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A review of the Conopid - Flies (Diptera, Conopidae) of Rumania

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The present paper is based on extensive material of the family Conoridae deposited in the collections of the Muzeul de Istorie Naturala "Gr. antipa", Bucuresti. We have found in the revised material altogether 39 species of this family collected on the whole territory of Rumania.

We include also further 6 species which we did not find in the revised material but the occurrence of which in Rumania is known from the literature. At the present time 45 species of the family Conopidae are known on the territory of Rumania but not even this number is definite. Kröber (1936, 1939) records e.g. 57 species from Italy, 35 from Greece and 53 from France. Although the occurrence of conopid-flies is more frequent in warmer southern regions, in Czechoslovakia, where the family Conopidae has been studied very extensively (Chvála, 1961, 1965), 52 species have been recorded and 8 other species are expected to be found here. The study and collecting of Conopidae especially in southern sandy regions of Rumania (Bucuresti and Dobrogea Regions) will result without no doubt in the discovery of further interesting species.

The first record on this family in Rumania was published by Frivaldszky (1876) who recorded 2 species — Zodion cinereum Fabr. and Sicus ferrugineus L. The further literary records were published by Strobl (1896) — 9 species, Thalhammer (1918) recorded in Fauna Regni Hungariae 14 species from the territory of Rumania, 9 of which were recorded for the first time. Individual records were published also by Kröber (1915—1939) and Chvála (1963).

Some faunistic papers dealing with the Conopidae in Rumania were published more recently. First Moczar (1952) recorded six species from Sebesului Mts., one of which was new to the fauna of Rumania. Later Lehrer (1959) recorded 7 species (2 species were new), Lazar (1960) recorded 15 species (6 species were new) and Bankowska (1961) recorded 18 species, especially from the Dobrogea Region (Delta Danubii), 5 species were recorded for the first time. The most recent paper on the

Conopidae of Rumania was published by Weinberg [1967] who records altogether 25 species, 2 of which are recorded in Rumania for the first time. On the whole 40 species of this family have been recorded up to 1967 in Rumania.

The present paper is a survey of all 45 species known up to the present time in Rumania, the general distribution, occurrence in Rumania, a list of all literary data and the flight period in Rumania is given for each species. We do not present the differential diagnosis or keys for identification, because these have been published already formerly by Kröber (1925, 1936) and Chvála (1961, 1965).

Conopinae

Abrachyglossum capitatum (Loew, 1847)

This species is known from Central and South Europe, and from south-western parts of the USSR as far as to Tadzikistan. Everywhere an uncommon species. It was recorded from Rumania first in 1960 by Lazar from Haghimas Mts. and later by Weinberg (1967) from Sibiu. Dates: From the end of June to July. The flight period in Central Europe (Chvála, 1961) is from July to September.

Material Examined: Maramures Reg. — Tarnava Mare 18. VII. 1950 1 σ (V. Iuga). Brasov Reg. — Gradina Sibiu 28. VI. 1953 1 φ (E. Worell). Banat Reg. — Moldova Noua 28. VI. 1964 1 φ (N. Savulescu).

Leopoldius coronatus (Rondani, 1857)

Leopoldius coronatus is known from West, Central and South Europe, from western parts of the USSR and from North Africa. In Central Europe it is a common species from July to October (Chvála, 1961) but we have only few records of its occurrence in Rumania. This species was recorded from Rumania for the first time, similar to the previous species, as late as 1960 by Lazar from Brebu and later by Weinberg (1967) from Magura Cisnadie. Dates: July and August.

Material Examined: Brasov Reg. — Sighisoara 13. VII. 1950 1 σ (X. Scobiola). Banat Reg. — Herculane 20. VII. 1964 1 σ (V. Bradescu).

Conops vesicularis Linnaeus, 1761

Widely distributed species known from the whole of Europe with the exception of its northern parts, from Near East, Siberia, mountains of Central Asia and from Corea. A common spring species, recorded from Rumania without precise locality by Kröber [1915, 1936], in 1918 by Thalhammer from Oradia, from Barnova by Lazar [1960] and from Sibiu and Magura Cisnadie by Weinberg [1967]. Dates: April, May and August; Smith [1959] also gives the flight period in Great Britain until August.

Material Examined: Ploiesti Reg. — Voinesti 24, V. 1950 1 \$ (X. Scobiola). Brasov Reg. — Cisnadiora 16, VI. 1948 1 \$, Magura Sibiu 1 \$ (E. Worell).

Conops elegans Meigen, 1824

A southern species known from South Italy (Sicily), South France, Cyprus, Syria, Sinai and North Africa. From Rumania recorded for the first time, all the documentary material being taken in South-Eastern Rumania. Dates: June and July.

Material Examined: Dobrogea Reg. — Letea 14.—15. VII. 1962 3 σ and 3 \circ \circ 4 M. Weinberg), Periprava 16.—25. VII. 1964 4 σ \circ and 4 \circ \circ (X. Scobiola and N. Savulescu), Agigea 15. VI. 1964 1 σ and 2 \circ \circ (X. Scobiola).

