1984, 1 male 1 female, (K. Hofmans), Fagnolles, (FR.15), 21.VI.1937, 1 male, (J. Verbeke), Feschaux, (FR.35), 7.VIII.1942, 3 males, (J. Verbeke), Gedinne, (FR.33), .VIII.1920, 1 male 1 female, (A. Tonnoir), Mazée, (FR.25), 11.VIII.1984, 1 male, (K. Hofmans), Nismes, (FR.14), 8.VI.1982, 1 male, (L. De Bruyn), Nismes, (FR.14), 6.VI.1984, 1 female, (K. Hofmans), Philippeville, (FR.06), 8.VIII.1937, 1 male 1 female, (MG), Philippeville, (FR.57), 8.VIII.1937, 1 male, (J. Verbeke), Treignes, (FR.15), 28.VI.1984, 3 males 1 female, (K. Hofmans), Treignes, (FR.15), 28.VI.1984, 2 males, (M. De Meyer), Treignes, (FR.15), 9.VIII.1984, 1 female, (K. Hofmans), Treignes, (FR.25), 20.VI-11.IX.1984, 147 males 53 females, (MT), Vaucelles, (FR.25), 16.VIII.1984, 1 male, (K. Hofmans), Vierves s. Viroin, (FR.14), 9.VIII.1984, 1 male, (K. Hofmans)

OOST-VLAANDEREN: Destelbergen, (ES.55), 7.VIII.1918, 1 male, (MG), Destelbergen, (ES.55), 2.VI.1915, 1 male, (MG), Destelbergen, (ES.55), 1.VIII.1913, 2 males, (MG), Destelbergen, (ES.55), 25.VII.1943, 2 males, (MB), Destelbergen, (ES.55), 6.VIII.1940, 5 males 1 female, (MB), Destelbergen, (ES.55), 7.VI.1939, 1 male, (MB), Destelbergen, (ES.55), 3.VI.1945, 1 male, (MB), Destelbergen, (ES.55), .VII.1939, 2 males, (MB), Destelbergen, (ES.55), 26.VIII.1945, 1 male 2 females, (MB), Destelbergen, (ES.55), 10.VIII.1940, 2 females, (MB), Destelbergen, (ES.55), 28.VIII.1961, 1 female, (MB), Destelbergen, (ES.55), 31.VII.1962, 1 male, (MB), Drongen, (ES.45), 17.VII.1912, 1 male, (MG), Eeklo, (ES.36), 12.VIII.1963, 1 male, (MB), Gent, (ES.55), 13.IX.1938, 1 female, (MB), Heusden, (ES.55), 17.VI.1935, 1 male, (MG), Heusden, (ES.55), 1.IX.1946, 1 female, (MG), Heusden, (ES.55), 2.VIII.1944, 1 male, (MB), Heusden, (ES.55), 24.V.(?)1911, 1 female, (P. Maréchal), Heusden, (ES.55), 15.VII.1942, 1 female, (J. Verbeke), Heusden, (ES.55), 26.VIII-4.IX.1945, 3 males 3 females, (J. Verbeke), Melle, (ES.55), 30.VI.1946, 1 male, (MB), Moorsel, (ES.74), 1.VII.1930, 1 male, (A. Ball), Moorsel, (ES.74), 19.VII.1942, 1 male, (A. Ball), Moorsel, (ES.74), 14.VII.1938, 1 male, (A. Ball), Oordegem, (ES.64), 28.VII.1942, 2 males 2 females, (J. Verbeke), Overmere, (ES.65), 3.VIII.1944, 1 female, (MG), Overmere, (ES.65), 28.VII.1934, 1 female, (A. Collart), Overmere, (ES.65), 3.VI.1945, 1 female, (J. Verbeke), Haarschoot, (ES.46), 31.VII.1948, 2 females, (MG), Haarschoot, (ES.46), 13.VIII.1938, 1 female, (MB)

WEST-VLAANDEREN: Blankenberge, (ES.08), 8.VIII.1951, 1 female, (MB), De Panne, (DS.76), 7.IX.1933, 2 females, (MG), De Panne, (DS.76), 16.VI.1936, 1 male, (MG), De Panne, (DS.76), 1-18.IX.1932, 1 female, (MG), Dikkebus, (DS.82), 29.V.1937, 1 male, (MG), Hoeke, (ES.28), 27.V.1948, 3 males, (MG), Knokke, (ES.18), 16.VI.1948, 1 male, (MB), Koksijde, (DS.76), 3.VI-7.IX.1983, 7 males 1 female, (MT), Koksijde-Bad, (DS.76), 20.VI.1937, 1 female, (A. Collart), Zeebrugge, (ES.18), 2.VIII.1950, 1 male, (MB)

Literature: Jacob (1905), Meunier (1905, 1911), Maréchal (1931), Goetghebuer (1943), De Meyer (1984).

One of the most common species in Belgium, occurring all over the country. It is a holarctic species mentioned from several European countries as well as the U. S. A. and Canada (Lauterer, 1981). Alloneura coquilletti (KERTESZ, 1907) is a very similar species which also seems to have a holarctic distribution. In Europe it is recorded from some Central European countries. As far as we could distinguish both species, A. coquilletti does not occur in Belgium.

genus Pipunculus LATREILLE, 1802

Pipunculus LATREILLE, 1802 Hist. nat. Crust. Ins. 3: 463.

Type species: Pipunculus campestris LATREILLE, 1804

Synonyms: Dorilas MEIGEN, 1800 suppressed by I.C.Z.N., 1963: 339  
(opinion 678).

Microcera MEIGEN, 1803

Cephalops FALLEN, 1810 p. p.

Dorylas KERTESZ, 1912

Pipunculus calceatus VON ROSER, 1840

Pipunculus calceatus VON ROSER, 1840 KorrespBl. Württenberg.  
landwirth. Ver. 1: 55.

Synonyms: Pipunculus pulchripes THOMSON, 1870

Material:

ANTWERPEN: Turnhout, (FS. 38), 1-15.VIII.1982, 2 females, (MT)

BRABANT: Kortenberg(Eikenhof), (FS. 03), 10.VI.1981, 4 males 1 female,  
(V.S. vd Goot)

LIEGE: Duzo-Moûpas, (KB. 90), 2.VII.1938, 1 male, (A. Collart)

New to the Belgian fauna.

Rare species, only a few captures mentioned.

According to Sack (1935) it occurs in Central Europe and the area of the Mediterranean Sea.

Pipunculus campestris LATREILLE, 1804

Pipunculus campestris LATREILLE, 1804 Hist. nat. Crust. Ins. 13:  
392.

Synonyms: Pipunculus ater MEIGEN, 1824

Pipunculus dentipes MEIGEN, 1838

Pipunculus dispar ZETTERSTEDT, 1838

Pipunculus Wolfii KOWARZ, 1887

Material:

ANTWERPEN: Antwerpen, (ES. 97), 6.IX.1980, 2 males, (V.S. vd Goot), Balen,  
(FS. 57), 16.VIII.1960, 2 males 1 female, (L. Marnef), Ekeren,  
(ES. 98), 4.VI.1980, 1 female, (L. Verlinden), Ekeren (Oude Landen),  
(ES. 98), 17.V.1980, 3 males, (V.S. vd Goot), Hoboken, (ES. 97),  
16.VIII.1973, 1 male, (L. Marnef), Hoboken Polder, (ES. 97),  
18.V.1980, 1 male, (V.S. vd Goot), Hoboken Polder, (ES. 97),  
15.V.1980, 1 male, (K. Hofmans), Hoogstraten, (FS. 29), 23.VIII.1918,  
1 female, (A. Tonnoir), Hoogstraten, (FS. 29), 4.IX.1918, 1 female,  
(G. Severin), Lier, (FS. 06), 13.IX.1953, 2 males 2 females, (L.  
Marnef), Mechels Broek, (FS. 05), 4.VIII.1984, 1 male, (L. Verlinden),  
Schoten, (FS. 08), 19.VII.1982, 1 female, (L. De Bruyn), Turnhout,  
(FS. 38), 9.V-12.IX.1982, 17 males 55 females, (MT), Westmalle,  
(FS. 18), 30.V.1959, 1 female, (L. Marnef), Wilrijk, (ES. 96),  
26.V.1982, 2 males, (M. De Meyer)

BRABANT: Audergem, (FS. 03), 11. IX. 1949, 1 male 1 female, (A. Collart), Beekevoort, (FS. 34), 18. V. 1950, 1 male 2 females, (J. Verbeke), Bosvoorde, (ES. 92), . VI. 1902, 1 female, (A. Guilliaume), Brussel, (ES. 93), 20. IX. 1956, 1 female, (R. Tollet), Erps Kwerps, (FS. 04), 19. IX. 1976, 1 male, (A. Michiels), Gaasbeek, (ES. 82), 13. V. 1982, 1 male, (A. Michiels), Ganshoren, (ES. 93), 31. V. 1977, 1 male 1 female, (A. Michiels), Gelrode, (FS. 24), 14. VII. 1946, 1 male, (A. Collart), Genval, (FS. 01), 9. VII. 1901, 1 male, (A. Guilliaume), Hoegaarden, (FS. 32), 21. VII. 1946, 2 males 1 female, (MB), Holsbeek, (FS. 24), 19. VIII. 1982, 1 female, (L. De Bruyn), Holsbeek, (FS. 24), 19. VIII. 1982, 2 males 4 females, (De Meyer & Janssens), Leuven, (FS. 13), 19. VIII. 1982, 2 females, (L. De Bruyn), Neerijse, (FS. 13), 20. VIII. 1982, 2 males 1 female, (De Meyer & Janssens), Ottignies, (FS. 01), 9. V. -29. VIII. 1981, 8 males, (MT), Ottignies, (FS. 01), 8. V. -13. XI. 1982, 6 males 4 females, (MT), Oud-Heverlee, (FS. 13), 20. VIII. 1982, 1 male, (De Meyer & Janssens), Overijsse, (FS. 02), 9. VI. 1950, 1 female, (J. Verbeke)

HAINAUT: Bois de Louise Marie, (ES. 42), 26. VIII. 1934, 1 male, (MG), Elzele, (ES. 42), 8. V. 1960, 1 female, (MB)

LIMBURG: Zutendaal, (FS. 74), 12. V. 1949, 1 male, (J. Verbeke)

