

Short Communication

Faunistic study on Pompilidae (Insecta: Hymenoptera) family in Ankara, Kirikkale, and Çankiri provinces

Mehmet Ali Kirpik

Kafkas University, Faculty of Sciences and Arts, Department of Biology, 36100, Kars/Turkey.
E-mail: kirpik80@hotmail.com. Tel: +90543-5563157.

Accepted 15 December, 2008

In this study that comprises Ankara, Kirikkale and Çankiri provinces, 30 specimens in total were collected, and 6 species belonging to Turkey Pompilidae (Hymenoptera) family were identified as new records in Turkey fauna. The locality and members of these specimens are shown in this material. Their distribution is also studied in this work.

Key words: Insects, hymenoptera, pompilidae, fauna, Ankara, Kirikkale, Çankiri, Turkey.

INTRODUCTION

The main object of this study is to give new records in addition to the specimens belonging to Turkey fauna. Hymenoptera is one of the orders that has the largest types and sample specimens. Pompilidae family has 4000 - 4500 species in the world (Day, 1988) and 230 species in Turkey (Özbek et al., 1999, 2000). In identification and naming of family groups, the studies of Day (1988), Özbek et al. (1999, 2000), Wahis, (1986) and Wolf, (1966, 1971) were used. The samples are kept in Entomology Museum in the Department of Biology, the Faculty of Science and Letters, Kafkas University. Study area is the Central Anatolia which is in the Middle of Eastern, Northern, Southern and Western Anatolia. Most of the Pompilidae species are solitaire and very few of them have semi-social life. Female members of Pompilidae are also called spider bees since they prey on spiders for their larvae (Day, 1988).

MATERIALS AND METHODS

In the study, thirty (30) samples were collected with net from early in the morning until late in the evening between the dates April 2000 and September 2004 in the region. Collected samples were killed in the bottles with KCN (potassium cyanide) and ethyl acetate, and they were brought to the laboratory in the boxes with the label information. In the laboratory new collected specimens were immediately prepared and the samples that were collected before were prepared after being softened in humidity container. In the preparation, only strafor was used.

RESULTS

It is aimed to determine Pompilidae species of the pro-

vinces Ankara, Kirikkale and Çankiri. In this study, species determined from work field are given below.

Evagetes parifomarvicus (Sustera, 1924)

Examined material

1♀, at the altitude of 800 m, on the 23rd September 1999 in Ayaş and Ankara. 1♀, at the altitude of 1200 m, on the 16th September 1999, in Elmadağ and Ankara. 2♀♀, at the altitude of 850 m, on the 11th June 2001, in Etlik, Keçiören and Ankara. 1♀, at the altitude of 1000 m, on the 5th October 1999, in Yakacık, Yenimahalle and Ankara. 4♀♀, at the altitude of 1040 m, on 18th September 2003, in Yakacık, Yenimahalle and Ankara.

Distribution in the world

England, Germany and Albania (Day, 1988; Wolf, 1971, 1995).

Dicyrtomellus tingitanus (Wolf, 1988)

Examined material

4♀♀, 1♂ at the altitude of 950 m, on the 29th September 1998 in Çubuk, Ankara. 1♀, 1♂ at the altitude of 1000 m, on 27th July 2000 in Keklikpınarı, Çankaya and Ankara. 1♀, at the altitude of 1300 m, on 5th August 1999, in Elmadağ and Ankara. 1♀, at the altitude of 1000 m, on 1st

August 2001, in Kıbrısköy, Mamak and Ankara.

Distribution in the world

Bulgaria, Yugoslavia, Greece, Italy, England, Uzbekistan (Day, 1988; Priesner, 1968; Wolf, 1971, 1995, 1999).

Tachygetes kasakistanicus (Wolf, 1987)

Examined material

1 ♀ at the altitude of 1350, on 8th September 1999, in Durhasan, Çubuk and Ankara.

Distribution in the world

Asiatic Russia, Turkmenistan, Kyrgyzstan, Tajikistan and Kazakhstan (Ozbek et al., 1999; Wolf, 1987, 1994).

Tachygetes gussakowskiji (Wolf, 1987)

Examined material

1 ♀, 1 ♂ at the altitude of 1100 m, on 26th September 2000, Yahşihan and Kırıkkale.

Distribution in the world

Tajikistan (Wolf, 1971).

