Turk J Zool
26 (2002) 305-307

Research Article

Micrommata virescens (Clerck, 1757), a New Species for the Spider Fauna of Turkey (Araneae, Sparassidae)

Abdullah BAYRAM
Department of Zoology, Faculty of Arts and Sciences, Kırıkkale University, 71450 Yahşihan, Kırıkkale - TURKEY
Sevda ÖZDAĞ
Directorate of National Education, 09000 Aydın - TURKEY

Received: 17.01.2001

Abstract: The morphological characteristics of *Micrommata virescens* (Clerck, 1757), which is recorded for the first time in Turkey, are given.

Key Words: *Micrommata virescens*, Sparassidae, Araneae, Taxonomy, Turkey

Türkiye Faunası İçin Yeni Bir Örümcek Türü, *Micrommata virescens* (Clerck, 1757) (Araneae, Sparassidae)

Özet: Türkiye'den ilk kez kayıt edilen *Micrommata virescens* (Clerck, 1757)'in morfolojik özellikleri verilmiştir.

Anahtar Sözcükler: *Micrommata virescens*, Sparassidae, Araneae, Taksonomi, Türkiye

Introduction

Sparassid spiders are tropical in their distribution. Most species have been described from tropical regions. A few species are Palearctic (1,2). So far, in *Micrommata*, the only species that has been recorded from Europe is *M. virescens* (3,4). In Turkey, *M. ligurina* (Koch C.L., 1845) was recorded from Bodrum by Dalmas (5). In Sparassidae, also, *Eusparassus dufouri* Simon, 1932, *E. walckenaeri* (Audoin, 1826), *Heteropoda variegata* (Simon, 1874) and *Olios argelasius* (Walckenaer, 1805) have been recorded from Turkey (6).

This paper deals with the characteristic features of *Micrommata virescens* (Clerck), and adds a species to the spider fauna of Turkey.

Materials and Methods

One male specimen and one female specimen were investigated in the study. Both specimens were recorded from Didim forests (Aydın). The male specimen was collected on a *Pistacia* tree on 01.08.1999, and the female specimen on a *Styrax* tree on 18.09.1999. The specimens were preserved in 70 % ethanol. The identification and drawings were made by means of a SMZ10A Nikon stereomicroscope with a camera lucida.

Diagnosis and Discussion

Species Diagnosis Key

1 (2) In female, prosoma and legs are yellowish – dull green; epigyne is black, longer than broad, in anterior, distance between the arms of the 'V' shaped shield is narrow, posterior point of 'V' reaches the middle; in male, tibial apophysis is gutter shaped, and broad in the base, blunt in the apical; tibia IV with two dorsal spines; opisthosoma is brown with blackish cardiac band ..... *M. ligurina*

2 (1) In female, prosoma and legs are bright emerald green; epigyne is blackish, broader than long, in anterior, distance between the arms is wide, posterior point does not reach the middle; in male, basal part of tibial apophysis wide and cylindrical, apical part is thorn shaped; tibia IV with one dorsal spine; opisthosoma is yellowish with claret red cardiac band ..... *M. virescens*

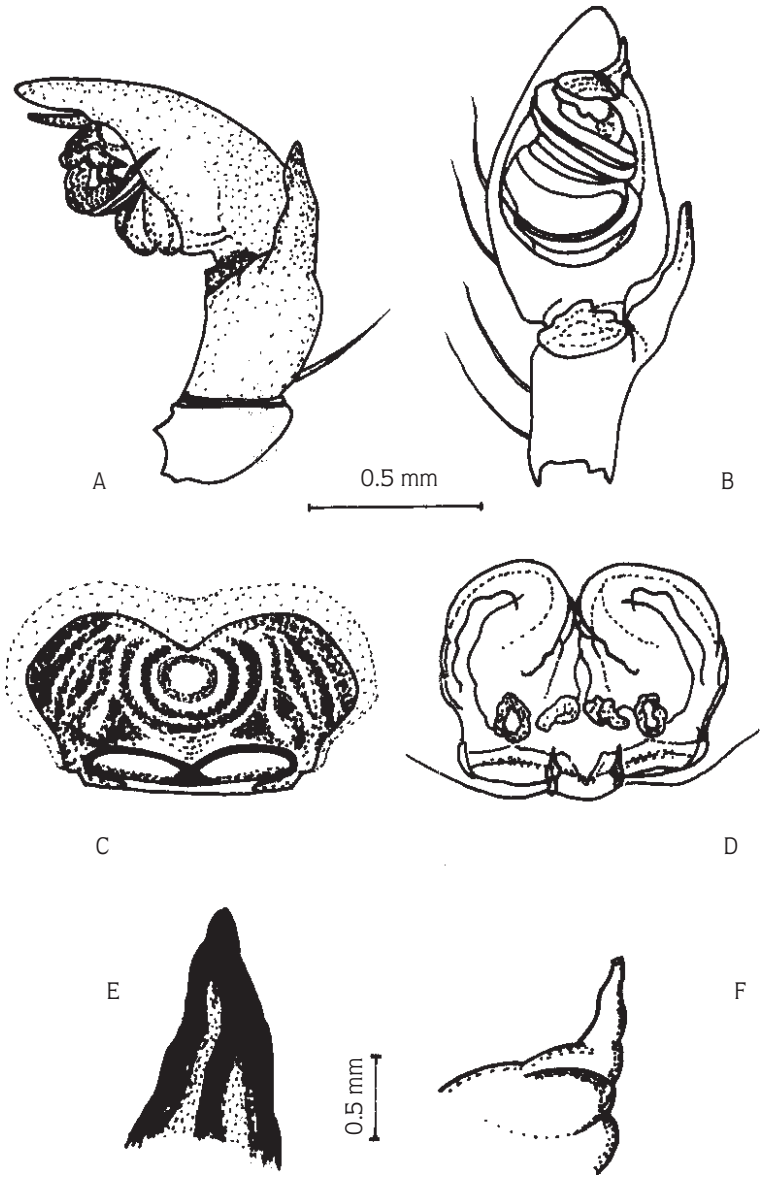

Fig. 1. Genital structures of *Micrommata virescens*. Male palp, lateral (A), male palp, ventral (B), female epigyne, ventral (C), female vulva, ventral (D), male tibial apophysis, dorsal (E), male palpal embolus, ventral (F).