LIEGE: Chabresse, (FS. 80), 22. V. 1937, 1 male, (P. Maréchal), Duzo-Moûpas, (KB. 90), 8. VI. 1946, 1 male, (A. Collart), Eben-Emael, (FS. 83), 11. VII. 1982, 1 male, (M. De Meyer), Eben-Emael, (FS. 83), 9. VI. 1984, 1 male, (L. De Bruyn), Ferrières, (FR. 88), 20-30. V. 1983, 1 female, (MT), Fond de forêt, (FS. 80), 15. VIII. 1946, 1 male, (A. Collart), Goffontaine, (FS. 90), 13. VII. 1949, 1 female, (R. Tollet), Hockai, (GR. 19), 11. VI. 1892, 1 female, (E. Candèze), Hockai, (GR. 19), 10. VI. 1912, 1 male, (MG), Hockai, (GR. 19), 12. VI. 1912, 2 males, (MG), Jupille, (FS. 81), 11. V. 1946, 1 male, (A. Collart), Lanaye, (FS. 82), 6. VI. 1938, 1 male, (MB), Losheimergraben, (LA. 18), 10-11. VIII. 1951, 1 male, (E. Janssens), Loën, (FS. 82), 29. VIII. 1926, 1 male, (P. Maréchal), Nonceaux, (FR. 99), 25. VIII. 1958, 3 males, (MB), Ouren, (KA. 96), 1. VIII. 1982, 1 male, (P. Van Laethem), Pepinster, (FS. 90), 13. VII. 1940, 1 female, (R. Tollet), Reinhardstein, (KA. 89), 26. VI. 1935, 1 male, (A. Collart), St. Pietersberg, (FS. 82), 7. VIII. 1947, 1 female, (A. Collart), St. Pietersberg, (FS. 82), 17. V. 1946, 1 female, (A. Collart), St. Pietersberg, (FS. 82), 7. VIII. 1947, 1 female, (A. Collart), Trooz, (FS. 80), 11. V. 1927, 1 male, (P. Maréchal), Verlaine, (FS. 60), 15. IX. 1931, 1 male 1 female, (P. Maréchal), Vieuxville, (FR. 88), 24. V. 1926, 1 female, (P. Maréchal), Wassage, (FS. 92), 11. IX. 1934, 1 male, (A. Collart)

LUXEMBOURG: Châtillon, (FR. 90), 4-8. VIII. 1981, 1 male, (J. Jacob), Ethe-Buzenol, (FR. 80), 2. VI-28. VII. 1981, 2 males 1 female, (MT), Smuid, (FR. 64), 7. V. 1948, 1 female, (R. Tollet), Torgny, (FQ. 78), 4. V. 1957, 1 male, (MB), Torgny, (FQ. 78), 3. IX. 1980, 1 female, (P. Grootaert), Torgny, (FQ. 78), 12. V. 1952, 1 male, (J. Verbeke), Virton, (FQ. 89), 7. VII. 1914, 1 male, (MG), Virton, (FQ. 89), 5. IX. 1920, 1 female, (A. Tonnoir)

NAMUR: Ciernon, (FR. 45), 15. VII. 1937, 1 male, (A. Collart), Dinant, (FR. 36), 4. V. 1949, 1 male, (MB), Falaën, (FR. 27), 14. VIII. 1916, 1 female, (A. Tonnoir), Falaën, (FR. 27), 2. VIII. 1943, 1 male, (MB), Frasnes, (FR. 04), 30. VIII. 1936, 1 male, (MB)n, Gimnée, (FR. 25), 8. VIII. 1937, 1 male, (MB), Nismes, (FR. 14), 6. VI. 1984, 1 female, (K. Hofmans), Nismes, (FR. 04), 22. VII. 1983, 1 male, (K. Hofmans), Orchimont, (FR. 32), 13. VII. 1957, 1 male, (L. Marnef), Sclayn, (FR. 49), 11. IX. 1927, 1 male, (MG), Treignes, (FR. 25), 24. V-17. IX. 1984, 20 males 46 females, (MT), Vaucelles, (FR. 25), 24. V-9. VI. 1984, 1 female, (K. Hofmans), Yvoir, (FR. 37), 7. VII. 1946, 1 male, (A. Collart)

OOST-VLAANDEREN: Destelbergen, (ES. 55), 7.IX.1924, 1 male, (MG), Destelbergen, (ES. 55), 11.IX.1946, 4 males 2 females, (MB), Destelbergen, (ES. 55), 25.VIII.1946, 1 male, (MG), Destelbergen, (ES. 55), 16.V.1943, 1 male, (MB), Destelbergen, (ES. 55), 31.VIII.1949, 1 male, (MB), Destelbergen, (ES. 55), 12.IX.1933, 1 male 1 female, (A. Collart), Destelbergen, (ES. 55), 12.IX.1933, 1 female, (A. Collart), Destelbergen, (ES. 55), 12.V.1943, 1 male, (MB), Destelbergen, (ES. 55), 10.VIII.1940, 1 male, (MB), Destelbergen, (ES. 55), 1.IX.1946, 1 male, (MB), Destelbergen, (ES. 55), 26.VIII.1945, 1 male, (MB), Destelbergen, (ES. 55), 4.IX.1946, 1 male, (MB), Destelbergen, (ES. 55), 13.V.1949, 1 female, (J. Verbeke), Eeklo, (ES. 36), 18.V.1913, 1 male, (MG), Eschenbeek, (ES. 81), 8.V.1881, 2 females, (J. Jacobs), Heusden, (ES. 55), 10.IX.1917, 1 male, (MG), Heusden, (ES. 55), 16.VIII.1944, 2 males, (MB), Heusden, (ES. 55), 23.VI.1946, 1 male, (MB), Heusden, (ES. 55), 18.V.1943, 1 male, (J. Verbeke), Heusden, (ES. 55), 24.V.1943, 1 female, (J. Verbeke), Heusden, (ES. 55), 20.VI.1944, 1 male, (J. Verbeke), Laarne, (ES. 55), 19.V.1927, 3 males, (MG), Louise Marie, (ES. 42), 19.V.1943, 1 male, (J. Verbeke), Melle, (ES. 55), 11.V.1938, 1 male, (MG), Melle, (ES. 55), 10.VII.1921, 1 female, (MG), Melle, (ES. 55), .VIII.1942, 1 male, (MB), Melle, (ES. 55), 15.IX.1946, 1 female, (MB), Melle, (ES. 55), 9.IX.1942, 1 male, (MB), Melle, (ES. 55), 5.VII.1942, 1 male, (J. Verbeke), Merelbeke, (ES. 54), 27.VIII.1934, 1 male, (A. Collart), Moerbeke Waas, (ES. 66), 15.VI.1981, 1 male, (Ch. Verbeke), Munte, (ES. 54), 29.V.1930, 1 male, (MB), Munte, (ES. 54), 22.VII.1938, 1 male, (MB), Oostakker, (ES. 56), 30.VII.1934, 1 male, (A. Collart), Oostakker, (ES. 56), 2.IX.1945, 2 males, (MB), Oostakker, (ES. 56), 4.VII.1945, 1 male, (MB), Oostakker, (ES. 56), 25.VII.1946, 1 male, (MB), Oostakker, (ES. 56), 10.VII.1946, 1 male, (MB), Oostakker, (ES. 56), 22.IX.1946, 1 male, (MB), Oostakker, (ES. 56), 4.VIII.1946, 1 female, (MB), Overmere, (ES. 65), 14.V.1950, 1 male, (J. Verbeke), Schelderode, (ES. 44), 1.VI.1939, 1 male, (MG), St. Amandsberg, (ES. 55), 18.VII.1947, 1 female, (J. Verbeke), St. Martens Latem, (ES. 45), 28.VI-7.IX.1981, 6 males 13 females, (MT), Vinderhoute, (ES. 45), 19.VIII.1912, 1 female, (MG), Haarschoot, (ES. 46), 26.VIII.1938, 1 female, (MG), Haarschoot, (ES. 46), 20.VII.1942, 1 female, (J. Verbeke), Hachtebeke, (ES. 56), 18.VII.1945, 1 male, (MB), Zaffelaere, (ES. 56), 16.VII.1944, 1 female, (J. Verbeke), Zwijnaarde, (ES. 45), 9.VIII.1978, 1 male, (Ch. Verbeke)

WEST-VLAANDEREN: Koksijde, (DS. 76), 8-16.VII.1983, 1 female, (MT)

Literature: De Meijere (1900), Jacobs (1905), Meunier (1911), Maréchal (1934), Goetghebuer (1943), De Meyer (1984).

Together with Alloneura sylvatica the most abundant species in Belgium. As is the case with the former species, the distribution in Belgium known until now, indicates where entomologists have been collecting but does not give an accurate view of the real distribution of the species in our country, since only a limited group of sites have been sampled (e.g. the coastal region, the surroundings of Gent, Brussel and Liège, St. Pietersberg, the "Hautes Fagnes",...).

However if we compare the distribution of these two abundant species, we find one striking difference (fig. 1,2). Although the coastal region is intensively sampled, Pipunculus campestris has almost never been reported from this area, except once (at Koksijde, with a malaise trap in 1983), whereas Alloneura sylvatica seems to be as common in this area as elsewhere in

Belgium.

The species occurs all over Europe.

Pipunculus fonsecai COE, 1966

Pipunculus fonsecai COE, 1966 Handbk Ident. Br. Insects 10, 2(c): 51, fig. 93, 104 & 54, fig. 106.

Material:

BRABANT: Genval, (FS.01), 24.VI.1917, 1 female, (A. Tonnoir)

New to the Belgian fauna.

The species is reported from Great Britain and Czechoslovakia.

Pipunculus oldenbergi COLLIN, 1956

Pipunculus Oldenbergi COLLIN, 1956 Opusc. Ent. 21: 163, fig. 2.

Material:

NAMUR: Treignes, (FR.25), 27.VI-31.VII.1984, 5 females, (MT)

Literature: De Meyer (1984).

The species is recorded from Sweden, Germany and Czechoslovakia.

Pipunculus phaeton COE, 1966

Pipunculus phaeton COE, 1966 Handbk Ident. Br. Insects 10, 2(c): 49, fig. 96 & 52, fig. 109.

Material:

NAMUR: Treignes, (FR.25), 27.VIII-3.IX.1984, 1 female, (MT)

New to the Belgian fauna.

