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ON ESTONIAN *SCOLIOIDEA* (*HYMENOPTERA, APOCRITA, ACULEATA*)

The superfamily *Scolioidea* mainly inhabits the warm regions of the world, and is especially abundant in arid and semiarid areas. In Northern Europe, the superfamily is represented by a few species of which only two — *Mutilla europaea* L. and *Smicromyrme rufipes* (F.) have been noted in Estonia till now (Maavara, 1956; Luig, Talvi in press).

In the present paper the occurrence of ten species of *Scolioidea* in Estonia is considered. The data from the neighbouring areas of Latvia, Finland and the Leningrad Region have been presented for comparison.

Material and mapping

A total of 185 Estonian specimens from 62 localities (Fig. 1) were examined. The materials from the following collections were used: Estonian Natural Museum (Tallinn), Museum of Saaremaa (Kuressaare), Institute of Zoology and Botany of Estonian Academy of Sciences, Zoological Museum of Tartu University (Tartu), the collections of M. Heidemaa, T. Kesküla, J. Luig, and I. Süda (all in Tartu). The collection in Tartu University also comprises the main part of the materials collected in Estonia during the last century.

The records of rare species and all old records up to 1960 have been given in the text. The data, taken from the literature and museum catalogues and not indicated on labels are given in square brackets. The locality records have been plotted on the maps of the UTM grid system (squares 50×50 km), marking old records with circles and new records with dots. The radius of a dot corresponds to 10 km and each dot represents one or more localities close to each other.

TIPHIIDAE

1. **Tiphia femorata** Fabricius, 1775 (Fig. 2).

Earlier records: [1803—09, probably Estonia] 1 ♀ leg. G. A. Germann; Livl. (Livland) [the first half of the last century, probably Estonia] 3 ♀ ♀ leg. ?; Dorpat (=Tartu) [1875—82] 12 ♀ ♀ leg. M. Sagemehl; [Kasaritsa] 25. 7. 1881, 1 ♀, 22. 7. 1884, 1 ♀ leg. F. Sintenis.

New records: Papisaare, 10. 7. 1990, 1 ♀ leg. M. Heidemaa; Narva-Jõesuu, 16. 8. 1990, 1 ♀ leg. A. Tamm; Kuru, 7. 8. 1980, 1 ♀ leg. I. Süda; Põlva, 20. 7. 1971, 1 ♀ leg. H. Remm; Rõuge, 6. 8. 1971, 1 ♀ leg. H. Remm.

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2. **Tiphia ruficornis** (Klug, 1810).

Only one doubtful record [1803—09, probably Estonia] 1 ♂ leg. G. A. Germann.

3. **Methocha ichneumonides** Latreille, 1805 (Fig. 3).

Recorded only recently: Linnuse, 26. 6. 1987, 1 ♀ leg. J. Luig; Vaabina, 2.—17. 7. 1988, 2 ♀ ♀ leg. J. Luig; Piusa railway station, 24. 7. 1989, 1 ♀, 3. 8. 1990, 1 ♂ leg. J. Luig.

MUTILLIDAE

4. **Myrmosa atra** Panzer, 1801 (Fig. 4).

Earlier records: [1803—09, probably Estonia] 1 ♂ 1 ♀ leg. G. A. Germann; Dorpat (= Tartu) [1875—82] 2 ♂ ♂ leg. M. Sagemehl; [Tartu] 11. 6. 1882, 1 ♂ leg. F. Sintenis; [Kasaritsa] 25. 6. 1884, 1 ♂, 7. 7. 1896, 1 ♂ leg. F. Sintenis; [Audru] 1. 7. 1891, 1 ♂ 1 ♀, 26.—27. 7. 1898, 2 ♂ ♂ leg. F. Sintenis.

Recently recorded from 14 localities. 17 ♂ ♂ (16. 6.—7. 8.), 5 ♀ ♀ (30. 6.—28. 7.).

5. **Mutilla europaea** Linnaeus, 1758 (Fig. 5).

Earlier records: Kiddijerw (= Kiidjärve) 19. 7. 1849, 1 ♀ leg. A. E. Grube; Baltischport (= Paldiski) [the end of the last century] 1 ♀ leg. ?; [Mereküla] 2. 9. 1874, 1 ♂ leg. B. von Schrenck; Quellenst. (Quellenstein = Allikukivi) 22. 6. 1883, 1 ♂ leg. M. von zur Mühlen; Oismäe (in Tallinn) 28. 5. 1933, 1 ♀ leg. J. Miländer; Lohusalu, 25. 7. 1960, 1 ♀ leg. G. Reindorff.

