

Some Faunistic Records on The Scoliidae (Insecta:Hymenoptera) Species in Balıkesir,İzmir, Manisa and Muğla Provinces

Ayla TÜZÜN, Nil BAĞRIAÇIK¹

Abstract: This study is based on 204 specimens belonging to the family of Scoliidae collected during the field surveys in the vicinities of Balıkesir, İzmir, Manisa and Muğla provinces, between the years 1979-1980. At the end of the study, the following 5 species belonging to 3 different genera have been determined: *Colpa* (*Colpa*) *sexmaculata* (Fabricius,1781), *Colpa* (*Heterelis*) *q.quinquecincta* (Fabricius,1793), *Megascolia* *bidens* (Linnaeus,1767), *Scolia h. hirta* (Schrank,1781), *Scolia* (*Scolia*) *s. sexmaculata* O.F. Müller,1766.

Key words: Hymenoptera, Scoliidae, Turkey, Fauna

Balıkesir, İzmir, Manisa ve Muğla İlleri Scoliidae (Insecta: Hymenoptera) Türleri Üzerinde Bazı Faunistik Kayıtlar

Özet: Bu araştırma, 1979 - 1980 yılları arasında Balıkesir, İzmir, Manisa ve Muğla illerinden toplanan 204 örneğe dayanmaktadır. Araştırma sonunda 3 cinse bağlı 5 tür tespit edilmiştir: *Colpa* (*Colpa*) *sexmaculata* (Fabricius,1781), *Colpa* (*Heterelis*) *q.quinquecincta* (Fabricius,1793), *Megascolia* *bidens* (Linnaeus,1767), *Scolia h. hirta* (Schrank,1781), *Scolia* (*Scolia*) *s. sexmaculata* O.F. Müller,1766.

Anahtar kelimeler: Hymenoptera, Scoliidae, Türkiye, Fauna

Introduction

Scoloids are constituting a quite small group among parasitoid Hymenoptera. They are widespread in tropical and temperate regions. Scoloids are generally large and pubescent wasps. Males are smaller than females. Because they are ectoparasites on larvae of Coleoptera inhabiting in the soil, they can be used for biological control. Their occurrence in a definite region in great numbers indicates that population density of Coleoptera species is high there.

Although scoloids have called attention for many years by their large bodies, faunistically they are not studied enough. Studies dealing with Turkish Scoliidae fauna are very limited either. These studies are not very expensive. In literary data 22 species are known from Turkey [1,2,3,4].

By this study it is aimed to determine Scoliidae species collected from of Balıkesir, İzmir, Manisa and Muğla provinces.

Material And Methods

This study is based on 204 specimens collected from Balıkesir, İzmir, Manisa and Muğla provinces between 1979 and 1980. Specimens collected by net and killed by killing bottles

¹ Ankara Univ. Fen Fak. Biyoloji Bölümü[06100]Tandoğan, Ankara

containing KCN. They are then prepared and preserved as museum materials in collection cupboards. Identification of species was made according to Berland [5], Betrem [4,6] in 1999. For taxonomical nomenclature Osten [7] has been followed. Identification keys to the species and examined material were known for this study.

Key to Species of Scoliidae

1. With one recurrent vein, one discoidal cell 2
- With two recurrent veins, two discoidal cells (Colpa)..... 4
2. With three cubital cells (Megascolia), third tergit of abdomen with two yellow spots, others black *Megascolia bidens*
- With two cubital cells (Scolia) 3
3. Second and third tergits of abdomen with two yellow spots, others black *Scolia sexmaculata*
- Second and third tergits of abdomen with large yellow band, others ferruginous..... *Scolia h. hirta*
4. Clypeus black, with yellow spots, inner margin of facet eyes with yellow spots, mediare segment with yellow spot of long in the middle and angular at sides. First, second and third tergits of abdomen with yellow spots, fourth, fifth and sixth of tergits with yellow bands *Colpa sexmaculata*
- Clypeus black, inner margin of facet eyes without spots, medier segments without spots in the middle. Between first and sixth segments of abdomen with narrow bands bending twice *Colpa q. quinquecincta*

Results

Colpa (Colpa) sexmaculata (Fabricius,1781)