As the two former species, only one record from Belgium.

As far as we know, Pipunculus phaeton is only reported from Great Britain.

This species is closely related to Pipunculus campestris but the mesonotum is shining except for a dusted area in the anterior part to a point slightly beyond the humeri. In Pipunculus campestris the mesonotum is entirely dusted. However we have noticed that there is a great variety in the intensity of dusting. The female ovipositors of the two species are very similar and a close study of the genitalia seems to be very usefull in order to distinguish these species.

Pipunculus spinipes MEIGEN, 1830

Pipunculus spinipes MEIGEN, 1830 Syst. Beschr. 6: 359. 14.

Synonyms: Pipunculus elegans EGGER, 1860

Material:

LIEGE: Loën, (FS. 82), 28.VI.1925, 1 female, (MG)

LUXEMBOURG: Croix Rouge, (FR. 80), 12.V.1952, 1 male, (J. Verbeke)

NAMUR: Nismes, (FR. 14), 22.VII.1983, 1 female, (K. Hofmans), Treignes, (FR. 25), 24.V-20.VI.1984, 2 females, (MT)

Literature: Maréchal (1926, 1939), Goetghebuer (1943), De Meyer (1984).

The few specimens we have found in the collections are all captured in calcareous regions.

Reported from North and central Europe and Great Britain.

Pipunculus tenuirostis KOZANEK, 1981

Pipunculus tenuirostis KOZANEK, 1981 Ann. Zool. Bot. 142: 4-5, fig. 1.

Material:

LUXEMBOURG: Champlon, (FR. 75), 21.VII.1949, 1 female, (J. Verbeke)

New to the Belgian fauna.

Only one specimen found in the collections.

Until now only reported from Czechoslovakia.

Pipunculus thomsoni BECKER, 1897

Pipunculus thomsoni BECKER, 1897 Berl. ent. Z. 42: 62.29, tab. 2 fig. 18.

Synonyms: Pipunculus pratorum VERRALL, 1901 nec FALLEN, 1816

In 1921, Becker has synomysed Pipunculus omissinervis with Pipunculus thomsoni. According to Kozánek (1981b) however, these are two distinct species.

Material:

ANTWERPEN: Blaasveld, (ES. 95), 27.VII.1984, 1 female, (L. De Bruyn), Ekeren, (ES. 98), 4.VI.1980, 1 male, (L. Verlinden), Hoboken Polder, (ES. 97), 4.VII.1980, 1 female, (K. Hofmans), Ruisbroek, (ES. 96), 12.VII.1984, 1 male 4 females, (K. Hofmans), Turnhout, (FS. 38), 20.VI-1.VIII.1982, 28 females, (MT)

BRABANT: Erps Kwerps, (FS. 04), 27.VI.1976, 2 males, (A. Michiels), Forêt de Soignes, (ES. 92), 23.VII.1941, 1 male, (A. Collart), Ottignies, (FS. 01), 26.VI-10.VII.1982, 2 females, (MT), Overijssse, (FS. 02), 16.VII.1949, 1 male, (J. Verbeke), Veltem, (FS. 14), 9.VIII.1984, 1 male, (L. Verlinden), Watermael, (ES. 92), , 1 male, (A. Guilliaume), Winksele, (FS. 14), 15.VIII.1984, 1 male, (L. Verlinden)

LIEGE: Botassart, (FR. 42), 24.VI.1896, 1 male, (E. Candèze), Châtillon, (FR. 90), 31.V-25.VI.1981, 2 females, (J. Jacob), Chôdières, (KB. 90), 10.VIII.1950, 1 female, (A. Collart), Chôdières, (KB. 90), 19.VII.1950, 2 males, (A. Collart), Comblain au Pont, (FR. 89), 30.VI.1926, 1 male, Comblain au Pont, (FR. 89), 6.VII.1927, 1 male, Comblain au Pont, (FR. 89), 6.VII.1927, 1 male, (P. Maréchal), Embourg, (FS. 80), 15.VII.1907, 1 male, (MG), Hockai, (GR. 19), .VII.1920, 1 male 1 female, (A. Tonnoir), Malmédy, (KA. 89), 29.VI.1935, 2 males, (A. Collart), Reinhardstein, (KA. 89), 26.VI.1935, 1 male, (A. Collart), Visé, (FS. 82), 8.VII.1938, 1 male, (MG)

LUXEMBOURG: Chiny, (FR. 61), 25.VI-8.VII.1945, 1\*, (A. Collart),  
Ethe-Buzenol, (FR. 80), 2.VI-11.VIII.1981, 5\*\* 19\$\$, (MT), Herbeumont,  
(FR. 61), 26.VI.1952, 1\*, (MB), Lamorteau, (FQ.78), 6.VII.1913, 1\* 1\$,  
(MG), Virton, (FQ.89), 20.VI.1952, 1\*, (J. Verbeke)  
NAMUR: Olloy s. Viroin, (FR. 14), 7.VIII.1984, 1\$, (K. Hofmans), Treignes,  
(FR. 25), 13.VI-27.VIII.1984, 11\*\* 21\$\$, (MT), Villers s. Lesse,  
(FR. 45), 22.VII.1963, 1\*, (J. Verbeke), Hépion, (FR. 38), 14.VII.1928,  
2\*\*, (P. Maréchal)  
OOST-VLAANDEREN: Heusden, (ES. 55), 3.VII.1934, 1 female, (MG), Melle,  
(ES. 55), 16.VII.1920, 1 female, (MG), Melle, (ES. 55), 27.VII.1942, 1  
male, (MB), Melle, (ES. 55), 30.VI.1946, 1 male, (MB), St. Martens  
Lateem, (ES. 45), 28.VI-26.VII.1981, 6 males 15 females, (MT)  
WEST-VLAANDEREN: Koksijde, (DS. 76), 8-16.VII.1983, 2 females, (MT)

Literature: Maréchal (1928), De Meyer (1984)

A frequent species; seems to occur all over Belgium.

Pipunculus varipes MEIGEN, 1824

Pipunculus varipes MEIGEN, 1824 Syst. Beschr. 4: 21.6.

Synonyms: Pipunculus monticula SCHUMM., 1836

Material:

ANTWERPEN: Turnhout, (FS. 38), 30.V-8.VIII.1982, 2 males, (MT)

BRABANT: Holsbeek, (FS. 24), 19.VIII.1982, 1 female, (De Meyer & Janssens)

LUXEMBOURG: Chiny, (FR. 61), .VII.1939, 1 male, (MB)

NAMUR: Treignes, (FR. 25), 4.VII-20.VIII.1984, 1 male 10 females, (MT)

OOST-VLAANDEREN: Melle, (ES. 55), 28.VI.1942, 1 male, (MB), Merelbeke,  
(ES. 54), 7.VII.1946, 1 male, (MB)

Literature: De Meyer (1984).

A species only rarely found in Belgium. In contrast with the findings of Kozánek in Czechoslovakia, the species is in Belgium not restricted to submontaneous or montaneous regions.

Pipunculus zugmayeriae KOWARZ, 1887

Pipunculus Zugmayeriae KOWARZ, 1887 Wien. ent. Ztg. 6: 151.10.

Material:

ANTWERPEN: Hoboken Polder, (ES. 97), 15.V.1980, 1 female, (K. Hofmans)

New to the Belgian fauna.

Only once found in a uncultivated polder with several pondlets,  
near Antwerpen.

genus Cephalops FALLEN, 1810

Cephalops FALLEN, 1810 Novam Dipt. Dispon. Meth.: 10. 28.

Type species: Cephalops aeneus FALLEN, 1810

Synonyms: Dorilas MEIGEN, 1800 p. p.

Pipunculus LATREILLE, 1802 p. p.

Prothechus RONDANI, 1856 nec BECKER, 1897

Cephalosphaera ENDERLEIN, 1936

Strandimyza DUDA, 1940

As in the case with Verrallia, a generic separation has been suggested between these species with an appendix in vein  $M_1+2$  (genus Prothechus, type species Prothechus furcatus (EGGER)) and without one (Cephalops s. s.). In this revision we do not sustain this point of view according to the arguments of Collin (1945).

The identification of species belonging to this genus sometimes causes problems due to the fact that there are no keys available which includes all the species which occur or might occur in Belgium. Also, it seems that a revision of the genus is necessary.

Cephalops aeneus FALLEN, 1810

Cephalops aeneus FALLEN, 1810 Novam Dipt. Dispon. Meth.: 25, tab. fig. 3.

Synonyms: Pipunculus flavipes MEIGEN, 1824 nec WALKER, 1834

Material:

BRABANT: Forêt de Soignes, (ES. 92), 14. VIII. 1942, 1 female, (R. Tollet)

LIEGE: Franchorchamps, (GR. 09), 21. IX. 1951, 1 male, (A. Collart), Lorcé, (FR. 98), 24. VIII. 1958, 1 male, (MB), Malmédy, (KA. 89), 29. VI. 1935, 1 male, (A. Collart), Modave, (FR. 69), .VIII. 1924, 2 males, (MG)

LUXEMBOURG: Buzenol, (FR. 80), 12. VIII. 1973, 1 female, (P. Dessart)

NAMUR: Couvin, (FR. 04), 18. IX. 1963, 1 female, (J. Verbeke), Treignes, (FR. 25), 20. VI-3. IX. 1984, 2 males 7 females, (MT)

OOST-VLAANDEREN: Melle, (ES. 55), 23. V. 1920, 1 male, (MG)

Literature: De Meyer (1984).

An uncommon species, found in a few localities in Belgium. It is reported from Scandinavia, Poland and Great Britain.

Cephalops braueri (STROBL, 1880)

Pipunculus Braueri STROBL, 1880 14 Progr. Seitenstetten: 13.

Material:

LUXEMBOURG: Chiny, (FR. 61), 15. VIII. 1945, 1 male, (MB), Mirwart, (FR. 64), 8-14. VI. 1945, 1 male, (MB)

NAMUR: Falaën, (FR. 27), 2. VIII. 1943, 1 male, (MB)

Literature: Goetghebuer (1943).

A rare species, only found in the southern part of Belgium. According to Sack (1935) this species occurs in North and central Europe.

Cephalops carinatus (VERRALL, 1901)

Pipunculus carinatus VERRALL, 1901 British Flies 8: 104. 14, fig. 104.