Conops strigatus Wiedemann, 1824

A European species known troughout Europe with the exception of its northern parts and from Caucasus. In central Europe a rather common species from July to September.

We have not found this species in the revised material but there are two literary records concerning its distribution in Rumania. Lazar [1960] records *Conops strigatus* from Cheile Bicazului and Weinberg [1967] from Sadului valley. Dates: August.

Conops scutellatus Meigen, 1804

A European species known from Belgium and Central and South Europe. It is recorded from Rumania by Kröber (1915), by Lehrer (1959) from Ciric, by Bankowska (1961) from Neptun and from Dumbrava Sibiu by Weinberg (1967). A rather common species. Dates: From June to the first half of September.

Material Examined: Brasov Reg. — Gradina Sibiu 28. VI. 1953 2 \$ 9 [E. Worell]. Bucuresti Reg. — Padurea Cernica 6. IX. 1963 1 σ [M. Weinberg].

Conops silaceus Wiedemann, 1824

A South European species, it has been known up to the present time only from Spain, France, Italy, Greece and Yugoslavia. Recorded from Rumania for the first time, it has been taken in Central and mainly in South Rumania. Dates: July and August.

Material Examined: Mures Autonoma Maghiara Reg. — Odorhei 24. VII. 1965 19 (X. Scobiola). Bucuresti Reg. — Padurea Cernica 15. VIII. 1960 1 & (A. Rosca), 13. VIII. 1963 2 & & (X. Scobiola), Padurea Pasarea 6. VIII. 1962 1 & (X. Scobiola), 7. VIII. 1964 1 & (I. Draghia), Branesti 24. VII. 1964 1 & (Bradescu), Budesti 24. VII. 1965 1 & (X. Scobiola).

Conops flavipes Linnaeus, 1758

A species with a large area of distribution known throughout Europe eastwards as far as Eastern Asia and from North Africa. It has been recorded from Rumania by many authors, Strobl (1896) records it from Transylvania, Thalhammer (1918) from Alba Iulia, Brasov and Magura Cisnadie, Lehrer (1959) from Borsa, Lazar (1960) from Lacul Rosu, Suhardul Mare, Cheile Bicazului and Culmea Pocrov, Bankowska (1961)

from Valul Traian and Weinberg (1967) from Retazat Mts., Saschiz, Tibles Mts., Raul Sadului, Magura Cisnadie and Dumbrava-Sibiu. One of the commonest species of this family. Dates: From June to September.

Material Examined: Bacau Reg. — Valeni 26. VII. 1954 1 d and 2 9 9 (V. Iuga). Brasov Reg. — Sacele 6. IX. 1962 1 d (X. Scobiola). Banat Reg. — Herculane 7. VIII. 1964 1 d (N. Savulescu). Ploiesti Reg. — Cheiti valley 22. VIII. 1953 1 d, Ghiosesti 8. VIII. 1950 1 d (V. Iuga).

Conops ceriaeformis Meigen, 1824

This species is known from West, Central and South Europe, from the western part of the USSR as far north as the Latvian SSR and from North Africa. In Europe a generally distributed but never common species, it has been recorded from Rumania as recently as 1967 by Weinberg (from Dumbrava and Sibiului env.). We have also found this species in the revised material from other parts of Rumania. Dates: August and September. Chvála (1961) gives the flight period in Central Europe as early as from June to August, Smith (1959) in Great Britain from July to September.

Material Examined: Crisana Reg. — Balota 28. VIII. 1951 1 σ (V. Iuga). Brasov Reg. — Dumbrava Sibiu 27. VIII. 1954 4 σ σ , Gradina Sibiu 14. VIII. 1951 1 φ (E. Worell). Bucuresti Reg. — Padurea Pasarea 8. IX. 1962 5 σ and 1 φ , Padurea Cernica 6. IX. 1962 1 σ (M. Weinberg). Dobrogea Reg. — Periprava 3.—4. IX. 1965 3 σ and 3 φ φ (N. Savulescu).

Conops vitellinus Loew, 1847

This species is recorded from Holland, Hungary, South Europe and Asia Minor. It seems to be a South European species, the records of its occurrence in Czechoslovakia given by Vimmer (1913) were incorrect, this species was missidentified for *Leopoldius brevirostris* (Germ.); see also Chvála, 1961, p. 130.

We have not found this species in the revised material but it has been already recorded from Rumania by Lazar (1960) from Barnova and later by Bankowska (1961) from Letea.

Conops quadrifasciatus Degeer, 1776

A widely distributed species known from Europe, Asia Minor and Siberia. In Central Europe a very common species from June to September but it seems not to be so frequent in the southern parts of its area of distribution. It has been recorded from Rumania as recently as in 1952 by Moczar from Sebesului Mts., later by Lazar (1960) from Brebu, Cheile Bicazului, Suhardul Mare and Valea paraului Haghimas and by Weinberg (1967) from Saschiz and Retezat Mts. Dates: July to September.

Material Examined: Bacau Reg. - Slanic Moldova 26. VII. 1949 1'd (X. Scobiola).