Material examined (55♀♀, 85♂♂): Balıkesir: Ören, 14.08.1980, 1♀, Havran, 19.08.1980, 5♀♀; İzmir: Dikili, 12.07.1980, 1♀, 1♂; Gümüşsu, 01.07.1980, 1♀, 02.07.1980, 1♀, İllica, 08.07.1980, 15♀♀, 34♂, 09.07.1980, 5♀♀, 22♂♂ 10.07.1980, 8♀♀, 24♂♂; Manisa: Bozköy, 27.07.1980, 3♀♀, Keçili, 14.08.1980, 2♀♀, Millipark, 30.07.1980, 1♂; Muğla: Marmaris, 03.08.1979, 1♀; 06.08.1979, 12♀♀; 07.08.1979, 3♂♂.

Colpa (Heterelis) q.quinquecincta (Fabricius,1793)

Material examined (7♂♂): Balıkesir: Altınoluk, 10.08.1980, 1♂; İzmir: Seferihisar, 06.07.1980, 2♂♂, 07.07.1980, 1♂; Manisa: Millipark, 29.07.1980, 1♂, Dereköy, 02.08.1980, 1♂, Muğla: Marmaris, 03.08.1979, 1♂.

Megascolia bidens (Linnaeus,1767)

Material examined (9♀♀, 20♂♂): İzmir: İllica, 08.07.1980, 3♀♀, 14♂♂, 09.07.1980, 5♀♀, 6♂♂, 10.07.1980, 1♀.

Scolia h. hirta (Schrank,1781)

Material examined (7♀♀, 8♂♂): İzmir: Gümüşsu, 02.07.1980, 1♀, Tire, 05.07.1980, 1♀, Dikili, 13.07.1980, 1♀, 1♂; Muğla: Marmaris, Uzunyalı, 03.08.1979, 1♂, 04.08. 979, 1♀, 2♂♂, 06.08.1979, 1♀, 3♂♂, 08.08.1979, 1♀; Muğla: Bodrum, Gümbet, 10.08.1979, 1♀, 1♂.

Scolia (Scolia) s. sexmaculata O.F. Müller,1766

Material examined (4♀♀, 9♂♂): İzmir: İllica, 08.07.1980, 1♀, 3♂♂, 09.08.1980, 2♀♀, 5♂♂, 10.07.1980, 1♀, 1♂.

Conclusion

In this Study 5 species from 3 genera belonging to Scoliidae family were identified. From the faunistical standpoint the results could be concluded are as follows: *Colpa sexmaculata* has been known from İzmir and Muğla provinces; by this study it is newly recorded from Balıkesir and Manisa provinces. *Colpa q. quinquecincta* has been known from İzmir and Muğla; by this study it is newly recorded from Balıkesir and Manisa provinces. *Megascolia bidens* is newly recorded from İzmir province.

Reference

1. Osten, T., Özbeş, H., **Beitrag zur Kenntnis der Scoliiden - Fauna der Türkei (ohne Zypern) mit Anmerkungen zur Systematik und Taxonomie (Hymenoptera, Scoliidae)**. Entomofauna 20 (28): 429-444 (1999).
2. Osten, T., **Beobachtungen an Scoliiden (Hymenoptera) in der Türkei**. Linzer biol. Beitr. 31/1: 449-457 (1999).
3. Madl, M., **Über Vespidae, Pompilidae, Scoliidae und Tiphiidae der Turkei (Hymenoptera)**, Linzer Biol. Beitr. 29(2):823-827 (1997).
4. Betrem, J.G., **Beitrag zur Kenntnis der paläarktischen Arten des Genus Scolia**. Tijdschr. Entom. 78: 1-78 (1935).
5. Berland, L., **Fauna de France Vol.10, Hyménoptères Vespiiformes I. (Sphegidae, Pompilidae, Scoliidae, Sapygidae, Mutillidae)**. Lechevalier, 354 pp., Paris (1925).
6. Betrem, J.G., **Bemerkungen über die paläarktischen Scoliiden**. Verh. XI. Int. Kongr. Ent. Wien. 1: 247-250 (1960).
7. Osten, T., **Kritische Liste der paläarktischen Scoliiden. (Hymenoptera, Scoliidae)**. Entomofauna 20(27): 422-428 (1999).