Material:

NAMUR: Treignes, (FR. 25), 31. VII-3. IX. 1984, 3 males 3 females, (MT)

New to the Belgian fauna.

Only one record from the "Fagne calcaire" at Treignes. This species resembles species of the genus Pipunculus but shows the characteristic features of the genus Cephalops.

Records from Great Britain and Finland.

Cephalops curtifrons COE, 1966

Cephalops curtifrons COE, 1966 Handbks Ident. Br. Insects 10, 2(c): 58.

Material:

NAMUR: Treignes, (FR. 25), 27. VI-4. VII. 1984, 1 female, (MT)

Literature: De Meyer (1984).

As is the case with the former species, only reported from Treignes.

Cephalops furcatus (EGGER, 1860)

Pipunculus furcatus EGGER, 1860 Verh. zool.-bot. Ges. Wien. 10: 347.

Material:

BRABANT: Veltem, (FS. 14), 7. VII. 1984, 1 female, (L. Verlinden)

LUXEMBOURG: Mirwart, (FR. 64), 12. IV. 1946, 1 male, (MG)

NAMUR: Treignes, (FR. 25), 7-13. VI. 1984, 1 female, (MT)

OOST-VLAANDEREN: Aalter, (ES. 35), 13. V. 1959, 1 female, (MB), Heusden, (ES. 55), 23. VIII. 1947, 1 male, (J. Verbeke)

Literature: Goetghebuer (1943), De Meyer (1984).

Uncommon species.

Reported from Germany, Hungary (Aczél, 1940), Bulgaria (Bankowska, 1967), Scandinavia and Great Britain.

Together with the following species Cephalops germanicus, both are regarded as a separate genus by some authors (cfr. supra).

Cephalops germanicus (ACZEL, 1940).

Cephalosphaera germanica ACZEL, 1940 Zool. Anz. 132: 168-169,  
Abb. 5 fig. 8-12 & Abb. 6 fig. 3.

Material:

ANTWERPEN: Turnhout, (FS. 38), 9.V-25.VII.1982, 3 males 1 female, (MT)  
LUXEMBOURG: Torgny, (FQ. 78), 16-21.VII.1951, 1 female, (MB)  
NAMUR: Falaën, (FR. 27), 23.VII.1947, 1 female, (MB), Nismes, (FR. 14),  
6.VI.1984, 1 female, (K. Hofmans), Wépion, (FR. 38), 6.V.1946, 1 male,  
(A. Michiels)  
OOST-VLAANDEREN: Destelbergen, (ES. 55), 22.VII.1942, 1 male, (J. Verbeke),  
Munte, (ES. 54), 21.V.1939, 1 male, (MB)

Literature: De Meyer (1984).

Morphologically resembling the former species. It shows also an uncommon appearance.

Cephalops obtusinervis (ZETTERSTEDT, 1844)

Pipunculus obtusinervis ZETTERSTEDT, 1844 Dipt. Scand. 3:  
965. 20.

Material:

ANTWERPEN: Overbroek, (FS. 09), 20.V.1984, 2 males, (K. Hofmans), Turnhout,  
(FS. 38), 23.V.1982, 1 male, (M. De Meyer)  
BRABANT: Ottignies, (FS. 01), 9-16.V.1981, 1 male, (MT)  
LIEGE: Ferrières, (FR. 88), 3-11.VI.1983, 1 female, (MT), Hockai, (GR. 19),  
11.IX.1892, 1 female, (E. Candèze)  
LUXEMBOURG: Châtillon, (FR. 90), 12-18.V.1981, 1 male, Ethe-Buzenol,  
(FR. 80), 5.V-2.VI.1981, 2 males 3 females, (MT)

New to the Belgian fauna.

Most of the specimens were collected with malaise traps.  
Occurs in central and northern Europe and in Great Britain.

Cephalops semifumosus (KOWARZ, 1887)

Pipunculus semifumosus KOWARZ, 1887 Wien. ent. Ztg 6: 149. 7.

Synonyms: Pipunculus flavipes WALKER, 1834 nec MEIGEN, 1824

Pipunculus strigulipes VERRALL, 1901

Pipunculus Strobli VERRALL, 1901

Material:

ANTWERPEN: Antwerpen, (ES. 97), 6-10.VII.1984, 1 female, (K. Hofmans),  
Antwerpen, (ES. 97), 11-20.IX.1984, 1 female, (K. Hofmans), Balen,  
(FS. 57), 16.VIII.1960, 1 male, (L. Marnef), Deurne, (FS. 07),  
6.VII.1984, 2 males 1 female, (L. De Bruyn), Ruisbroek, (ES. 96),  
12.VII.1981, 1 male, (K. Hofmans), Schoten, (FS. 08), 21-28.VIII.1983,  
1 female, (MT), Turnhout, (FS. 38), 6.VI-3.X.1982, 15 males 84  
females, (MT), Wilrijk, (ES. 96), 5.VII.1981, 1 male 1 female, (M. De  
Meyer)

BRABANT: Erps Kwerps, (FS. 04), 25.VIII.1973, 1 male, (A. Michiels), Forêt de Soignes, (ES. 92), 10.VI.1918, 1 male, (A. Tonnoir), Forêt de Soignes, (ES. 92), 21.V.1943, 1 female, (R. Tollet), Forêt de Soignes, (ES. 92), 21.VIII.1942, 1 female, (R. Tollet), Genval, (FS. 01), 17.VII.1917, 1 male, (A. Tonnoir), Genval, (FS. 01), 28.VI.1921, 1 male, (A. Tonnoir), Holsbeek, (FS. 24), 19.VIII.1982, 1 female, (L. De Bruyn), Holsbeek, (FS. 24), 19.VIII.1982, 5 males 7 females, (De Meyer & Janssens), Neerijse, (FS. 13), 20.VIII.1982, 12 males 7 females, (De Meyer & Janssens), Ottignies, (FS. 01), 6.VI-3.X.1981, 8 males 48 females, (MT), Ottignies, (FS. 01), 31.VII-2.X.1982, 8 males 22 females, (MT), Oud-Heverlee, (FS. 13), 20.VIII.1982, 2 males 3 females, (De Meyer & Janssens), Overijssse, (FS. 02), 24.VIII.1972, 1 female, (J. Verbeke), Veltem, (FS. 14), 13.IX.1984, 1 female, (L. Verlinden)

HAINAUT: Flobecq, (ES. 52), 26.VIII.1942, 2 males, (J. Verbeke)

LIEGE: Ferrières, (FR. 88), 22.VI-29.VII.1983, 2 males 2 females, (MT)

LUXEMBOURG: Ethe, (FQ. 89), 2.IX.1980, 1 female, (P. Grootaert), Ethe, (FR. 80), 4.IX.1980, 2 males 4 females, (P. Grootaert), Ethe-Buzenol, (FR. 80), 2.VI-14.VII.1981, 10 males 5 females, (MT), Torgny, (FQ. 78), 3.IX.1980, 1 male 1 female, (P. Grootaert)

NAMUR: Houyet s. L., (FR. 46), 27.VI.1927, 1 male, (MG), Treignes, (FR. 25), 11.VII-7.VIII.1984, 3 males 11 femalefemale, (MT)

OOST-VLAANDEREN: Bellem, (ES. 35), 13.VII.1956, 1 male, (MB), Destelbergen, (ES. 55), 31.VIII.1949, 1 male 1 female, (MB), Destelbergen, (ES. 55), 26.VIII.1945, 1 male, (MB), Gent, (ES. 55), 30.VIII.1957, 1 female, (MB), Gentbrugge, (ES. 55), 5.VII.1981, 1 female, (Ch. Verbeke), Heusden, (ES. 55), 23.VI.1946, 2 males, (MB), Melle, (ES. 55), 8.IX.1920, 1 male, (MG), Melle, (ES. 55), 7.IX.1937, 1 male, (MB), Melle, (ES. 55), 9.IX.1942, 1 male, (MB), Melle, (ES. 55), 3.IX.1942, 1 male, (J. Verbeke), Moorsel, (ES. 74), 19.VII.1942, 1 female, (A. Ball), Overmere, (ES. 65), 24.VIII.1944, 1 male 1 female, (MB), Overmere, (ES. 65), 7.VIII.1957, 1 male, (MB), St. Martens Latem, (ES. 45), 28.VI-27.IX.1981, 11 male 125 females, (MT), Vinderhoute, (ES. 45), 1.I.1925, 1 female, (MG), Waarschoot, (ES. 46), 14.VI.1931, 1 male, (MG)

WEST-VLAANDEREN: De Panne, (DS. 76), 1-18.IX.1932, 1 female, (MG), De Panne, (DS. 76), 4.IX.1933, 1 female, (MG), Koksijde, (DS. 76), 1.VII-7.IX.1983, 5 males 9 females, (MT), Loppem, (ES. 16), 15.VIII.1983, 1 female, (Ch. Verbeke), Nieuwpoort, (DS. 86), 18.VI.1981, 1 male, (A. Michiels), Snaaskerke, (DS. 96), 14.VIII.1982, 1 male, (Ch. Verbeke), Snellegem, (ES. 06), 7.VIII.1982, 2 females, (Ch. Verbeke), Westende, (DS. 86), 26.VI.1980, 1 female, (A. Michiels), Zedelgem-Vloetem, (ES. 06), 1.IX.1979, 3 males 1 female, (Ch. Verbeke), Zedelgem-Vloetem, (ES. 06), 20.IX.1980, 1 female, (Ch. Verbeke), Zedelgem-Vloetem, (ES. 06), 27.IX.1980, 1 male, (Ch. Verbeke), Zillebeke, (DS. 93), 24.VIII.1981, 1 female, (A. Michiels)

Literature: Goetghebuer (1943), De Meyer (1984).

One of the more abundant species in Belgium. It is recorded from all over the country although it seems to have a preference for the northern part.

Cephalops semifumosus is found in Scandinavia, Denmark, Poland and Great Britain.

Cephalops seminitidus (BECKER, 1897)

Pipunculus seminitidus BECKER, 1897 Berl. ent. Z. 42: 73. 48,  
tab. 2 fig. 19.

Material:

LUXEMBOURG: Ethe-Buzenol, (FR. 80), 2-16. VI. 1981, 1 male 1 female, (MT)

Literature: Goetghebuer (1943).

Sack (1935) is the only author who mentions this species in his identification key. We found some specimens which could be identified as C. seminitidus with Sack's key. We have some doubts however concerning this identification since this work is now much out of date.

