

SCIENTIFIC NOTES

SOME ECOLOGICAL AND FAUNISTICAL NOTES ON INSECT FAUNA IN ŞAHAPLI STREAM (TURKEY: ELAZIĞ: BASKİL)**İnanç Özgen***, **Aykut Topdemir*** and **M. Şaban Tanyıldızı***

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Şahaplı is located in the south of Baskil district, Şevkat creek merging with the River Geli which is stemming from the creeks of Bulutlu Mountain near Kuluşağı, is the river flows into Karakaya dam lake (Anonymous, 2016). In recent years, the stream has been affected by domestic pollutants. Sewage wastes of Baskil are poured into this quarry. Because of this, biodiversity and its varieties in this stream and its vicinity are important. A detailed study on insect biodiversity in the vicinity of this stream has not been done yet. This study includes the results of surveys carried out in certain periods to determine insect biodiversity nearby the stream. In the study, glass jars with a diameter of 5 cm and a height of 10 cm were placed at the edge of the creek so that the tubulure part would be on the same surface as the soil layer. Ethylene glycol, vinegar or antifreeze was poured into the jars at a height of 4 cm and water was added to the other 4 cm clearance. The liquids in the jar-traps were brought to the laboratory by draining them into the culture jars with the aid of a strainer for 15 days. Species were separated into the family level and sent to experts for diagnosis. Besides, atrap sampling method has also been applied in order to collect the species found on weeds at the stream's waterfront. The study was carried out between April and October of 2015-2016.

RESULTS**COLEOPTERA****Carabidae*****Trechus quadristriatus* (Schrank, 1781)****Material examined:** Elazığ, Baskil, Şahaplı, 1220 m, 16.05.2016, 5 exs.**Distribution in Turkey:** Adana, Adyaman, Antalya, Bilecik, Bolu, Burdur, Bursa, Erzincan, Erzurum, Giresun Hatay İçel, Izmir, Manisa Muğla, Osmaniye, Sakarya (Tezcan et al., 2007).***Calathus melanocephalus* (Linnaeus, 1758)****Material examined:** Elazığ, Baskil, Şahaplı, 1220 m, 01.07.2015, 11 exs. leg. Özgen.**Distribution in Turkey:** Afyon, Ardahan, Artvin, Çankırı, Çorum, Diyarbakır, Erzurum, Erzincan, Eskişehir, Kars, Kayseri, Rize Tokat (Özgen et al., 2012; Fidan et al., 2014).**Cantharidae*****Rhagonycha fulva* (Scopoli, 1763)****Material examined:** Elazığ, Baskil, Şahaplı, 1220 m, 16.05.2016, 5 exs. leg. Özgen.**Distribution of Turkey:** Erzurum, Isparta (Yıldırım et al., 2011; Demirözer & Karaca, 2014).**Hydrophilidae*****Coelostoma transcaspicum* (Reitter, 1906)****Material examined:** Elazığ, Baskil, Şahaplı, 1220 m, 28.10.2016, 5 exs. leg. Özgen.

Distribution of Turkey: Bingöl (Mart et al., 2006).

Staphylinidae

Paederus mesopotamicus (Eppelsheim, 1889)

Material examined: Elazığ, Baskil, Şahaplı, 1220 m, 21.10.2016, 18 exs. leg. Özgen.

Distribution of Turkey: Sivas, Tunceli (Anlaş, 2009; Sert et al., 2013).

Gauropterus sanguinipennis (Kolenati, 1846)

Material examined: Elazığ, Baskil, Şahaplı, 1220 m, 11.7.2015, 2 exs. leg. Özgen.

Distribution in Turkey: Adana, Amasya, Ankara, Antalya, Batman, Bayburt, Bilecik, Bingöl, Bitlis, Bursa, Elazığ, Erzincan, Erzurum, Eskişehir, Gaziantep, Hakkari, Hatay, Iğdır, Isparta, İzmir, Kars, Kastamonu, Konya, Malatya, Manisa, Mersin, Muğla, Niğde, Sakarya, Siirt, Şırnak, Tunceli, Van, Zonguldak (Anlaş, 2009; Özgen et al., 2015).