Recently recorded from 15 localities. 15 ♂ ♂ (25. 6.—16. 8.), 9 ♀ ♀ (28. 5.—12. 8.).

6. **Mutilla marginata** Baer, 1848 (= *trifasciata* Radoszkowski, 1865) (Fig. 6).

Earlier records: Merreküll (= Mereküla) 22. 7. 1876, 1 ♀, 28. 6. 1878, 1 ♀, 8. 7. 1883, 1 ♂ leg. B. von Schrenck; Waiwara (= Vaivara) 23. 7. 1883, 1 ♀ leg. B. von Schrenck.

Recent records: Palmse, 22. 5. 1988, 1 ♀ leg. T. Talvi; Tamsalu, 4. 6. 1988, 1 ♀, 23. 6. 1990, 1 ♀ leg. A. Tamm; Uikala, 1. 8. 1982, 1 ♀ leg. I. Süda; between Tudu and Peressaare, 6. 8. 1970, 1 ♂ leg. K. Remm; Adomäe, 7. 8. 1970, 1 ♂ leg. K. Remm; Järvselja, 11. 7. 1982, 1 ♂, 27. 6. 1983, 1 ♀ leg. I. Süda.

7. **Smicromyrme rufipes** (Fabricius, 1787) (Fig. 7).

Earlier records: Dorpat (= Tartu) [1875—82] 4 ♂ ♂ 3 ♀ ♀ leg. M. Sagemehl; Vääna-Jõesuu, 24. 8.—2. 9. 1953, 4 ♀ ♀, 24. 8. 1956, 1 ♀ leg. G. Reindorff; Laulasmaa, 8. 9. 1958, 1 ♀ leg. G. Reindorff.

Recently recorded from 13 localities. 14 ♂ ♂ (11. 6.—10. 7.), 24 ♀ ♀ (29. 6.—31. 8.).

SAPYGIDAE

8. **Sapyga clavicornis** (Linnaeus, 1758) (Fig. 8).

Earlier records: [Tartu] 2. 5. 1881, 1 ♀ leg. F. Sintenis.

Recent records: Läätsa, 30. 6. 1990, 4 ♂ ♂ leg. J. Luig; Puise, 29. 6. 1970, 1 ♀ leg. K. Remm; Massiaru, 4. 6. 1990, 1 ♂ leg. J. Luig.

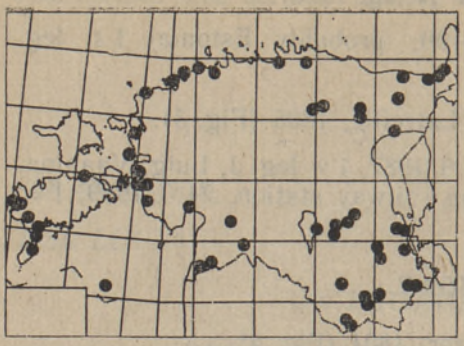

Fig. 1. The distribution of collecting localities.

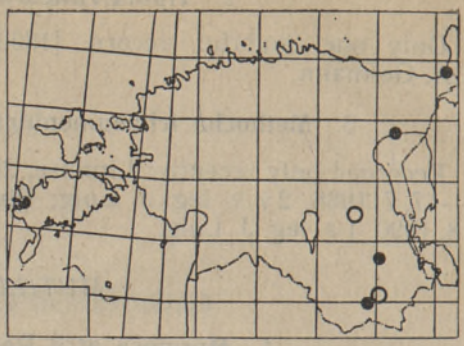

Fig. 2. *Tiphia femorata* F.

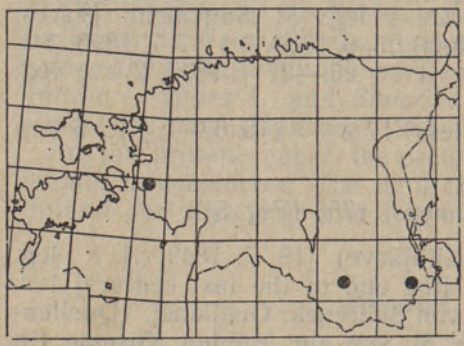

Fig. 3. *Methocha ichneumonides* Latr.