Goetghebuer (1943) has mentioned the species from Destelbergen (in the neighbourhood of Gent). We could not verify this record since the material on which it was based could be found neither in his collection, nor in any other. According to Sack, the species occurs in the area of the Mediterranean Sea.

Cephalops subultimus COLLIN, 1956

Cephalops subultimus COLLIN, 1956 Opusc. Ent. 21: 165, fig. 9.

Material:

ANTWERPEN: Schoten, (FS. 08), 26. VI-3. VII. 1983, 1 female, (MT), Turnhout, (FS. 38), 19-26. IX. 1982, 1 female, (MT)

BRABANT: Erps Kwerps, (FS. 04), 27. VI. 1976, 2 females, (A. Michiels), Forêt de Soignes, (ES. 92), 14. IX. 1947, 1 male, (A. Collart), Ottignies, (FS. 01), 20. VI-8. VIII. 1981, 1 male 3 females, (MT), Ottignies, (FS. 01), 19-26. VI. 1982, 1 female, (MT)

LIEGE: Ferrières, (FR. 88), 15-22. VII. 1983, 1 female, (MT)

LUXEMBOURG: Croix Rouge, (FR. 80), 11. VIII. 1959, 1 female, (L. Marnef), Ethe-Buzenol, (FR. 80), 30. VI-11. VIII. 1981, 5 females, (MT)

NAMUR: Treignes, (FR. 25), 31. VII.-7. VIII. 1984, 1 female, (MT)

OOST-VLAANDEREN: Destelbergen, (ES. 55), 1. IX. 1946, 1 male, (MB), Heusden, (ES. 55), 25. VI. 1944, 1 female, (MB), Heusden, (ES. 55), 23. VIII. 1947, 1 female, (J. Verbeke), Oostakker, (ES. 56), 25. VII. 1946, 1 male 1 female, (MB), Oostakker, (ES. 56), 25. VII. 1946, 1 female, (MB), St. Martens Late, (ES. 45), 28. VI-8. XI. 1981, 1 male 9 females, (MT)

WEST-VLAANDEREN: Knokke, (ES. 18), 3. II. 1947, 1 female, (MB)

New to the Belgian fauna.

Uncommon species, recorded from a few places, mainly in the northern part.

Found in Great Britain and Scandinavia.

Cephalops ultimus (BECKER, 1900)

Pipunculus ultimus BECKER, 1900 Berl. ent. Z. 45: 227 & 231. 65.

Material:

ANTWERPEN: Schoten, (FS. 08), .X.1982, 1 male, (L. De Bruyn), Schoten, (FS. 08), 2-9.X.1983, 1 male 1 female, (MT), Turnhout, (FS. 38), 1.VIII-24.X.1982, 4 females, (MT)

BRABANT: Erps Kwerps, (FS. 04), 14.VIII.1984, 1 male, (L. Verlinden), Genval, (FS. 01), 2.VII.1917, 1 female, (A. Tonnoir), Ottignies, (FS. 01), 12.IX-3.X.1981, 5 males 2 females, (MT), Ottignies, (FS. 01), 19.VI-9.X.1982, 7 males 8 females, (MT)

NAMUR: Treignes, (FR. 25), 20.VI-27.VIII.1984, 3 males 9 females, (MT)

OOST-VLAANDEREN: Aalter, (ES. 35), 13.VI.1959, 1 male, (MB), Melle, (ES. 55), 11.VIII.1946, 1 male, (MB)

WEST-VLAANDEREN: Adinkerke, (DS. 75), 13.VI.1960, 1 female, (MB), Knokke, (ES. 18), 11.VI.1947, 1 female, (MB), Knokke, (ES. 18), 16.VI.1948, 1 male, (MB), Koksijde, (DS. 76), 5-12.VIII.1983, 1 male, (MT), Nieuwpoort, (DS. 86), 31.VIII.1981, 1 male, (A. Michiels)

Literature: De Meyer (1984).

Also uncommon and mostly found in the northern part of Belgium. C. ultimus, C. subultimus and C. semifumosus are three morphologically resembling species. Especially the females are not always easy to distinguish because the colouration of the legs and the shape of the ovipositor shows a considerable variation.

#### Cephalops vestitus (BECKER, 1900)

Pipunculus vestitus BECKER, 1900 Berl. ent. Z. 45: 227, 228 & 230. 64.

##### Material:

BRABANT: Ottignies, (FS. 01), 15-22.VIII.1981, 1 female, (MT)

OOST-VLAANDEREN: St. Martens Latem, (ES. 45), 18.VII-2.VIII.1981, 3 females, (MT)

New to the Belgian fauna.

Very rare species, only twice captured (only females). Both times with a malaise trap.

Sack (1935) reports the species from central Europe.

#### Cephalops vittipes (ZETTERSTEDT, 1844)

Pipunculus vittipes ZETTERSTEDT, 1844 Dipt. Scand. 3: 963. 17.

##### Material:

ANTWERPEN: Turnhout, (FS. 38), 23-30.V.1982, 1 female, (MT)

LIEGE: Ferrières, (FR. 88), 3-11.VI.1983, 1 female, (MT)

LUXEMBOURG: Chiny, (FR. 61), 10-17.VIII.1945, 1 male, (MG)

New to the Belgian fauna.

A rare species, resembling Cephalops aeneus.

Reported from Great Britain, Poland and Scandinavia.

genus Eudorylas ACZEL, 1940

Eudorylas ACZEL, 1940 Zool. Anz. 132: 151.  
Type species: Eudorylas opacus (FALLEN, 1816).  
Synonyms: Dorilas MEIGEN, 1800 p. p.  
Pipunculus LATREILLE, 1804 p. p.

The identification of species belonging to Eudorylas causes a great deal of problems. First of all, as is the case with the genus Cephalops, there are no identification keys or monographs which include all species. At the moment, the best way to identify Belgian material is to use both the works of Coe (1966b) and Bańkowska (1973). Nevertheless it is not possible to identify all specimens with certainty. Especially the group with black femora and humeri, and a great membranous area on abdominal segment eight (e.g. E. zonatus, E. zonellus) causes problems. We presume a thorough revision of the genus is necessary.

Eudorylas fascipes (ZETTERSTEDT, 1844)

Pipunculus fascipes ZETTERSTEDT, 1844 Dipt. Scand. 3: 964. 8.  
Synonyms: Pipunculus coloratus BECKER, 1897

Material:

ANTWERPEN: Turnhout, (FS. 38), 27. VI-4. VII. 1982, 1 female, (MT)  
BRABANT: Kortenberg, (FS. 03), 10. VI. 1981, 2 males 1 female, (V. S. vd Goot)  
LIEGE: Hockai, (GR. 19), 24. VI. 1929, 1 female, (A. Ball)  
WEST-VLAANDEREN: Zeebrugge, (ES. 18), 3. VI. 1981, 1 female, (Ch. Verbeke)

New to the Belgian fauna.

Uncommon species.

It is recorded from Great Britain, Poland and Scandinavia.

Eudorylas fuscipes (ZETTERSTEDT, 1844)

Pipunculus fuscipes ZETTERSTEDT, 1844 Dipt. Scand. 3: 953. 5.  
Synonyms: Pipunculus ruralis STROBL, 1894 nec MEIGEN, 1824

Material:

ANTWERPEN: Mechelen, (FS. 05), 10. VIII. 1982, 1 male, (M. De Meyer),  
Merksplas, (FS. 29), 17. VII. 1918, 1 female, (G. Severin), Postel,  
. (FS. 58), . VII. 1922, 2 males, (G. Severin)  
BRABANT: Ganshoren, (ES. 93), 18. VII. 1976, 1 male, (A. Michiels),  
Hoegaarden, (FS. 32), 21. VII. 1946, 1 female, (MB)  
HAINAUT: Chimay, (ER. 94), 17. V. 1947, 1 male, (A. Collart)  
LUXEMBOURG: Mirwart, (FR. 64), 8-14. VI. 1946, 1 male, (MB)  
NAMUR: Feschaux, (FR. 35), 7. VIII. 1942, 1 male, (J. Verbeke), Villers s.  
Lesse, (FR. 45), 7. VI. 1959, 1 male, (MB)  
OOST-VLAANDEREN: Destelbergen, (ES. 55), 26. VIII. 1945, 2 males, (MB),  
Destelbergen, (ES. 55), 11. VI. 1944, 1 female, (MB), Destelbergen,  
(ES. 55), 1. IX. 1946, 1 male, (MB), Destelbergen, (ES. 55),  
31. V-2. VI. 1958, 3 males, (MB), Heusden, (ES. 55), 18. V. 1943, 1 male,  
(J. Verbeke), Laarne, (ES. 55), 19. V. 1927, 2 males, (MG), Oostakker,  
(ES. 56), 25. VII. 1945, 1 male, (MB), St. Amandsberg, (ES. 55),

. V. 1947, 2 males 1 female, (J. Verbeke)  
WEST-VLAANDEREN: De Panne, (DS.76), 6.IX.1933, 1 female, (MB)

Literature: Jacobs (1905), Goetghebuer (1943).  
Uncommon species but found all over the country.  
Records from central and northern Europe and Great Britain.

Eudorylas fusculus (ZETTERSTEDT, 1844)

Pipunculus fusculus ZETTERSTEDT, 1844 Dipt. Scand. 3: 955. 7.

**Material:**

BRABANT: Testelt, (FS.35), 30.VIII.1977, 1 male, (A. Michiels)  
LIEGE: Weerst, (FS.92), 11.IX.1934, 1 female, (A. Collart)

Literature: De Meyer (1984).

A rare species.

According to Sack (1935) it occurs in northern and central Europe.

Eudorylas halteratus (MEIGEN, 1838)

Pipunculus halteratus MEIGEN, 1838 Syst. Beschr. 7: 146. 16.

**Material:**

According to Collart (1936) Meigen has reported the species from the surroundings of Liège. Until now this is the only record from this species in Belgium. We have found no specimens in any of the collections we have investigated, so the occurrence of E. halteratus in Belgium is only based on the record of Meigen.

Literature: Collart (1936).

Reported from central Europe and Great Britain.

Eudorylas horridus (BECKER, 1897)

Pipunculus horridus BECKER, 1897 Berl. ent. Z. 42: 41. 6, tab. 2 fig. 1.

