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***A NEW RECORD FOR TURKISH ASILIDAE  
(INSECTA:DIPTERA)FAUNA : PAMPONERUS GERMANICUS  
(LINNAEUS, 1758)***

Hakan ÇALIŞKAN

**ABSTRACT** : In this study, *Pamponerus germanicus* (Linnaeus) was recorded for the first time in Turkish robber flies fauna. The specimens were collected from Eskisehir province in 1994. Short descriptions of these species are given below.

**KEYWORDS** : Diptera, Asilidae, new record, *Pamponerus germanicus*, Turkish fauna.

***TÜRKİYE ASİLİDAE (INSECTA:DIPTERA) FAUNASINA YENİ BİR  
KAYIT: PAMPONERUS GERMANICUS (LINNAEUS, 1758)***

**ÖZET** : Bu çalışmada *Pamponerus germanicus* (Linnaeus) Türkiye Asilidae faunası için ilk kez kaydedilmiştir. Örnekler 1994 yılında Eskişehir ilinden toplanmıştır. Bu tür ile ilgili kısa deskripsiyon verilmiştir.

**ANAHTAR KELİMELER** : Diptera, Asilidae, yeni kayıt, *Pamponerus germanicus*, Türkiye Faunası.

## ***I. INTRODUCTION***

The Robber flies (Diptera Asilidae) are distributed through all parts of the world. Approximately 148 genus consist of 1600 species of robber fly are known to present in the Palearctic region. Because of their predatory habit of feeding on other insects and their voracious appetites, they contribute to the maintenance of the natural balance among insect populations. The robber flies are aggressive aerial predators of other insects. Most robber flies inhabit in warm countries and they have been collected particularly numerous in savanna, steppe and desert regions. Considerably fewer robber flies are found to be in forests where they occur in glades and on river banks [1].

Up to date, many Asilids species have been reported for Turkish fauna by the following investigators: Giray [2], Hayat and Alaoğlu [3, 4], Hayat and Özbek [5, 6], Kovár and Hradský [7], Weinberg and Hayat [8, 9], Hasbenli et. al. [10, 11], Hasbenli and Bayraktar [12], Hasbenli and Geller-Grimm [13], Geller-Grimm and Hradský [14], Tomasovic [15-18], Bosak and Hradský [19], Çalışkan [20, 21], Çalışkan and Şahin [22], Hayat and Çalışkan [23] Alpay et. al. [24]. Among Asilids genus *Pamponerus* was listed the first time by Loew in 1849 with a single species as *Pamponerus germanicus*. To date, the genus only contains four species which are named as *P. germanicus*, *P. helveticus*, *P. epirus*, and *P. choreii* [25-27].

To the best of our knowledge, no species of this genus has been recorded for Turkey. In the present study, for the first time *Pamponerus germanicus* was recorded from Turkey.

## ***II. MATERIALS AND METHODS***

Specimens of Asilids were collected in Mayıslar village of Eskisehir (Turkey) in 1994. They were captured by an entomological net at the edge of a pine forest up to 300 m above sea level. All specimens have been deposited in Zoology Museum Collection, Eskisehir Osmangazi University. The identification of the specimens was performed under a Leica MZ16 stereomicroscope. Identification and comparison of the specimens was based on the structure of male genitalia [26-28].

### **III. RESULT AND DISCUSSION**

Analysis of the collected materials was resulted in a new record for Turkish fauna of the robber flies. The species was identified as *Pamponerus germanicus* according to the male genitalia as shown in the figure 1.

#### **Subfamily Asilinae**

*Pamponerus germanicus* (Linnaeus, 1758)

Sinonim: *Asilus/A.germanus* Jaennicke, 1867 / *A .praedator* Rossi, 1790 / *A. tibialis* Fabricius, 1794 / *A. undulatus* Villers, 1789 / *A. germanicus v.melaneurus* Loew, 1840/

Length: 17-21 mm; Wings: 12-15 mm.

Coloration: Body brownish, legs reddish and wings brown.

Head: Two times wider than height; upper margin of facial gibbosity distinctly angular; face tubercle with long white hairs, some upper hairs black.

Antennae: Near to each other; segment 1 longer than segment 2; segment 3 about longer than segment 1+2; style long and thin; ocellar tubercle distinct; ocellar and occipital setae black.

Thorax: Mesonotum with black short hairs; humeral callus with gray tomentum with weak hairs anteriorly; scutellum posteriorly with white hairs.