Physocephala pusilla (Meigen, 1824)

A species with a southern distribution, known from southern parts of Central Europe (Czechoslovakia, Austria, Hungary), from South Europe, southern parts of the USSR, from Asia Minor, Eastern Asia and North Africa. The occurrence in southern parts of Czechoslovakia represents the northern border of its area of distribution. In Rumania a rather common species in south-eastern part. Recorded from Rumania for the first time by Bankowska (1961) from Valul Traian and more recently by Weinberg (1967) from Eforie Sud. Dates: June to September.

Material Examined: Dobrogea Reg. — Baneasa 17. VII. 1964 2 σ d, Hagieni 30.—31. VIII. 1964 1 σ and 1 φ , 26. IX. 1965 1 d, Comarova 27. VIII. 1964 2 σ d [M. Weinberg], Canaraua Fetii 17. VII. 1964 1 σ (N. Savulescu), Agigea 9. VIII. 1962 2 φ φ [I. Draghia], Periprava 15.—17. VII. 1964 1 σ and 1 φ , Valul Traian 7. VII. 1959 1 φ , 16. VII. 1955 1 σ , Techirghiol 29. VIII. 1954 1 φ [X. Scobiola].

Physocephala lacera (Meigen, 1824)

A southern species with an area of distribution similar to that of the previous species *P. pusilla*, it is known from southern parts of Central Europe, from Southern Europe, Asia Minor, Turkmenia, Syria and North Africa. A rare species recorded in Rumania only once by Bankowska [1961] from Letea (Delta Dunarii); we have seen another female. Dates: June and July.

Material Examined: Dobrogea Reg. — Agigea 25. VI. 1964 1 \$ (X. Scobiola).

Physocephala variegata (Meigen, 1824)

Another species with a typical southern distribution, it is known only from Austria, South Europe, southern parts of the USSR and from Asia Minor. The occurrence in Austria represents the northern border of its area of distribution. It seems to be a rather rare species in Rumania. The first record of its occurrence in Rumania is given by Lehrer (1959) who took one female at Agigea; another single female has been taken at Letea (Bankowska, 1961). Dates: July and August.

Material Examined: Dobrogea Reg. — Agigea 21. VII. 1964 1 & (M. Weinberg), Periprava 23.—25. VII. 1964 1 \$ (N. Savulescu).

Physocephala truncata (Loew, 1847)

A widely distributed species known from Central and South Europe, from western parts of the USSR, Asia Minor, Eastern Asia and North Africa. It seems not to be a rare species in Rumania, it was recorded in 1918 by Thalhammer from Transylvania, Biborteni, Odorhei and Oradea, and more recently by Bankowska (1961) from Letea (Delta Dunarii). Dates: June and July. The flight period given in Central Europe (Chvála, 1961) is from July to August.

Material Examined: Dobrogea Reg. — Periprava 17.—25. VII. 1964 1 σ and 1 φ [N. Savulescu), Letea — forest 15. VII. 1962 1 σ (A. P. Gorj), Agigea 15. VI. 1964 1 φ (X. Scobiola), 18.—19. VII. 1964 1 σ and 1 φ [M. Weinberg).

Physocephala chrysorrhoea [Megerle, 1824]

A species known from Belgium, Holland, Central and South Europe, European part of the USSR, South Siberia, Altai and North Africa. Widely distributed but never common, it has been recorded from Rumania by Thalhammer (1918) from Palota-Oradea, and by Lazar (1960) from Branova. Dates: May and July.

Material Examined: Dobrogea Reg. — Periprava 2. VII. 1963 1 d, 17. VII. 1964

1 9 (X. Scobiola), Letea — forest 15. VII. 1962 1 9 (A. P. Gorj).

In addition to this material we have at our disposal 2 males and 3 females which are somewhat different. 2 & & and 1 & were taken at Periprava (17.—22. VII. 1964, leg. X. Scobiola), 1 & at Agigea (19. VII. 1964, leg. I. Andrescu), all in Dobrogea Reg., and 1 & at Bacau (2. VII. 1951, leg. V. Iuga) in Bacau Reg. All these specimens show some resemblance to Physocephala furax Becker, 1913 especially regarding the wing pattern but the other characters (coloration of thorax and abdomen etc.) do not confirm that this species is involved. The exact determination calls for a more profound study of more extensive material and a study of all type-material of the Physocephala-species described by Becker (1913) in his "Persische Dipteren von den Expeditionen des Herrn N. Zarudny 1898 und 1901" is necessary.

Physocephala vittata (Fabricius, 1794)

A widely distributed species known throughout Europe with the exception of its western parts (England), from Asia Minor, Central and Southern Asia and North Africa. It is recorded from Rumania by Strobl (1896) from Transylvania and Ocna Sibiului, by Thalhammer (1918) from Oradea, Banat, Ocna Sibiului, Mehadia, and Sura Mica Sibiu, by Moczar (1952) from Sebesului Mts., and by Weinberg (1967) from Gusterita, Ocna Sibiului, Sura Mica, Techirghiol and Eforie Sud. Common species. Dates: From May to August.