**Material:**

BRABANT: Berg, (FS.04), 11.VIII.1984, 1 female, (L. Verlinden)  
LIEGE: Eben-Emael, (FS.83), 9.VI.1984, 1 male, (L. De Bruyn), St. Pietersberg, (FS.82), 17.V.1946, 2 females, (A. Collart)  
LUXEMBOURG: Torgny, (FQ.78), 21.V.1952, 1 male, (J. Verbeke)  
NAMUR: Frasnes les Couvin, (FR.04), 7.VI.1984, 2 males, (K. Hofmans), Mazée, (FR.25), 11.VIII.1984, 1 male, (K. Hofmans)  
WEST-VLAANDEREN: Wenduine, (ES.08), 15.VII.1947, 1 female, (J. Verbeke)

Literature: De Meyer (1984).

Only found in a few localities in Belgium. Remarkable is that all the sites (perhaps except for Wenduine) are calcareous regions: 'fagne calcaire' of Viroin-Hermeton, St. Pietersberg, Torgny and Torfbroek in Berg (the only important calcareous swamp in the Belgian lowland).

Records from the Mediterranean region, central Europe and Great Britain.

Eudorylas inferus COLLIN, 1956

Eudorylas inferus COLLIN, 1956 Opusc Ent. 21: 167-168,  
fig. 16-17.

Material:

?, ?, ?, 3.VII.1882, 1 male, (J. Jacobs)

LUXEMBOURG: Ethe-Buzenol, (FR. 80), 5-19.V.1981, 1 female, (P. Grootaert)

New to the Belgian fauna.

But the occurrence is not certain. The only male specimen in the collection bears an unreadable label, and we could not decipher the name of the collecting site. The identification of the female specimen is doubtful due to the difficulties in identifying Eudorylas spp of this group (black femora and humeri; cfr. supra).

Eudorylas jenkinsoni COE, 1966

Eudorylas jenkinsoni COE, 1966 Handbk Ident. Br. Insects 10, 2(c): 69, fig. 145 & 70, fig. 151-152.

Material:

ANTWERPEN: Turnhout, (FS. 38), 30.V-6.VI.1982, 1 female, (MT)

BRABANT: Forêt de Soignes, (ES. 92), 17.VII.1943, 1 male, (R. Tollet),  
Ottignies, (FS. 01), 19-26.IX.1981, 1 male, (MT)

NAMUR: Treignes, (FR. 15), 28.VI.1984, 2 males 1 female, (K. Hofmans)

Literature: De Meyer (1984).

A rare species.

As far as we know only reported from Great Britain.

Eudorylas longifrons COE, 1966

Eudorylas longifrons COE, 1966 Handbk Ident. Br. Insects 10, 2(c): 73, fig. 168.

Material:

LIEGE: St. Pietersberg, (FS. 82), 13.VI.1938. 2 males 1 female, (A. Collart)

LUXEMBOURG: Torgny, (FQ. 78), 19.VI.1952, 1 male, (J. Verbeke)

WEST-VLAANDEREN: De Panne, (DS. 76), 1.VII.1961, 1 male, (J. Verbeke),  
Koksijde, (DS. 76), 3.VI-16.VII.1983, 1 male 1 female, (MT), Knokke,  
(ES. 18), 26-30.VI.1949, 5 males 3 females, (MG), Knokke, (ES. 18),  
29-30.VI.1948, 4 males, (MG)

The shape of the membranous part of the eight abdominal tergite differs in the specimens we have seen from the drawings of Coe (1966b) and Bańkowska (1973). These two also differ from each other. The exact surroundings of the membranous area is often difficult to distinguish and thus easily to misinterpretate (cfr. Coe, 1967).

New to the Belgian fauna.

Eudorylas melanostolus (BECKER, 1897)

Pipunculus melanostolus BECKER, 1897 Berl. ent. Z. 42: 40.5.

Material:

LUXEMBOURG: On, (FR. 66), 16. IV. 1908, 1 female, (MG)

Literature: Maréchal (1929).

Only one specimen found in the material.

The species seems to occur all over Europe.

Eudorylas montium (BECKER, 1897)

Pipunculus montium BECKER, 1897 Berl. ent. Z. 42: 50.16.

Material:

BRABANT: Overijssse, (FS. 02), 9. VI. 1950, 6 males, (J. Verbeke)

LIEGE: Visé, (FS. 82), 21. VIII. 1936, 1 male, (A. Collart), Visé, (FS. 82), 16. VIII. 1937, 1 male, (A. Collart)

New to the Belgian fauna.

A rare species.

Eudorylas obliquus COE, 1966

Eudorylas obliquus COE, 1966 Handbk Ident. Br. Insects 10, 2(c): 69-70, fig. 147 & 71, fig. 160-162.

Material:

ANTWERPEN: Schoten, (FS. 08), 3-10. VII. 1983, 1 male, (MT), Turnhout, (FS. 38), 26. IX-24. X. 1982, 2 males, (MT)

BRABANT: Ottignies, (FS. 01), 11-18. IX. 1982, 2 males, (MT), Ottignies, (FS. 01), 8-29. VIII. 1981, 1 male 1 female, (MT)

LUXEMBOURG: Bomal s. Ourthe, (FR. 78), 22. VI. 1936, 1 male, (A. Collart)

WEST-VLAANDEREN: Koksijde, (DS. 76), 7-14. IX. 1983, 1 male 2 females, (MT)

Literature: De Meyer (1984).

An uncommon species. Most of the records are from malaise or emergence traps.

Eudorylas obscurus COE, 1966

Eudorylas obscurus COE, 1966 Handbk Ident. Br. Insects 10, 2(c): 74-75, fig. 170, 184, 185.

Material:

ANTWERPEN: Postel, (FS. 58), 14. X. 1922, 1 male, (G. Severin), Schoten, (FS. 08), 17-22. V. 1983, 1 female, (MT), Schoten, (FS. 08), 19. VII. 1982, 1 male, (L. De Bruyn), Turnhout, (FS. 38), 9. V-1. VIII. 1982, 8 males 7 females, (MT)

BRABANT: Gaasbeek, (ES. 82), 22. VII. 1946, 1 male, (A. Collart), Gembloux, (FS. 10), 3-10. V. 1982, 1 female, (C. Fassotte)

LIEGE: Beaumont Esneux, (FS. 80), 4. V. 1935, 1 male 1 female, (P. Maréchal), Eben-Emael, (FS. 83), 11. VII. 1982, 1 female, (M. De Meyer), Lixhe, (FS. 82), 14. IV. 1950, 1 female, (A. Collart), Lixhe, (FS. 82), 31. VII. 1949, 1 male, (P. Maréchal)

LUXEMBOURG: Ether-Buzenol, (FR. 80), 19. V-2. VI. 1981, 1 male 1 female, (MT)

NAMUR: Auffe, (FR. 55), 27. IV. 1954, 1 male, (P. Maréchal), Dourbes, (FR. 14), 16. VIII. 1984, 1 male, (K. Hofmans), Frasnes les Couvin, (FR. 04), 7. VI. 1984, 1 female, (K. Hofmans), Gedinne, (FR. 33), . VIII. 1920, 1 male, (A. Tonnoir), Onoz-Spy, (FR. 29), 24. V. 1950, 1 female, (A. Collart), Vaucelles, (FR. 25), 9. VI. 1984, 1 male, (K. Hofmans)

OOST-VLAANDEREN: Destelbergen, (ES. 55), 1. VIII. 1913, 6 males, (MG), Destelbergen, (ES. 55), 17. VII. 1912, 1 female, (MG), Destelbergen, (ES. 55), 9. X. 1920, 1 male, (MG), Destelbergen, (ES. 55), 1. VIII. 1913, 1 male, (P. Maréchal), Destelbergen, (ES. 55), 8. VIII. 1943, 1 male, (J. Verbeke), Oostakker, (ES. 56), 4. VII. 1945, 1 male, (MB), Wachtebeke, (ES. 56), 18. VII. 1945, 1 male, (MB)

WEST-VLAANDEREN: Beernem, (ES. 26), 27. VII. 1980, 1 male, (Ch. Verbeke), Koksijde, (DS. 76), 27. V-12. VIII. 1983, 1 male 1 female, (MT), Westende, (DS. 86), 2. VII. 1979, 1 female, (A. Michiels), Zedelgem, (ES. 06), 19. V. 1981, 1 male, (Ch. Verbeke), Zeebrugge, (ES. 18), 2. VIII. 1982, 1 female, (Ch. Verbeke)

Literature: De Meyer (1984).

One of the more common species of the genus Eudorylas, wide spread over Belgium but never abundant.  
As the former species, it is only reported from Great Britain as far as we know.

#### Eudorylas ruralis (MEIGEN, 1824)

Pipunculus ruralis MEIGEN, 1824 Syst. Beschr. 4: 22. 8.

Synonyms: Pipunculus terminalis STROBL, 1893 nec THOMSON, 1869  
nec VERRALL, 1901

Pipunculus arimosus BECKER, 1900

#### Material:

ANTWERPEN: Duffel, (FS. 06), 14. IX. 1949, 1 female, (V. Hendrickx)

BRABANT: Overijse, (FS. 02), 16. VII. 1949, 1 female, (J. Verbeke)

LIEGE: Jupille, (FR. 76), 21. VII. 1934, 1 male, (A. Collart), Sy, (FR. 78), 15. IX. 1949, 2 males 1 female, (A. Collart), Visé, (FS. 82), 21. VIII. 1936, 2 females, (A. Collart)

LUXEMBOURG: Chiny, (FR. 61), 17-22. VIII. 1933, 1 male, (MG)

NAMUR: Frasnes les Couvin, (FR. 04), 30. VIII. 1936, 1 male, (MB), Treignes, (FR. 15), 28. VI. 1984, 1 female, (M. De Meyer)

OOST-VLAANDEREN: Deurle, (ES. 45), 13. VIII. 1936, 1 male, (MB), Melle, (ES. 55), 6. X. 1948, 1 male, (MG)

Easy to recognize by the characteristic shape of the eight abdominal segment of the male and the typical form of the ovipositor in the female.

Literature: De Meyer (1984).

Uncommon species. Reported from central and southern Europe as well as Great Britain.

Eudorylas subfascipes COLLIN, 1956

Eudorylas subfascipes COLLIN, 1956 Opusc Ent. 21: 167.

