and characteristic medioventral process as illustrated with a ventral view in figure 12. Genital styles as figured, with a relatively small apex (fig. 14). Aedeagus (fig. 13) provided with four spinose processes, all of them visible in dorsal orientation : two implanted subapically on the periandrium ; the third and fourth one fused together at their base, inserted apically along the base of the flagellum and forked more distally. Furthermore, the periandrium bears a lamelliform process along the left margin, provided with a variable number of small teeth along its dorsal border.

Female terminalia : ovipositor short, anal tube very short and shiny.

Diagnosis. — *Mnemosyne hirta* is distinguished from other African species by the presence of granules all over the surface of the tegmina and by the very characteristic shape of the male terminalia, more particularly the aedeagus and medioventral process of the pygofer. The type of *Oliarus hirtus* was compared with specimens of the KBIN. These specimens were compared with the holotype of *Mnemosyne maculipennis* by M.R. Wilson. All specimens proved to be conspecific and thus, *Mnemosyne maculipennis* is a new, younger synonym of *Mnemosyne* (*Oliarus*) *hirta* (Melichar).

Distribution. — The species has hitherto been recorded from Somalia, Kenya, Ruanda, Malawi, Mozambique and South Africa (Transvaal).

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New and noteworthy Chloropidae (Diptera) to the Belgian fauna

by L. DE BRUYN** and M. DE MEYER**

Summary

In 1982, Chloropidae were caught in emergence traps and Malaise traps in two overgrown meadows, one marshy woodland and one garden, situated at two different localities in Belgium, and with a sweepnet and pooter during several excursions to different geographical regions in Belgium. In all, 41 species of Chloropidae were collected, of which 8 species were new to the Belgian fauna. A short discussion of these species is given.

Samenvatting

In 1982 werden Chloropidae verzameld door middel van uitsluipvallen en Malaisevallen in twee verwilderde weilanden, een broekbos en een tuin, gesitueerd in twee verschillende lokaliteiten in België. Tevens werden vliegen gevangen met een sleepnet en een pooter tijdens excursies naar verschillende geografische streken in België. In totaal werden 41 Chloropidae soorten gevangen, waarvan 8 nieuw voor de Belgische fauna. Een korte bespreking van deze soorten wordt gegeven.

The family Chloropidae represents a rather common but usually overlooked group of minute acalypterate flies. The larvae of most species develop in the stems, leafsheets or panicles of Poaceae, while some also attack cereals. Other species develop in monocotyl families which are close allied to the Poaceae like Liliaceae, Juncaceae, Juncaginaceae or Cyperaceae. Furthermore, some species develop on organic detritus, or are predaceous.

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In the scope of a M. Sc. thesis (De Bruyn, 1983) during the year 1982, the authors made a taxonomic and ecological study on the family Chloropidae. In the present article the species, new to the Belgian fauna are discussed.

Material and methods

The study was mainly conducted at two different localities in Belgium : Turnhout (U.T.M. : FS 38) and Ottignies (U.T.M. : FS 01). At Turnhout, two overgrown meadows and one marshy woodland were taken as sampling plots, while at Ottignies the sampling plot was situated in a garden. For a detailed characterisation of the vegetation on the different sites, we refer to De Bruyn and De Meyer (1984).

During a period from early April to half November, flies were sampled with two types of interception traps : Malaise traps and emergence traps. In all 6 emergence traps (three on each meadow in Turnhout) and 4 Malaise traps (one on each sampling plot) were in operation. All traps were emptied weakly on Sunday (± 15.00 h) (Turnhout : leg. L. De Bruyn and M. De Meyer ; Ottignies : leg. P. Dessart).

Besides the study at those two localities, several excursions were carried out to different geographical regions in Belgium. During these excursions, flies were collected by means of a sweepnet and a pooter in different habitats.

Results and discussion

As a result of the present study, Chloropidae, belonging to 20 genera and 41 species were captured (table 1). Eight species are new to the Belgian fauna. In this paper these previous unrecorded species (marked with the abbreviation f. n. sp.) are considered.

Elachiptera diastema COLLIN, 1946 f.n.sp.

Elachiptera diastema closely resembles *Elachiptera cornuta* (FALLÉN), but can be distinguished from the latter by the relatively shorter wings, darker abdominal pubescens and the apical scutellar

TABLE I

List of the chloropid species captured during this study.