Material Examined: Sucaeva Reg. — Corocaiesti forest 8. VIII. 1962 1 \$\frac{9}{2}\$ \$(M. Weinberg). Mures Autonoma Maghiara Reg. — Jigodin 18. VIII. 1950 1 \$\delta\$ \$(A. P. Gorj). Brasov Reg. — Ocna Sibiului 29. VI. 1943 1 \$\delta\$ \$(X. Scobiola). Ploiesti Reg. — Magura 1. VI. 1949 1 \$\frac{9}{2}\$ \$(V. Iuga). Oltenia Reg. — Filiasi 2.—3. VIII. 1951 2 \$\delta\$ \$\delta\$ and 1 \$\frac{9}{2}\$ \$(E. Dumitrescu). Bucuresti Reg. — Pasarea forest 7. VII. 1962 2 \$\frac{9}{2}\$ \$(M. Weinberg). P. VIII. 1961 1 \$\frac{9}{2}\$ \$(A. P. Gorj), Caldarusani 30. VI. 1959 1 \$\delta\$ \$(X. Scobiola), Cernica 29. V. 1956 1 \$\delta\$ \$(M. Weinberg). Dobrogea Reg. — Agigea 29. V. 1963 2 \$\delta\$ \$\delta\$ \$(X. Scobiola), 15. VI. 1964 2 \$\delta\$ \$(A. P. Gorj), 21.—23. VII. 1964 2 \$\delta\$ \$(M. Weinberg), Hagieni 1. V. 1949 1 \$\delta\$ \$(V. Iuga), 12. VIII. 1962 1 \$\delta\$ \$(I. Draghia), Periprava 15. VII. 1964 2 \$\delta\$ \$\delta\$ \$(A. P. Gorj), Comarova 5. VI. 1965 1 \$\delta\$, Valul Traian 21. VI. 1958 1 \$\delta\$ \$(M. Weinberg).

Physocephala rufipes (Fabricius, 1781)

This species has a large area of distribution throughout Europe (with the exception of Scandinavia), Asia Minor, Southern Siberia and mountains of Central Asia as far as Japan. In Rumania a rather frequent species recorded by Thalhammer (1918) from Tusnad and Orsova, and later by Lazar (1960) from Cheile Bizacului. Dates: July and August. In Central Europe as early as from May or June but sparsely in spring (Chvála, 1961).

Material Examined: Brasov Reg. — Sighisoara 17. VII. 1959 1 & (V. Iuga). Banat Reg. — Herculane 4. VII.—7. VIII. 1964 2 & & (N. Savulescu). Dobrogea Reg. — Periprava 13. VII. 1962 1 & and 1 & (W. Weinberg), 16. VII. 1964 1 & (A. P. Gorj), Letea 14. VII. 1962 2 & & (M. Weinberg), Rosetti 20. VII. 1964 1 & (X. Scobiola).

Myopinae

Zodion notatum Meigen, 1804

This species is known from West, Central and South Europe, from the European part of the USSR and North Africa. It is recorded from Rumania only by Thalhammer (1918) from Mehadia. An uncommon species. Dates: May and June. The short flight period is caused by an insufficient number of records from Rumania. In Central Europe the adults are to be found from May until the beginning of September (Chvála, 1965).

Material Examined: Bucuresti Reg. — Budesti 2. VI. 1964 1 J. Dobrogea Reg. — Agigea 28.—29. V. 1963 2 J J (X. Scobiola).

Zodion cinereum (Fabricius, 1794)

One of the commonest species of the family Conopidae, with a large area of distribution. Known from Europe, Asia Minor, mountains of Central Asia and from North Africa. It was recorded from Rumania as early as in 1876 by Frivaldszky from Baziasi, later by Strobl (1896) from Transylvania, by Kröber (1915, 1936) from Rumania without precise locality, by Lehrer (1959) from Agigea, and by Bankowska (1961) from Sulina and Crisan. Dates: From the end of May until September.

Material Examined: Crisana Reg. — Giurtelec Simleu 31. VII. 1957 1 \$\frac{7}{2}\$, Uilac Simleu 2. VIII. 1957 1 \$\frac{7}{2}\$ (X. Scobiola), Baile Victoria 8. VIII. 1964 1 \$\frac{7}{2}\$ (C. Nagy). Galati Reg. — Odobesti 8. VI. 1950 1 \$\frac{7}{2}\$ (V. Iuga). Oltenia Reg. — Arcani 31. VII. 1956 1 \$\frac{7}{2}\$ and 1 \$\frac{7}{2}\$ (V. Iuga). Bucuresti Reg. — Branesti 24. VII. 1964 2 \$\frac{7}{2}\$ (V. Bradescu). Dobrogea Reg. — Agigea 18. VI. 1958 1 \$\frac{7}{2}\$, 19. VII. 1964 1 \$\frac{7}{2}\$ (M. Weinberg), 10. VIII. 1962 1 \$\frac{7}{2}\$ (I. Draghia), 27.—28. V. 1963 2 \$\frac{7}{2}\$, Tulcea 26. VII. 1963 1 \$\frac{7}{2}\$ Babadag 19. VI. 1963 1 \$\frac{7}{2}\$ and 1 \$\frac{7}{2}\$, 29. VI. 1956 1 \$\frac{7}{2}\$, Techirghiol 17. VI. 1958 1 \$\frac{7}{2}\$ (X. Scobiola), Magurele 2. VI. 1949 1 \$\frac{7}{2}\$, Brosteni 27. VIII. 1949 1 \$\frac{7}{2}\$, Lespezi 18. VIII. 1960 1 \$\frac{7}{2}\$, Sarba 24. VIII. 1949 1 \$\frac{7}{2}\$ (V. Iuga).