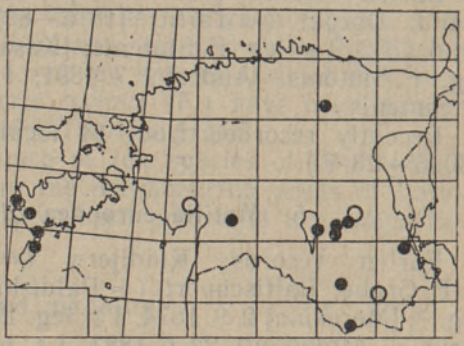

Fig. 4. *Myrmosa atra* Pz.

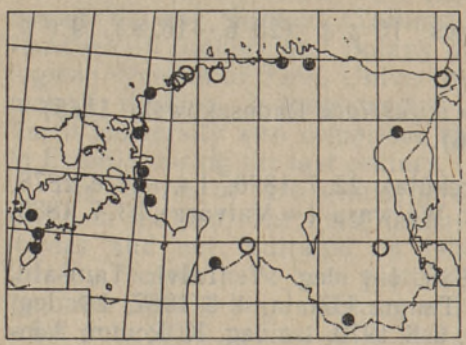

Fig. 5. *Mutilla europaea* L.

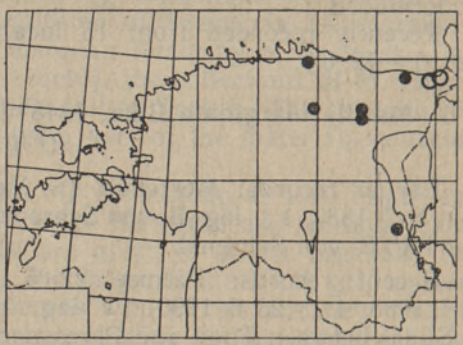

Fig. 6. *Mutilla marginata* Baer.

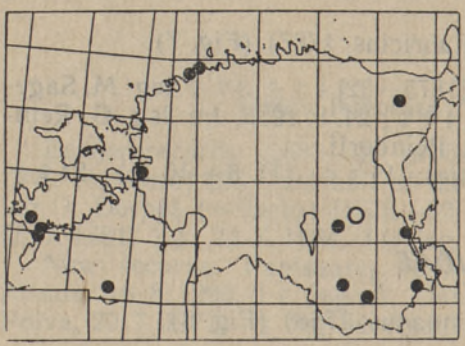

Fig. 7. *Smicromyrme rufipes* (F.).

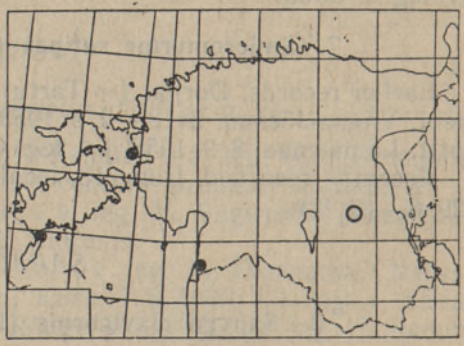

Fig. 8. *Sapyga clavicornis* (L.).

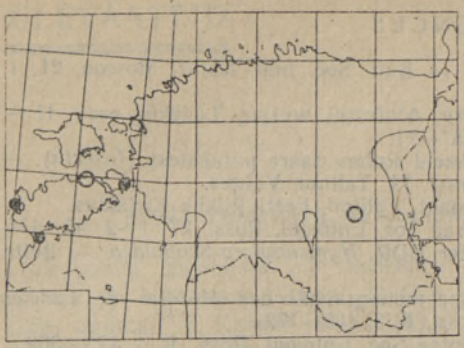

Fig. 9. *Sapyga quinquepunctata* (F.).

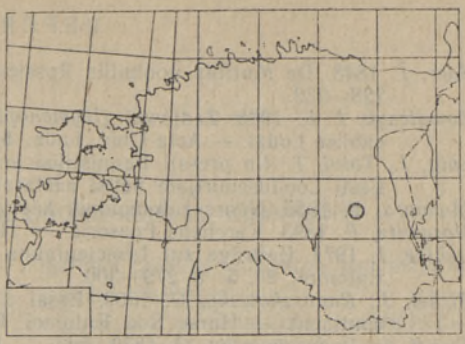

Fig. 10. *Sapyga similis* (F.).