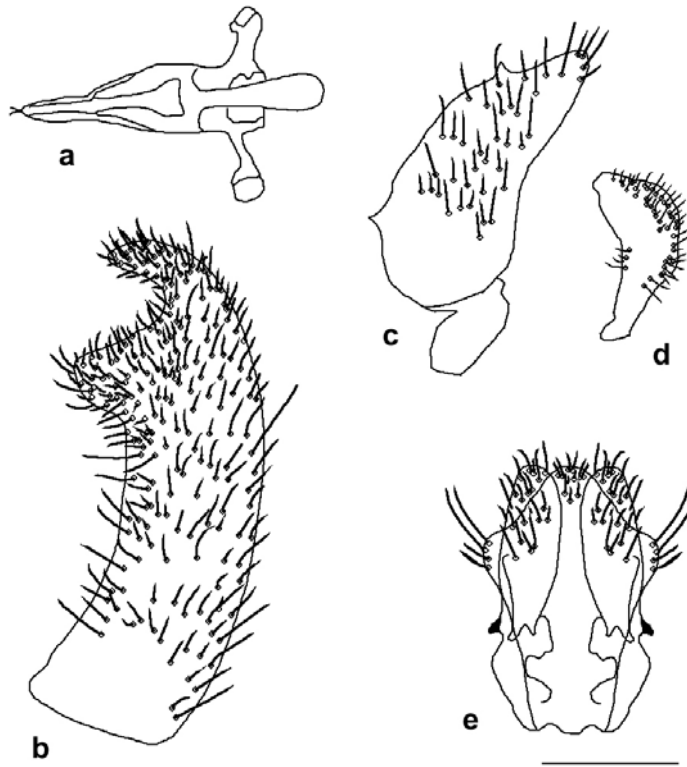
Wings: r1 closed; m3 closed,

Legs: Legs stout; Bristles numerous and stout. Femur of fore legs with about 20 stout setae, All femur black, all tibia reddish with interiorly black band.

Abdomen: Cylindroid, tergites black with dense yellowish hairs posteriorly, male hypopygium dark brown (figures 1-5).

General Distribution: Austria, Czech Republic/Slovakia, Denmark, Germany, United Kingdom, Finland, France, Italy, Hungary, Kazakhstan, The Netherlands, Norway, Poland, Romania, Sweden, Switzerland, USSR (Central European Territory, North European Territory, East Siberia, West Siberia), former Yugoslavia,

**Examined material:** Eskisehir (Mayıslar), (41°40' N / 26°31' E), 300 m., (19.04.1994), 3 ♂♂.



**Figure 1.** Male genitalia of *Pamponerus germanicus*,  
**a)** aedeagus, **b)** epandrium, **c)** gonocoxite, **d)** dististylus, **e)** proctiger (Scale: 1 mm).

*Pamponerus germanicus* are known as large brownish robber flies. These flies are usually seen rarely whereas they are widely distributed throughout the Europe [29-32]. Furthermore, *P. germanicus* is one of the characteristic species of the rush community located in the sandy, slightly salinized soil in the marshy alluvial plain up to 0-800 m above sea level [30-39]. Additionally, *P. germanicus* were recorded from the edge of a pine forest by Blöchlinger [40] and Romaniszyn [41]. Previously, Landrock [36] had recorded a large quantity of *P. germanicus* at the edge of the forest in Moravia (Czech Republic) in May. Here, the specimens were also captured at the edge of a pine forest near the Sakarya river in April whereas the number of flies was very low.

The specimens represented here were collected in 1994. Since then, any fly has been found in the same region. The area of this investigation is known as an important region for biodiversity.

Sakarya Valley is former ruins of a water path of Black Sea which was connected with Mediterranean Sea during the last ice age [42]. Height on the both sides of the valley is around 1200 -1500 m with a base 200 m from sea level. It is warm and humid because of the flow of Sakarya river. Due to the absence of any record from the region, it can be suggested that *P. germanicus* may be a rare species or has limited seasonal activities for the region. Similarly, *P. germanicus*, has been reported as a rare species by others [30-32]. On the other hand, examination of the collected *P. germanicus* showed similar morphology with species as reported by Drake [33] and Melin [37].

In a result of this investigation, *Pamponerus germanicus* as a first member of genus *Pamponerus* has been reported for the first time for Turkish fauna. The geographic distribution of the genus *Pamponerus* is currently unknown but still under investigation for Turkey.

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