Zodion carceli Robineau-Desvoidy, 1830

This species is known so far only from Central and South Europe (Germany, Poland, Austria, Hungary, France, Rumania) and from Asia Minor. Probably a widely distributed species in Europe but rare. In Rumania it is recorded by Lazar (1960) from Brebu. Dates: June to August.

Material Examined: Dobrogea Reg. - Valul Traian 21. VI. 1958 1 & (M. Weinberg).

Zodion grande Kröber, 1915

A southern species known up to the present time only from Italy, Rumania and Asia Minor (Brussa). Kröber (1915) described this species (female only) from Dobrogea in Rumania, another female was taken by Bankowska (1961) at Sulina and we have found in the revised material a single female from Baneasa. Rare species. Dates: July.

Material Examined: Dobrogea Reg. — Baneasa 17. VII. 1964 1 9 (M. Weinberg).

Myopa dorsalis Fabricius, 1794

A widely distributed species known from Norway, Denmark, Belgium, Central, South and East Europe, Caucasus, Transcaucasus, from Asia Minor to as far as Central Asia and India and from North Africa. In Rumania it is recorded from Oradea by Thalhammer (1918), and from the Dobrogea Region from Agigea (Lazar, 1960), Eforie Sud and Techirghiol (Weinberg, 1967). A rather common species in Rumania, especially in south-eastern parts. Dates: June and the beginning of July. Séguy (1928) gives the flight period in France as early as from April, in Central Europe from May (Chvála, 1965). It will be surely taken in Rumania at earlier dates.

Material Examined: Bacau Reg. — Sagna 9. VII. 1951 1 $^{\circ}$ (V. Iuga). Bucuresti Reg. — Urziceni 27. VI. 1954 1 $^{\circ}$ (X. Scobiola). Dobrogea Reg. — Agigea 15.—25. VI. 1964 3 $^{\circ}$ and 2 $^{\circ}$ (N. Savulescu, X. Scobiola, A. P. Gorj and M. Weinberg), Hagieni 7. VI. 1964 1 $^{\circ}$ (N. Savulescu), 19. VI. 1965 1 $^{\circ}$ (A. P. Gorj), Valul Traian 19. VI. 1958 1 $^{\circ}$ (Comarova 5. VI. 1965 1 $^{\circ}$ (M. Weinberg).

Myopa variegata Meigen, 1804

This species is known from almost the whole Palaearctic region, throughout Europe (with the exception of its western parts), from Asia Minor, Arabia, Central Asia, Siberia ar far as the Far East, Mongolia and China. It was recorded from Rumania as recently as 1967 by Weinberg from Ocna Sibiului. Dates: July. A species with a very long flight period, from the end of April (Chvála, 1965) to September (Séguy, 1928 and Zimina, 1963).

Material Examined: Galati Reg. - Vidra 23. VII. 1962 1 & (A. Rosca).

Myopa fasciata Meigen, 1804

A widely distributed species known from almost the whole Palaearctic region, throughout Europe (with the exception of its northern parts) as far as the Far East, Mongolia and China. In Rumania a widely distributed but uncommon species recorded by Strobl (1896) from Ocna Sibiului, by Thalhammer (1918) from Ocna Sibiului and Mehadia, by Moczar (1952) from Sebesului Mts. and by Lazar (1960) from Bucegi Mts. Dates: July and August.

Material Examined: Ploiesti Reg. - Brosteni 27. VIII. 1949 1 9 (V. Iuga).

Myopa occulta Wiedemann, 1824

A species known from England, Belgium, Central and South Europe, from the European part of the USSR, Caucasus, Transcaucasus, Iran, South Siberia, Far East and North Africa. The first record of its occurrence in Rumania is given by Bankowska [1961] from Sinaia. A rare species. Dates: July. In Central Europe a more frequent species with the flight period from May to August (Chvála, 1965), according to Zimina [1963] in the USSR until the beginning of September.

Material Examined: Ploiesti Reg. — Voinesti 24. VII. 1957 - d (X. Scobiola).

Myopa picta Panzer, 1798

A widely distributed species known from Belgium, Central, South and East Europe, from Transcaucasus, Asia Minor, Central Asia, China, India and North Africa. A rather common spring species, but it was first recorded in Rumania only in 1959 by Lehrer from Ploiesti, later by Bankowska [1961] from Sinaia and Campina and by Weinberg [1967] from Techirghiol. Dates: From May to the beginning of July.

Material Examined: Bucuresti Reg. — Budesti 14. V. 1958 1 σ [X. Scobiola], Cernica 28. V. 1955 1 φ . Dobrogea Reg. — Hagieni 6. VI. 1965 1 σ [M. Weinberg].