Synonyms: Pipunculus fascipes VERRALL, 1901 nec ZETTERSTEDT, 1844

Material:

OOST-VLAANDEREN: Zaffelare, (ES. 56), 9. V. 1945, 2 males, (J. Verbeke)

New to the Belgian fauna.

A rare species.

Reported from Scandinavia and Great Britain.

Eudorylas subterminalis COLLIN, 1956

Eudorylas subterminalis COLLIN, 1956 Opusc. Ent. 21: 166-167, fig. 11-12.

Synonyms: Pipunculus terminalis VERRALL, 1901 nec THOMSON, 1869 nec STROBL, 1893

Material:

ANTWERPEN: Antwerpen, (ES. 97), 4. VII. 1952, 1 male, (J. Verbeke), Hoogstraten, (FS. 29), 1. VI. 1918, 1 male, (G. Severin), Hoogstraten, (FS. 29), 20. VIII. 1918, 1 female, (A. Tonnoir), Hoogstraten, (FS. 29), 23. VIII. 1918, 1 male, (A. Tonnoir), Schoten, (FS. 08), 10. V-5. VI. 1983, 2 females, (MT), Schoten, (FS. 08), 20. V-4. VI. 1984, 1 male, (MT), Turnhout, (FS. 38), 16. V-19. IX. 1982, 29 males 58 females, (MT), Wilrijk, (ES. 96), 17. V. 1980, 1 male, (V. S. vd Goot), Zoersel, (FS. 18), 2. VIII. 1944, 1 male, (J. Verbeke)

BRABANT: Berg, (FS. 04), 11. VIII. 1984, 1 female, (L. Verlinden), Erps Kwerps, (FS. 04), 14. VIII. 1984, 2 males, (L. Verlinden), Erps Kwerps, (FS. 04), 2. VI. 1984, 1 female, (L. Verlinden), Genval, (FS. 01), 19. VII. 1917, 1 male, (A. Tonnoir), Ottignies, (FS. 01), 12. IX-3. X. 1981, 1 male 1 female, (MT), Ottignies, (FS. 38), 31. VII-14. VIII. 1982, 1 male, (MT), Veltem, (FS. 14), 13. IX. 1984, 1 male, (L. Verlinden)

LIEGE: Lixhe, (FS. 82), 22. IV. 1949, 1 female, (A. Collart), St. Pietersberg, (FS. 82), 17. V. 1946, 1 female, (A. Collart), Visé, (FS. 82), 30. V. 1941, 1 male 1 female, (A. Collart)

LUXEMBOURG: Ethe-Buzenol, (FR. 80), 5-19. V. 1981, 2 females, (MT), Torgny, (FQ. 78), 18. V. 1952, 1 female, (J. Verbeke), Virton, (FQ. 89), 2. IX. 1920, 1 female, (MG)

NAMUR: Olloy s. Viroin, (FR. 14), 10. VI. 1984, 1 male, (K. Hofmans), Treignes, (FR. 15), 7. VI. 1984, 1 female, (K. Hofmans), Treignes, (FR. 15), 9. VIII. 1984, 1 male, (K. Hofmans), Vaucelles, (FR. 25), 9. VI. 1984, 1 female, (K. Hofmans)

OOST-VLAANDEREN: Destelbergen, (ES. 55), 17. V. 1944, 1 male, (MG), Destelbergen, (ES. 55), 31. VII. 1941, 1 female, (J. Verbeke), Laarne, (ES. 55), 19. V. 1927, 2 males, (MG), Munte, (ES. 54), 23. VII. 1938, 1 male, (MG), Overmere, (ES. 65), 12. V. 1944, 1 male, (J. Verbeke), Overmere, (ES. 65), 26. VII. 1944, 1 female, (MB)

Literature: De Meyer (1984).

The most widespread species of the genus Eudorylas in Belgium. However it is not abundant. Formerly the species was often confused with Eudorylas terminalis.

It is reported from Scandinavia and Great Britain.

Eudorylas sulcatus (BECKER, 1897)

Pipunculus sulcatus BECKER, 1897 Berl. ent. Z. 42: 57. 23.

Material:

Maréchal (1931) recorded the species (one female) from Comblain-la-Tour. We found in his collection one female specimen (dated 18.VI.1930) from this site. However it is difficult to identify E. sulcatus since the only key where it is included is Sack (1935). So the occurrence of this species in Belgium is doubtful.

Literature: Maréchal (1931).

According to Sack (1935) it occurs in the Mediterranean region. It is also recorded from Scandinavia.

Eudorylas terminalis (THOMSON, 1865)

Pipunculus terminalis THOMSON, 1865 Opusc. Ent. 2: 115. 11.

Material:

ANTWERPEN: Hoogstraten, (FS.29), 31.VII.1918, 1 male, (G. Severin),  
Hoogstraten, (FS.29), 31.V.1918, 1 female, (G. Severin)

Literature: Goetghebuer (1943).

The species is found only in the northern part of Belgium. Goetghebuer reported the species also from Schelderode. However, we found out that all the material in his collection and identified as E. terminalis belongs to other species, mainly E. subterminalis.

Reported from Great Britain (but seems to be rare in this country), Poland and Scandinavia.

Eudorylas zonatus (ZETTERSTEDT, 1849)

Pipunculus zonatus ZETTERSTEDT, 1849 Dipt. Scand. 8: 3206. 5-6.

Synonyms: Pipunculus distinctus BECKER, 1921

Material:

No specimens could be found in the collections we investigated.

Literature: Maréchal (1927), Goetghebuer (1943).

The occurrence of E. zonatus in Belgium is only based on these two records. We did not find any specimens belonging to this species, in the collections of these authors but again we remark here that E. zonatus belongs to the group within the genus Eudorylas that causes considerable problems in identifying.

The species is reported from northern Europe, Poland, Bulgaria (Bankowska, 1967) and Great Britain.

Eudorylas zonellus COLLIN, 1956

Eudorylas zonellus COLLIN, 1956 Opusc. Ent. 21: 169, fig. 18.

Synonyms: Pipunculus zonatus KOWARZ, 1887 nec ZETTERSTEDT, 1849

Material:

ANTWERPEN: Mortsel, (FS. 07), 27.VI.1984, 1 female, (K. Hofmans)  
BRABANT: Berg, (FS. 04), 5.VII.1984, 1 male, (L. Verlinden), Genval, (FS. 01), 26.VI.1917, 1 female, (A. Tonnoir), Kortenberg, (FS. 03), 10.VI.1981, 15 males 1 female, (V.S. vd Goot), Winksele, (FS. 14), 6.VII.1984, 2 males, (L. Verlinden)  
LIEGE: Ferrières, (FR. 88), 1-15.VII.1983, 1 male, (MT), Hockai, (GR. 19), 1.VIII.1920, 1 female, (MG), Malmedy, (KA. 89), 29.VI.1935, 3 males, (A. Collart)  
LUXEMBOURG: Dohan, (FR. 51), 24.VI.1963, 1 male, (A. Collart), Ethe, (FQ. 89), 18-21.V.1981, 1 female, (P. Grootaert), Herbeumont, (FR. 61), 23-26.VI.1952, 2 males, (MB)  
NAMUR: Houyet s. Lesse, (FR. 46), 27.VI.1927, 1 male 1 female, (MG), Namêche, (FR. 49), 22.VI.1879, 1 female, (H. Donckier)  
OOST-VLAANDEREN: Destelbergen, (ES. 55), 6.VI.1945, 1 male, (MB), Destelbergen, (ES. 55), 4.VI.1944, 1 male, (MB), Destelbergen, (ES. 55), 18.VI.1947, 2 females, (MB), Drongen, (ES. 45), 8.VI.1920, 1 male, (MG), Gontrode, (ES. 54), 12.VI.1949, 1 male, (J. Verbekte), Melle, (ES. 55), 13.VI.1947, 1 male, (MB), Munte, (ES. 54), 27.VI.1929, 2 females, (MG), Munte, (ES. 54), 16.VI.1938, 2 males, (MB), Munte, (ES. 54), 3.VI.1937, 1 male, (MB)

New to the Belgian fauna.

Uncommon species, but records from all over the country.

## DISCUSSION

In the literature concerning Pipunculidae in Belgium, two species are mentioned which are not referred to anywhere in the general literature on the subject. These are:

- Pipunculus elegans SCHINER, reported by Meunier (1908)
- Pipunculus pratorum MEIGEN, reported by Jacobs (1905)

Probably a mistake has been made regarding the references of the authors because Pipunculus elegans EGGER, 1860 (synonym of Pipunculus spinipes MEIGEN, 1830) and Pipunculus pratorum VERRALL, 1901 (synonym of Pipunculus thomsoni BECKER, 1897) are known to exist. In that case these two references are not valid, due to synonymy.

Of all the species reported from Belgium we have found material in the collections investigated, except for:

- Eudorylas halteratus (MEIGEN, 1838), reported by Collart (1936)
- Eudorylas sulcatus (BECKER, 1897), reported by Maréchal (1931)
- Eudorylas zonatus (ZETTERSTEDT, 1849), reported by Goetghebuer (1943) and Maréchal (1927)

The occurrence of these three species is only based on the references in the literature.

Our revision resulted in the find of 29 species new to the Belgian fauna. The occurrence of three species however is not yet certain because the places on the labels were unknown to us or illegible. Since all these specimens were deposited in the Belgian part of the collection of the K.B.I.N. (and national and international material is separated in this collection), we presume they are from Belgian sites.

If we observe the distribution of the several species in Belgium, it is not possible to formulate any conclusions concerning typical boundings to certain biotopes (since the information is too sparse), except for some. For example Alloneura littoralis occurs only at the littoral border. Some other species like Pipunculus spinipes and Eudorylas horridus are restricted to regions with a calcareous soil. For any further conclusions, a more extensive sampling is necessary.

Despite our sparse information, a comparison between Belgium and some other European countries is interesting. We have compared our fauna with those from Great Britain and Poland (table 1) because the pipunculid fauna of these two countries have been quite thoroughly investigated. We only made the comparison for those species occurring in Belgium. Species occurring only in Great Britain and/or Poland are not included.