9. **Sapyga quinquepunctata** (Fabricius, 1781) (Fig. 9).

Earlier records: [1803—09, probably Estonia] 1 ♀ leg. G. A. Germann; Dorpat (= Tartu) [1875—82] 6 ♂♂ 7 ♀♀ leg. M. Sagemehl; [Tartu] 9. 6. 1882, 1 ♀, 3. 6. 1883, 1 ♂ leg. F. Sintenis; Rannaküll (= Randküla) 23. 5. 1896, 1 ♀ leg. F. Poll.

Recent records: Suur-Vilsandi, 30. 6. 1990, 1 ♀ leg. M. Heidemaa; Läätsa, 30. 6. 1990, 1 ♀ leg. J. Luig; Kuivastu, 26. 6. 1990, 1 ♀ leg. J. Luig.

10. **Sapyga similis** (Farbicius, 1793) (Fig. 10).

Only old records: Dorpat (= Tartu) [1875—82] 2 ♀ ♀ leg. M. Sagemehl.

On the basis of this paper and the data from the neighbouring areas, the following remarks can be made concerning the distribution of the *Scolioidea* species. A total of eleven species of *Scolioidea* have been found in Finland, the Leningrad Region, Estonia, and Latvia out of which six are common in all the four areas (Morawitz, 1893; Баровский, 1922; Тобиас, 1978; Tumšs, 1976; Vikberg, 1986). Only one of them, *Tiphia minuta* Lind., has not been found in Estonia. Its occurrence here is quite possible because it occurs in all the other neighbouring areas. Of these mentioned areas *T. ruficornis* has been recently found only in five localities in Latvia. Besides Estonia and the Leningrad Region (found only from Levashovo) *Mutilla marginata* has been recorded in the USSR, in the South Ukraine (Kirovograd, the type locality), the Caucasus and the Southern Urals (Orenburg, the type locality of *M. trifasciata* Radoszkowski) (Baer, 1848; Sichel, Radoszkovsky, 1869, 1870; Morawitz, 1893; Лелей, 1985). Outside the USSR the species occurs in Poland, Germany, Austria, Switzerland, Hungary, Roumania, Bulgaria, Italy, Spain, and Syria. In Germany *M. marginata* is confined to the areas between 520—1200 m above sea level (Oehlke, 1974; Лелей, 1985; Kowalczyk, 1988). It is remarkable that in Estonia in more than one hundred years the species has been recorded only in the north-eastern and eastern part of the country, while the other, bionomically similar species, *M. europaea* occurs all over the territory. On the basis of presented information it appears that *M. marginata* has presumably a disjunctive distribution of the boreo-mountainous type. *Sapyga clavicornis* has been reported in the neighbouring areas except for the Leningrad Region. *S. quinquepunctata* is absent only in Finland, and the northern limit of its distribution in the Leningrad Region extends almost to 60° N.

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ÜLEMSUGUKONNAST *SCOLIOIDEA (HYMENOPTERA, APOCRITA, ACULEATA)* EESTIS

On esitatud ülemsugukonna *Scolioidea* kümne liigi leiuandmed Eestis. Kaheksat nendest märgitakse Eestis esmakordselt. UTM-süsteemis kaartidel (ruutudega 50×50 km) on leiukohad enne 1960. aastat näidatud sõõridega ja pärast seda aega punktidega. Tõenäoliselt esineb Eestis, nagu ka naaberaladel Soomes, Leningradi oblastis ja Lätis kokku, üksteist liiki ülemsugukonnast *Scolioidea.*

Яан ЛУИГ

О НАДСЕМЕЙСТВЕ *SCOLIOIDEA (HYMENOPTERA, APOCRITA, ACULEATA)* В ЭСТОНИИ

Представлены данные о десяти видах *Scolioidea* в Эстонии. Восемь из них отмечены для Эстонии впервые. На картах с разграфкой УТМ (квадраты 50×50 км) показаны их местонахождения до (кружки) и после (точки) 1960 года. Исходя из данных по смежным территориям (Финляндия, Ленинградская область, Латвия), можно предположить, что на территории Эстонии обитают одиннадцать видов *Scolioidea.*