Myopa buccata (Linnaeus, 1758)

Known throughout Europe and Asia (with the exception of its northern regions), from Japan and North Africa. One of the commonest species of this family, the adults are often to be found very early in the spring. It was recorded from Rumania first in 1960 by Lazar from the Buzaului valley and Agigea, Bankowska (1961) records this species from Sinaia and Weinberg (1967) from Cristian, Sighisoara, Magura Cisnadie, Sibiu, Sura-Mica and Techirghiol. Dates: From April to the end of August.

Material Examined: Brasov Reg. — Imprejurimile Sibiului 2. IV. 1945 2 $\ensuremath{\mathcal{S}}\xspace{\ensuremath{\mathcal{S}}}\xspace$

Myopa testacea (Linnaeus, 1759)

A species with a large area of distribution; known throughout Europe with the exception of Finland, throughout Asia to Japan and from North Africa. From Rumania it is recorded by Strobl (1896) from Transylvania, by Lazar (1960) from Lacul Rosu and Iasi, by Bankowska (1961) from Agigea and by Weinberg (1967) from Imprejurimile Sibiului, Ocna Sibiului and Sibiu. A common species but all the older literature on its distribution and occurrence must be verified because many records refer very probably to other closely allied species *Myopa polystigma* Rond., *M. extricata* Coll., *M. vicaria* Walk. and *M. strandi* Duda. Dates: From the end of April (?) to June. In Central Europe mainly in May and June, according to Zimina (1963) in the USSR as early as March but this record refers very probably to *M. vicaria* Walk. or *M. strandi* Duda.

Material Examined: Dobrogea Reg. — Valul Traian 9. VI. 1960 1 9 (M. Ionescu).

Myopa stigma Meigen, 1824

Known from a relatively small area of Central and South Europe, Asia Minor and Arabia. The only record of its occurrence in Rumania is given by Thalhammer (1918) from Campia Transilvanici. A rather rare species. Dates: May. In Central Europe in April and May (Chvála, 1965).

Material Examined: Ploiesti Reg. — Voinesti 18. V. 1961 1 9 (M. Weinberg).

Myopa extricata Collin, 1959

This species has been described only recently by Collin from England, Smith [1961] records it from Denmark and the Balearic Isles, and Chvála [1965] from Czechoslovakia, Poland and Germany. According to Zimina [1963] it has not been found in the USSR. It seems to be a rather common species in Europe but usually mistaken for *M. polystigma* Rond. or *M. testacea* L. In Rumania it is now recorded for the first time. Dates: From the end of April to the beginning of July. The flight period in Rumania corresponds quite well with that given from Central Europe (Chvála, 1965).

Material Examined: Cluj Reg. — Gheorghieni 5. VII. 1955 1 $\mbox{$\mathbb P$}$. Galati Reg. — Hanu Conache 11. V. 1956 1 $\mbox{$\mathbb C$}$ (V. Iuga). Ploiesti Reg. — Voinesti 23. V. 1950 1 $\mbox{$\mathbb C$}$ (X. Scobiola). Bucuresti Reg. — Cernica 28. IV. 1962 1 $\mbox{$\mathbb P$}$, 6. V. 1955 1 $\mbox{$\mathbb P$}$ (A. Rosca), Peris forest 4. V. 1963 1 $\mbox{$\mathbb C$}$. Dobrogea Reg. — Chilia Veche (Delta Dunarii) 7. V. 1964 1 $\mbox{$\mathbb P$}$ (X. Scobiola), Baneasa 2. VI. 1965 1 $\mbox{$\mathbb C$}$ (M. Weinberg), Greci 26. V. 1961 1 $\mbox{$\mathbb P$}$ (I. Sienkiewicz).

Myopa vicaria Walker, 1849

An Holarctic species known from Europe and North America. It has been recorded in Europe from England, Sweden, Poland, Czechoslovakia and Italy, it is very probably widely distributed in Europe and Asia but it has been separated in the European material only since 1959, when Collin's paper on the *Myopa*-species was published. An uncommon species, one of the earliest spring-species; in Rumania it is recorded now for the first time. Dates: From the end of March to the beginning of May.

Material Examined: Brasov Reg. — Sibiului env. 25. III. 1947 1 d, 2. IV. 1945 1 d. 4. V. 1946 1 d (E. Worell).

Melanosoma bicolor (Meigen, 1824)

This species is known from Central and South Europe, from the European part of the USSR, Asia Minor, Iran and North Africa. It has been recorded in Rumania by Thalhammer (1918) from Oradea and by Weinberg (1967) from Gusterita and Sibiu env. In southern parts of its area of distribution more frequent. Dates: June and July. According to Kröber (1925) as early as in April.

Material Examined: Bucuresti Reg. — Branesti 25. VII. 1964 1 \(\text{VI. Bradescu} \). Dobrogea Reg. — Canaraua Fetii 16.—17. VII. 1964 2 & \(\text{d} \) (M. Weinberg and N. Savulescu), Hagieni 5. VI. 1962 1 & (A. P. Gorj), 20. VI. 1964 1 \(\text{V} \) (X. Scobiola).