We noted that there are in Belgium (which can largely be considered as a West European country) some central and North European species present (Dorylomorpha albitarsis, Dorylomorpha xanthocera, Cephalops braueri, Cephalops vestitus, Alloneura cilitarsis). But again, it is not possible to deduce whether the geographical distribution in Belgium supports the view of the European distribution or not because of the few records. However, for some species, certain trends are noticeable. For example, Dorylomorpha albitarsis and Alloneura cilitarsis are restricted to the surroundings of the Hautes Fagnes, a

montaneous and moorlike area in the easternmost part of Belgium, and famous for some boreal surviving species. Cephalops seminitidus a Mediterranean species according to Sack (1935), occurs only in the south of the country. Also, the occurrence of Dorylomorpha hungarica confirms the European distribution.

We must however remember that the European distribution of most of the Pipunculidae is poorly known and it is not uncertain that some impressions of their distribution will have to be changed in the future.

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Table 1: A comparison between the Belgian Pipunculidae (B) and their occurrence in Great Britain (G) and Poland (P). The species marked with ° are new to the Belgian fauna.

SPECIES	B	G	P	SPECIES	B	G	P
° <i>Chalarus basalis</i>	*	*	*	° <i>Pipunculus phaeton</i>	*	*	
° <i>Chalarus fimbriatus</i>	*	*	*	<i>Pipunculus spinipes</i>	*	*	*
° <i>Chalarus latifrons</i>	*	*	*	° <i>Pipunculus tenuirostris</i>	*		
° <i>Chalarus pughi</i>	*	*		<i>Pipunculus thomsoni</i>	*	*	*
<i>Chalarus spurius</i>	*	*	*	<i>Pipunculus varipes</i>	*	*	*
<i>Verrallia aucta</i>	*	*	*	° <i>Pipunculus zugmayeriae</i>	*	*	*
<i>Verrallia pilosa</i>	*	*	*	<i>Cephalops aeneus</i>	*	*	*
<i>Verrallia setosa</i>	*	*		<i>Cephalops braueri</i>	*		
<i>Verrallia villosa</i>	*	*	*	° <i>Cephalops carinatus</i>	*	*	
<i>Nephrocerus flavicornis</i>	*	*	*	<i>Cephalops curtifrons</i>	*	*	
<i>Nephrocerus lapponicus</i>	*			<i>Cephalops furcatus</i>	*	*	*
<i>Nephrocerus scutellatus</i>	*	*		<i>Cephalops germanicus</i>	*	*	
° <i>Dorylomorpha albitalris</i>	*			° <i>Cephalops obtusinervis</i>	*	*	
<i>Dorylomorpha confusa</i>	*	*		<i>Cephalops semifumosus</i>	*	*	*
<i>Dorylomorpha extricata</i>	*	*	*	<i>Cephalops seminitidus</i>	*		
° <i>Dorylomorpha hungarica</i>	*	*?	*?	° <i>Cephalops subultimus</i>	*	*	
° <i>Dorylomorpha imparata</i>	*	*		<i>Cephalops ultimus</i>	*	*	
° <i>Dorylomorpha incognita</i>	*			° <i>Cephalops vestitus</i>	*		
<i>Dorylomorpha infirmata</i>	*	*	*	° <i>Cephalops vittipes</i>	*	*	*
° <i>Dorylomorpha maculata</i>	*	*	*	<i>Eudorylas fascipes</i>	*	*	*
<i>Dorylomorpha rufipes</i>	*	*	*	<i>Eudorylas fuscipes</i>	*	*	*
° <i>Dorylomorpha xanthocera</i>	*	*		<i>Eudorylas fusculus</i>	*		
<i>Dorylomorpha xanthopus</i>	*	*	*	<i>Eudorylas halteratus</i>	*	*	
° <i>Alloneura cilitarsis</i>	*	*	*	<i>Eudorylas horridus</i>	*	*	
<i>Alloneura geniculata</i>	*	*	*	° <i>Eudorylas inferus</i>	*	*	*
<i>Alloneura kuthyi</i>	*	*		<i>Eudorylas jenkinsoni</i>	*	*	
<i>Alloneura littoralis</i>	*	*	*	° <i>Eudorylas longifrons</i>	*	*	
° <i>Alloneura minima</i>	*	*	*	<i>Eudorylas melanostolus</i>	*	*	
° <i>Alloneura palliditarsis</i>	*	*		° <i>Eudorylas montium</i>	*	*	*
<i>Alloneura sylvatica</i>	*	*	*	<i>Eudorylas obliquus</i>	*	*	
° <i>Pipunculus calceatus</i>	*			<i>Eudorylas obscurus</i>	*	*	
<i>Pipunculus campestris</i>	*	*	*	<i>Eudorylas ruralis</i>	*	*	*
° <i>Pipunculus fonsecai</i>	*	*		° <i>Eudorylas subfascipes</i>	*	*	
<i>Pipunculus oldenbergi</i>	*			<i>Eudorylas subterminalis</i>	*	*	
				<i>Eudorylas sulcatus</i>	*		
				<i>Eudorylas terminalis</i>	*	*	*
				<i>Eudorylas zonatus</i>	*	*	*
				° <i>Eudorylas zonellus</i>	*	*	*

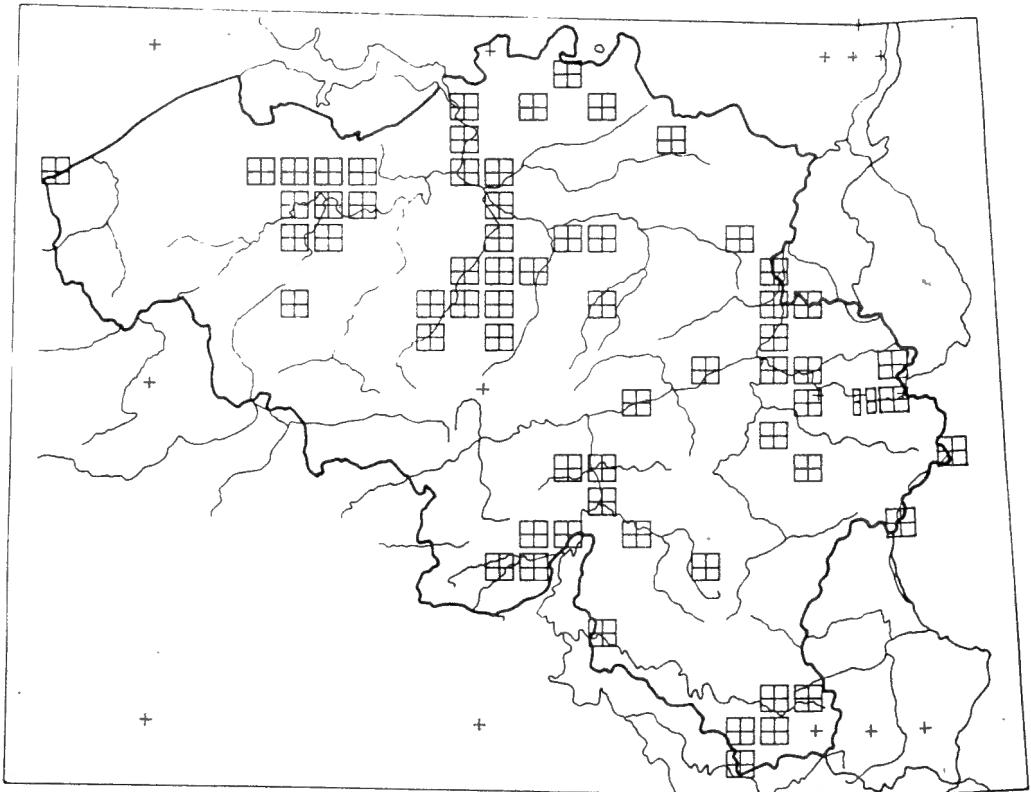


Fig.1: Distribution of *Pipunculus campestris* in Belgium.

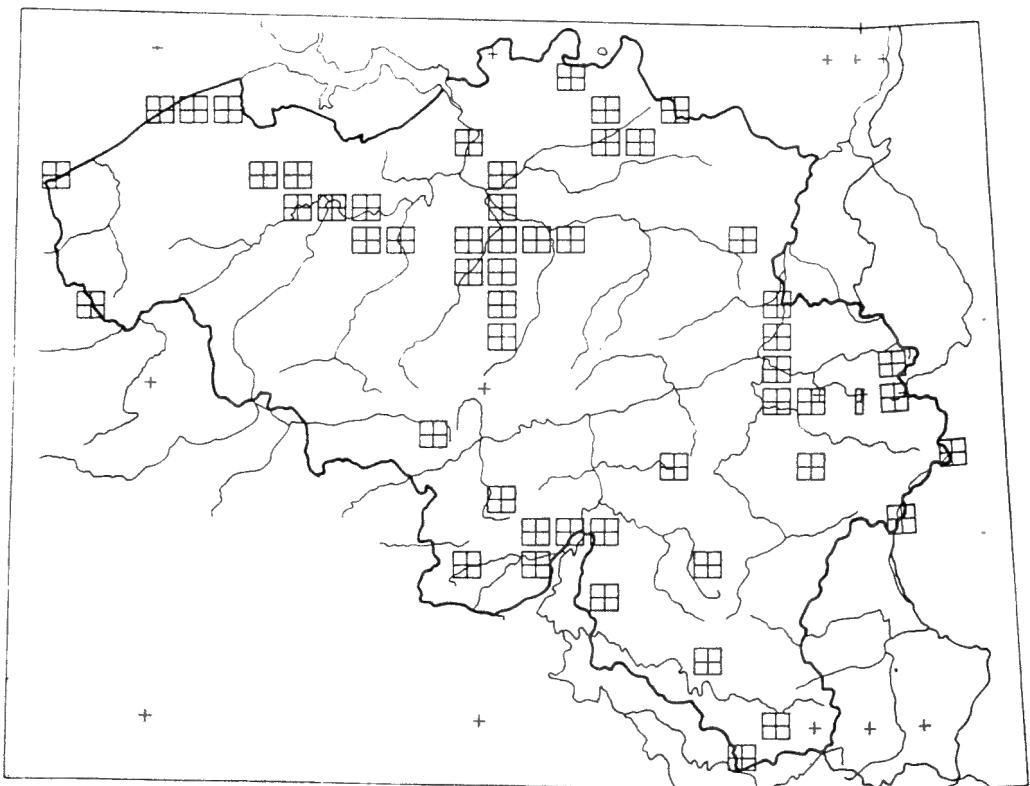


Fig.2: Distribution of *Alloneura sylvatica* in Belgium.

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