Oscinellinae
Elachiptera cornuta (FALLEN)
Elachiptera diastema COLLIN
Elachiptera magaspis (LOEW)
Elachiptera sordidulata (STROBL)
Elachiptera tuberculifera (CORTI)
Melanochaeta pubescens (THALHAMMER)
Dicraeus vagans (MEIGEN)
Lipara lucens MEIGEN
Lipara rufitarsis LOEW
Calamoncosis laminifrons (BECKER)
Siphunculina aenea (MACQUART)
Aphanotrigonum nigripes COLLIN
Aphanotrigonum trilineatum (MEIGEN)
Tricimba cincta (MEIGEN)
Tricimba humeralis (LOEW)
Tricimba lineela (FALLEN)
Trachisiphonella scutellata (von ROSER)
Conioscinella sordidella (ZETTERSTEDT)
Conioscinella frontella (FALLEN)
Oscinella maura (FALLEN)
Oscinella nitidissima (MEIGEN)
Incertella kertezi (BECKER)
Incertella trigonella (DUDA)
Haplegnella laeviforms (LOEW)
Oscinisoma cognata (MEIGEN)
Oscinisoma gilvipes (LOEW)

Chloropinae
Meromyza variegata (MEIGEN)
Chlorops calceata MEIGEN
Chlorops meigeni LOEW
Chlorops hypostigma MEIGEN
Chlorops novaki STROBL
Chlorops scalaris MEIGEN
Chlorops speciosa MEIGEN
Diplotoxa messoria (FALLEN)
Cetema cereris (FALLEN)
Cetema elongata (MEIGEN)
Thaumatomyia notata (MEIGEN)
Thaumatomyia glabra (MEIGEN)
Cryptonevra flavitarsis (MEIGEN)
Lasiosina albipila (LOEW)
Lasiosina cinctipes(MEIGEN)

bristles which stand wider apart. Furthermore, the dusted stripes on the mesonotum are joined behind by a prescutellar dusted band, which is absent in *E. cornuta*.

Material : Turnhout (FS 38), 4.VII-7.XI.1982, 10 ♂♂, 20 ♀♀ ; Schoten (FS 07), 23.IV.1984, 1 ♀ (leg. L. De Bruyn); Landelies (ER 98), 21.V.1984, 1 ♂ (leg. L. De Bruyn).

At Turnhout *E. diastema* was collected with the emergence traps in both meadows. At Schoten and Landelies, *E. diastema* was swept in grazed meadows.

E. diastema is probably an overlooked species, due to the resemblance to *E. cornuta*. Formerly this species was only mentioned from England (Collin, 1946), Germany (Wendt, 1968) and the USSR (Stackelberg, 1958).

Elachiptera scrobiculata (STROBL, 1900). f.n.sp.

The thorax is uniformerly dusted and the marginal scutellar bristles arise from distinct tubercles (although smaller than in *E. tuberculifera* (CORTI). The legs of the four females are rather dark, so according to Duda (1933) they belong to the forma typica of *E. scrobiculata*. This species is mostly recorded from marshy localities with a large amount of decaying vegetation.

Material : Turnhout (FS 38), 15.VIII - 24.X.1982, 4 ♀♀.

E. scrobiculata was trapped in meadow 2 with the emergence traps. According to Dely-Draskovits and Papp (1978), E. scrobiculata has a Palaearctic distribution, and is also mentioned from northern America.

Aphanotrigonum nigripes (Zetterstedt, 1848). f.n.sp.

This species belongs to the *Aphanotrigonum trilineatum* group (Dely-Draskovits, 1981). It can be distinguished from the other species by the bluish-grey dusted mesonotum, without the dark longitudinal stripes, the number of notopleural bristles (1 + 2) and the apical scutellar bristles which are mostly twice as long as the lateral bristles.

Material : Turnhout (FS 38), 27.VI. - 18.VII.1982, 2 ♂♂, 5 ♀♀ ; Torgny (FQ 78), 3.IX.1980, 1 ♂ (leg. P. Grootaert).