Melanosoma mundum Strobl, 1909

A little known species with a southern distribution, known from several localities in South Europe and North Africa. We have not found this species in the revised material but Bankowska (1961) took a pair in Valul Traian (19.—20. VI. 1959) and one female in Tehirghiol (26. VI. 1959), all in the Dobrogea Region.

Thecophora atra (Fabricius, 1781)

A widely distributed species known from Europe, Caucasus, Asia Minor, Siberia, Central and East Asia, India and North Africa. In Rumania it is recorded by Strobl (1896) from Transylvania and Bucegi, by Moczar (1952) from Sebesului Mts., by Lehrer (1959) from Barnova and Repedea, and by Bankowska (1961) from Baile Herculane, Agigea and Neptun. A very common species. Dates: May to September. In Central Europe to October.

Material Examined: Crisana Reg. — Ramusa 1. VI. 1964 1 \$\frac{2}\$ (Vl. Bradescu). Bacau Reg. — Sagna 9. VII. 1951 1 \$\frac{2}\$ (V. Iuga). Brasov Reg. — Sighisoara 13. VII. 1950 1 \$\delta\$ (X. Scobiola), Hertur 10. VII. 1950 1 \$\delta\$, Poplaca 30. IX. 1951 1 \$\delta\$, Magura 1. V. 1949 1 \$\frac{2}\$ (V. Iuga). Galati Reg. — Odobesti 9. VI. 1950 1 \$\delta\$, Golesti 1. IX. 1958 1 \$\frac{2}{7}\$, Piscu 8. VII. 1949 1 \$\delta\$ (X. Scobiola). Ploiesti Reg. — Golesti 12. VIII. 1949 1 \$\delta\$ (X. Scobiola). Oltenia Reg. — Rachiti 2. VIII. 1956 2 \$\delta\$ \$\delta\$ (V. Iuga). Bucuresti Reg. — Turnu Magurele 3. VI. 1949 1 \$\delta\$, Budesti 5. VII. 1949 1 \$\delta\$, Pasarea 25. VI. 1962 1 \$\delta\$ (A. P. Gorj), 7. IX. 1962 1 \$\delta\$ (N. Savulescu), Alexandria 31. V. 1958 1 \$\delta\$ (X. Scobiola), Branesti 24. VII. 1964 1 \$\delta\$ (Vl. Bradescu), Daresti 12. VI. 1949 1 \$\delta\$ (X. Scobiola). Dobrogea Reg. — Valul Traian 28. VIII. 1963 1 \$\delta\$ (St. Negru), Comarova 5. VI. 1965 1 \$\delta\$, 28. VIII. 1964 1 \$\delta\$ (M. Weinberg).

Thecophora pusilla (Wiedemann, 1824)

Known from Central, South and East Europe, Caucasus, Asia Minor, Syria, Siberia, Central Asia and North Africa. A very common species with an area of distribution similar to *Thecophora atra*, but it is lacking in West and North Europe. Recorded from Rumania as early as 1896 by Strobl from Transylvania, by Thalhammer (1918) from Bucegi and more recently by Moczar (1952) from Sebesului Mts., by Bankowska (1961) from Grindul Raducu (Delta Dunarii) and by Weinberg (1967) from Sighisoara, Sibiu and Transylvania. Dates: May to September.

Material Examined: Crisana Reg. — Baile Victoria 8. VIII. 1964 1 \(\) (C. Nagy). Ploiesti Reg. — Voinesti 28. V. 1943 1 \(\) (X. Scobiola). Oltenia Reg. — Arcani 31. VII. 1956 1 \(\) (V. Iuga). Dobrogea Reg. — Hagieni 26.—27. IX. 1965 2 \(\) \(\) Comarova 5. VII. 1965 1 \(\) (M. Weinberg).

Thecophora fulvipes (Robineau-Desvoidy, 1830)

A generally distributed species known throughout Europe, from Caucasus, Transbaikalia and North Africa. The first record from Rumania was given by Kröber in 1915 (as *Occemyia sundewalli* Zett.) without exact data, Bankowska (1961) records this species more recently from Techirghiol and Weinberg (1967) from Sibiu env. and Transylvania. Dates: June to September. In Central Europe from May to October (Chvála, 1965).

Material Examined: Bacau Reg. — Piatra Neamt 23. VIII. 1954 1 & (V. Iuga). Ploiesti Reg. — Mogos 29. VII. 1954 1 &, Plaetu 25. VII. 1954 1 \copp. Oltenia Reg. — Segarcea 8. VI. 1949 1 & (V. Iuga).

Thecophora longirostris Lyneborg, 1962

Up to the present time a very little known species described by Lyneborg (1962) from Austria and Asia Minor, Chvála (1965) records it from Poland. From *Thecophora distincta* (Wied.) it is well separated by its very long proboscis. Very probably a rare species. Now it has been found also in Rumania (a single female). Dates: August.

Material Examined: Oltenia Reg. — Rachitele 2. VIII. 1956 1 9 (V. Iuga).

Thecophora distincta (Wiedemann, 1824)

This species is known from Denmark, Central, South and East Europe, from Caucasus, Asia Minor, Armenian SSR and Turkestan. Never a common species, it has been recorded from Rumania by Kröber (1915, 1936) without exact data, Weinberg (1967) records it from Ocna Sibiului. Dates: From June to the beginning of October.