Micrommata virescens (Clerck, 1757)

(Syn. *Micrommata rosea*, *M. viridissima*)

Measurements in female, total length: 13.2 mm. Carapace: Length 4.6 mm, width 3.2 mm. Opisthosoma: Length: 9.4 mm, width 5.2 mm. In male, total length: 8.8 mm. Carapace: Length 3.5 mm, width 2.3 mm. Opisthosoma: Length: 4.9 mm, width 2.0 mm.

In female, carapace and legs are bright emerald green, but opisthosoma is yellowish green, and there is a deeper green cardiac band near its base. In male, carapace and legs are a rather somber dull green, but slim opisthosoma is gold on top with a broad, red-brown central band and reddish sides. In the center of the thoracic region, a narrow dark fovea present. Eyes are ringed with white hairs in two rows; anterior row is recurved while posterior row is slightly procurved. Inner margins of chelicerae armed with two strong teeth; well-defined cheliceral scopula present. Maxilla with brown scopula. Sternum yellowish green. Legs are very long; tarsi not much longer than one-third of the metatarsi; tarsal and metatarsal scopula composed of long hairs; foot-claws with numerous teeth. Male palps with black tibial apophysis (Fig. 1A,B), epigyne with circular chitinous shields (Fig. 1C), vulva structure as in Fig. 1D.

According to Roberts (7,3) and Heimer and Nentwig (4) this species occurs more often on green leaves of long grasses and bushes in Europe. In this study, the specimens were found on the leaves of young *Pistacia* and *Styrax*. Most species of this family have been described from South America, Africa, southeastern Asia and New Guinea (1,2). *Micrommata ligurina* is a Mediterranean species. It has been recorded from southern Europe, northern Africa, Yugoslavia, Greece and the southwest part of Turkey (Bodrum) (1,2,6). However, *M. virescens*, being a Palearctic species, has a wider distribution. So far, it has been found in southern England, Spain, the Canary and Madeira Islands, Germany, Italy, Greece, Algeria, southern Russia, Syria, Israel, Afganistan and Japan (8-11). It is recorded for first time from Turkey in this study.

Some authors discussed that *Micrommata* species might travel with tropical fruits in ships to Palearctic countries (12,7).

The color and design of our specimens are similar to those of European specimens, but the prosoma is dark green in European specimens in both sexes. In our specimens, the body length is 8.8 mm in the male, and 13.2 mm in the female while the European limits are 7-10 mm for males, and 10-15 mm for females. In addition, no significant differences have been determined in genital structures. The palp and epigyne resemble those of German and Russian specimens (4,10). In the palps of our specimens, the embolus and tibial apophysis are not very pointed, as described in Roberts (3,7) and Heimer and Nentwig (4) (Fig. 1E-F).

References

1. Brignoli, P.M., A catalogue of the Araneae described between 1940 and 1981, Part II, Manchester, 1983, Manchester University Press, 379 pp.
2. Platnick, N.I., Advances in spider taxonomy 1981-1987, Part II, Manchester, 1989, Manchester University Press, 357 pp.
3. Roberts, M.J., Spiders of Britain and Northern Europe, Bath, 1995, Harper Collins Publishers, 449 pp.
4. Heimer, S. and Nentwig, W., Spinnen Mitteleuropas: Ein Bestimmungsbuch, Berlin, 1991, Parey Verlag, 543 pp.
5. Dalmas, R., Liste d'araignees de Boudroom en Asie Mineure suivi d'une etude des especes Mediterranees du genre Habrocestum, 1920, *Ann. Mus. cıv. Stor. Nat. Genova*, pp. 57-69.
6. Karol, S., Türkiye Örümcekleri, I. Ön Liste, Ankara, 1967, Ankara Üniversitesi Fen Fakültesi Yayınları No 109, 34 sh.
7. Roberts, M.J., The spiders of Great Britain and Ireland, Vol. I., Colchester, 1985, Harley Books, 229 pp.
8. Barrientos, J.A. and Urones, M.C., La coleccion de areneidos del Departamento de Zoologia de la Universidad de Salamalnca, V: Aranas, clubionoideas y tomisoideas, 1985, *Boln Asoc. Esp. Entomologia* 9: 349-366.
9. Wunderlich, J., Die Spinnen der Kanarischen Inseln und Madeiras: Adaptive Radiation, Biogeographie, Revisionen und Neubeschreibungen, West Germany, 1987, Triops Verlag.
10. Tyschchenko, V.P., Identification Key to Spiders of the European USSR, Leningrad, 1971, Opred Faune USSR 105, 281 pp.
11. Mikhailov, K.G. and Fet, V.Y., Contribution to the spider fauna (Aranei) of Turkmenia. I. Families Anyphaenidae, Sparassidae, Zoridae, Clubionidae, Micariidae, Oxyopidae. Sb. Trud. Gos. Zool. Muz. 24: 168-186,
12. Locket, G.H. and Millidge, A.F., British spiders, Vol. I, London, 1991, The Ray Society.