A. nigripes was trapped in meadow 2 with the emergence traps. *A. nigripes* is known from England, Sweden, Hungaria, Yugoslavia, Bulgaria, the European part of the USSR, Kazakstan, Siberia and Mongolia (Dely-Draskovits, 1981).

Conioscinella sordidella (Zetterstedt, 1848). f.n.sp.

The thorax of *C. sordidella* is dusted while the sternopleuron is shining. All bristles on the head are yellow. The legs are totally yellow in both sexes. The scutellum bears only marginal bristles.

Material : Ottignies (FS 01), 6.VI - 12.VI.1982, 1 ♀.

Conioscinella sordidella can be found all over Europe and is also mentioned from North-Africa (Duda, 1933 ; Kloet and Hincks, 1975 ; Wendt, 1968).

Hapleginella laevifrons (Loew, 1858). f.n.sp.

Small shining black *Oscinella* like species with yellow antennae. One row of interfrontal bristles on the ocellar plate. Black thorax with black bristles and haires. The legs are entirely yellow exept for the black femora.

Material : Turnhout (FS 38), 25.VII - 1.VIII.1982, 1 ♀.

H. laevifrons was trapped in meadow 1 with the Malaise trap. This species is known from West-Germany, Austria (Duda, 1933), England (Collin, 1946), France (Séguy, 1934), Hungaria (Dely-Draskovits and Papp, 1978) and Finland (Hackman, 1980).

Oscinisoma gilvipes (Loew, 1858). f.n.sp.

This species strongly resembles *Oscinosoma cognata* (MEIGEN), but can be distinguished from the latter by the dusted humeri, the wings which are longer than the abdomen and the mesonotum which is flattened on the hind three quarters of the disk.

Material : Neerijse (FS 13), 20.VIII.1982, 1 ♀ (leg. L. De Bruyn).

Oscinisoma gilvipes was swept in a moist meadow near a pond. The vegetation cosisted mainly of *Glyceria maxima* (HARTMAN.) HOLMBERG and *Phragmites australis* (CAV.) STEUD. Until now, *Oscinisoma gilvipes* was only mentioned from England (Ismay, 1976).

Chlorops meigeni Loew, 1866. f.n.sp.

The thorax is greasy shining, the antennae are partly yellow and the large black ocellar plate is reaching to the front of the frons. In the rear, the ocellar triangle and the black occiput are separated by an indistinct yellow stripe.

Material : Turnhout (FS 38), 23.V - 27.VI.1982, 65 ♂♂, 31 ♀♀ ; Schoten (FS 08), 2.VI.1982, 2 ♂♂, 2 ♀♀ (leg. L. De Bruyn).

At Turnhout *C. meigeni* was trapped with the Malaise traps of meadow 1, meadow 2 and the marshy woodland, and with the emergence traps of meadow 1. At schoten it was swept in a moist meadow near a brooklet. The vegetation consisted mainly of Poaceae. *Chlorops meigeni* is a common species throughout Europe, and has a Palaearctic distribution (Dely-Draskovits, 1977).

Chlorops novaki Strobl, 1902. f.n.sp.

Mesonotum dusted. The sternopleural spot is black and dusted. The third antennal segment is totally black. The narrow ocellar triangle is black with yellow side margins, and shows a central longitudinal furrow in front of the ocelli.

Material : Wilrijk (ES 96), 22.VIII.1982, 1 ♀ ; 21.IX.1983, 2 ♂♂, 8 ♀♀ (leg. L. De Bruyn) ; Antwerpen (ES 97), 22.VI.1983, 9 ♂♂, 11 ♀♀ (leg. L. De Bruyn) ; Oud-Heverlee (FS 13), 20.VIII.1982, 1 ♂ (leg. L. De Bruyn).

Chlorops novaki was swept in meadows. At Wilrijk and Antwerpen these meadows contain several grass species. (*Holcus lanatus* L., *Dactylis glomerata* L., *Poa trivialis* L., *Arrhenaterum elatius* (L.) Beauv., *Elymus repens* (L.) Gould.), while at Oud-Heverlee only two Poaceae species were found (*Holcus lanatus* L. and *Arrhenaterum elatius* (L.) Beauv.). Later we were able to rear *C. novaki* from *Elymus repens*. The distribution of *C. novaki* is Palaearctic (Duda, 1933 ; Dely-Draskovits and Papp, 1978).

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