Material Examined: Cluj Reg. — Cluj 5. X. 1951 1 9. Galati Reg. — Odobesti 8. VI. 1950 1 of (V. Iuga). Bucuresti Reg. — Branesti 24. VIII. 1964 1 of (Vl. Bradescu)

Thecophora melanopa Rondani, 1857

Known from Central and South Europe, from central and southern regions of European USSR, West Caucasus, Asia Minor, Central Asia and North Africa. A species with a more southern distribution, widely distributed but everywhere scarce. In Rumania Bankowska (1961) took a single female in Valul Traian and we have seen in the revised material another pair. Dates: June to September.

Material Examined: Dobrogea Reg. — Hagieni 27. IX. 1965 1 ${\mathfrak E}$ (M. Weinberg), Dumbraveni 2. IX. 1964 1 ${\mathfrak P}$ (X. Scobiola).

Sicus ferrugineus (Linnaeus, 1761)

This species has been recorded from Europe, Asia, Japan and North Africa but the occurrence in Eastern Asia and Japan ought to be verified, it has been possibly mistaken there for *Sicus fusenensis* Ouchi and *Sicus abdominalis* Kröb. (see also Chvála, 1963). The commonest species of this family in Europe, from Rumania it is recorded by many authors; in 1876 by Frivaldszky from Oravita, by Strobl (1896) from Transylvania and Bucegi, by Kröber (1939) from "Rumania", by Moczar (1952) from Sebesului Mts., by Lehrer (1959) from Barnova and Bicaz, by Lazar (1960) from Cheile Bicazului and Manastires Neamt, Suhardul Mare and Haghimasului valley and from Brebu, by Weinberg (1967) from Paltinis, Dumbrava, Sibiu, Tampa Brasov, Ocna Sibiului and Dealul Lomp, Cozia, Comanesti, Tibles Mts. and Retezat Mts. Dates: June to August.

Material Examined: Crisana Reg. — Preluca Isei 3. VIII. 1960 1 $^{\circ}$, Baile Victoria 8. VIII. 1964 1 $^{\circ}$ (C. Nagy). Brasov Reg. — Sighisoara 8. VII. 1950 1 $^{\circ}$, Hertur 17. VII. 1950 1 $^{\circ}$, Brasov VII. 1952 1 $^{\circ}$ (X. Scobiola). Banat Reg. — Moldova Noua 28. VI. 1964 1 $^{\circ}$ (N. Savulescu). Oltenia Reg. — Runcu 30. VII. 1956 1 $^{\circ}$ (V. Iuga). Bucuresti Reg. — Comana 29. VI. 1964 1 $^{\circ}$ (N. Savulescu). Arges Reg. — Calimanesti 8. VII. 1943 3 $^{\circ}$ $^{\circ}$ (E. Worell), Rarau Mts. 11. VIII. 1965 1 $^{\circ}$ (A. P. Gorj).

Sicus abdominalis Kröber, 1915

A widely distributed and little known species, it is recorded from England, Central and South Europe (Poland, Czechoslovakia and Rumania), Transcarpathian Ukraine, Siberia, East Asia, China and India. It is recorded from Rumania by Chvála (1963) on the basis of a single female taken by A. Jenistea in August 1960 at Sinaia. We did not find this species in the revised material.

Dalmanniinae

Dalmannia puncata (Fabricius, 1794)

Known throughout Europe with the exception of its western parts, from Caucasus, Turkmenian and Kazachstan SSR, and from Asia Minor. An uncommon species, we have not found it in the revised material but Thalhammer (1918) records it from Mehadia (Banat Reg.) and Weinberg (1967) from Bradu Arvig and Magura Cisnadie (Brasov Reg.).

Dalmannia aculeata (Linnaeus, 1761)

A species with a predominantly southern distribution known from Central and South Europe, Caucasus, Armenian SSR, Asia Minor and North Africa. Everywhere an uncommon species, in Rumania it has been recorded by Strobl (1918) from Banat Region, and by Weinberg (1967) from Ocna Sibiului and Dealul Zakel. Dates: From June to the beginning of July. In Central Europe in May and June (Chvála, 1965).

Material Examined: Bacau Reg. — Trifesti Bacau 1. VII. 1951 1 9 (V. Iuga). Brasov Reg. — Dealul Zakel 3. VI. 1948 2 of of (E. Worell).

Dalmannia marginata (Meigen, 1824)

Known from Central and South Europe and from Asia Minor. A rare species with a southern distribution, the most northern occurrence known is from South Poland (Trojanowa, 1956). We have not found this species in the revised material but Thalhammer (1918) records it from Banat Region. An early spring-species, the adults occur in April and May (Chvála, 1965).

Summarv

On the whole 45 species of the family Conopidae (Diptera) have been found up to the present time in Rumania, 5 species are recorded here for the first time, they are: Conops elegáns Meig., Conops silaceus Wied., Myopa extricata Coll., Myopa vicaria Walk. and Thecophora longirostris Lyneb. The present paper is based on a large collection of the family Conopidae in the Muzeul de Istorie Naturale "Gr. Antipa", București.

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