Arachnospila abnormis (Dahlbom, 1842)

Examined material

3 ♀♀ at the altitude of 800 m, on 23rd September 1999, Ayaş and Ankara. 4 ♀ at the altitude of 1350 m, on 8th September 1999, Durhasan, Çubuk and Ankara. 1 ♀ at the altitude of 950 m, on 30th July 2000, Ilgaz and Çankırı.

Distribution in the world

Norway, Sweden, Finland, France, Middle Europe, Russia, Hungary, Bulgaria, Italy, China, Mongolia (Wolf, 1971).

Priocnemis rufazonatus (Costa, 1887)

Examined material

1 ♀ at the altitude of 900 m, on 22nd July 2001 in Kaçarlı, Şereflikoçhisar, Ankara.

Distribution in the world

Greece (Ozbek et al., 1999, 2000).

DISCUSSION

Study area is situated in both Palearctic and the Central Anatolia in Zoogeographic regions. Thus the location of the study area that covers the middle part of the Central Anatolia is of great importance in case of species diversity. The distribution of the specimens in the world examined in this study confirms that the above mentioned species are of European origin. *Evagetes pariformarvicus* and *Nanoelavelia leucopterus* are of European origin, *Dicyrtomellus tingitanus* is of European and Caucasian origin, *Arachnospila abnormis* is of Northern, Western, and Eastern Palearctic origin. *Priocnemis rufazonatus* was solely recorded in Greece and *Tachygetes aegyptiacus* was solely recorded in Egypt. With the investigation of *Priocnemis rufazonatus* in Europe in the West and Caucasus in the North, the real distribution area of this species will be determined. Besides, *T. aegyptiacus* that was only recorded in Egypt was also found in Turkey. This result requires a detailed examination of this species in Europe and Caucasus. With the determination of real fauna when a detailed study is carried out in a wider area, the numbers of new records will increase in Turkey.

ACKNOWLEDGMENTS

I would like to thank Prof. Dr. Heinrich WOLF (Studiendirektor i.R. Uhlandstrabe 15 D-58840 Plettenberg, Deutschland) for his precious contribution to the identification of the species.

REFERENCES

- Day CM (1988). Spider Wasps. Hymenoptera: Pompilidae. Handbooks for the Identification of British Insect. R. Entom. Soc. London. Vol. 6, Part 4.
- Özbek H, Yıldırım E, Wolf H, Wahis R (2000). The Pompilidae (Hymenoptera, Aculeata) Fauna of Turkey. Part II: Pompilinae. Zool. Middle East. 21: 109-128.
- Özbek H, Yıldırım E, Wolf H, Wahis R (1999). The Pompilidae (Hymenoptera, Aculeata) Fauna of Turkey. Part I: Ceropalinae and Pepsinae. Zool. Middle East 18: 91-105.
- Priesner H V (1968). Zur Kenntnis der Pompiliden (Hymenoptera) der Türkei. Sitzungsberichte, Abteilung I, *Biologie, Mineralogie, Erdkunde und verwandte Wissenschaften*. 176: 44-60.
- Wahis R (1986). Catalogue Systematique et Codage des Hymenopteres Pompilides de la Region Quest-Europeenne. Notes Fauniques de Gembloux. 12: 91.
- Wolf H (1966). Bulletin De La Societe Entomologique Suisse, Band XXXIX Heft 1 u. 2.
- Wolf H (1971). *Prodromus* Der Hymenopteren Der Tschechoslowakei. Acta Faun. Ent. Mus. Nat. Pragae, 14(Suppl. 3): 1-176.
- Wolf H (1987). Zur Kenntnis der Gattung *Tachygetes* Haupt, 1930 (Hymenoptera, Pompilidae) III. Linzer Biol. Beitr. 19/2: 415-459.

- Wolf H (1990). Bemerkungen Zu Einigen Wegwespen-Arten (Hymenoptera: Pompilidae (V), Linzer Biol. Beitr. 22/1: 247-285.
- Wolf H (1994). Zur Kenntnis der Gattung *Tachyagetes* Haupt, 1930 (Hymenoptera, Pompilidae) V. *Linzer Biol. Beitr.* 26/2: 907-921.
- Wolf H (1995). Über bekannte und unbekannte Wegwespen (Hymenoptera, Pompilidae) aus Turkmenistan, *Linzer Biol. Beitr.* 27/2: 887-900.

- Wolf H (1999). Bemerkungen zu einigen Wegwespen-Arten (Hymenoptera, Pomilidae) (VI.), *Linzer Biol. Beitr.* 31/1: 167-181.