Philonthus concinnus (Gravenhorst, 1802)

Material examined: Elazığ, Baskil, Şahaplı, 1220 m, 05.5.2015, 6 exs. leg. Özgen.

Distribution in Turkey: Adana, Ankara, Antalya, Ardahan, Bingöl, Bolu, Diyarbakır, Elazığ, Erzincan, Erzurum, Iğdır, Kayseri, Konya, Manisa, Mardin, Mersin, Tunceli (Anlaş, 2009; Özgen et al., 2015).

Cicindellidae

Calomera fischeri fischeri (M. F. Adams, 1817)

Material examined: Elazığ, Baskil, Şahaplı, 1220 m, 22.10.2016, 14 exs. leg. Özgen.

Distribution of Turkey: Adana, Adıyaman, Antalya, Alanya, Bingöl, Bursa, Çankırı, Çorum, Denizli, Gaziantep, Gümüşhane, Elazığ, Erzincan, Erzurum, Fethiye, Hakkari Hatay, İçel, İskenderun, İzmir, İnegöl, Kahramanmaraş, Kars, Kayseri, Kütahya, Malatya, Mardin, Muğla, Nevşehir, Pamukkale, Tokat, Tunceli, Siirt, Şanlıurfa, Silifke, Şanlıurfa (Avgin, 2006).

Hemiptera

Hydrometridae

Hebrus montanus (Kolenati, 1857)

Material examined: Elazığ, Baskil, Şahaplı, 1220 m, 21.10.2016, 15 exs. leg. Özgen.

Distribution of Turkey: Ankara, Bingöl, Gaziantep

Ochterus (Ochterus) marginatus marginatus (Latreille, 1804)

Material examined: Elazığ, Baskil, Şahaplı, 1220 m, 21.10.2016, 11 exs.

Distribution of Turkey: Adana, Elazığ, Niğde (Önder et al., 2006; Fent et al., 2011; Matocq et al., 2014).

Miridae

Alloeomimus unifasciatus (Reuter, 1879)

Material examined: Elazığ, Baskil, Şahaplı, 1200 m, 21.10.2016, 4 exs. leg. Özgen.

Distribution of Turkey: Kahramanmaraş (Önder et al., 2006).

In the study, a total of 96 individuals of 2 orders, 7 families and 11 species were collected. As a result, all species except *C. fischeri fischeri*, *O. marginatus*, *G. sanguinipennis* and *P. concinnus* were detected for the first time in the province of Elazığ along with the surrounding stream area. The vast majority of species are species that live in beach areas that prefer aquatic habitats. Besides, the detection of *C. transcaspicum* and *A. unifasciatus* in these habitats is the second record of their faunistic presence in our country. In addition, due to the substance of the secretion paederine secreted by the *P. mesopotamicus* strain collected in the study, it is among the species which should be particularly emphasized due to the feature of dermatitis formation. The possibility of an increase in the population of this beetle at the streamside has the feature of forming dermatitis cases. This municipal waste of the district will have negative effects on the insect populations, which will have negative effects on faunistic composition in the next years. It is important to carry out ecological and faunistic studies on this stream and its neighbour.

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LITERATURE CITED

- Anonymous**, 2016. 23 Elazığ. Elazığ province.blogspot.com/p/baskil.html. Alıntılama tarihi: 10.07.2016.
- Anlaş, S.** 2009. Distributional checklist of the Staphylinidae (Coleoptera) of Turkey, with new and additional records. Linzer Biologische Beiträge, 41 (1): 215-342.
- Avgn, S. S.** 2006. General Information and Tiger beetles *Cicindella herbacea*, *Calomera fisheri fisheri* and *Homodela ismenia kilikensis* collected from southeast of Turkey (Coleoptera: Cicindellidae). BAÜ. Fen Bilimleri Enst. Derg., 8 (2): 23-27.
- Fent, M., Kment, P., Çamur-Elipek, B. & Kirgiz, T.** 2011. Annotated catalogue of Enicocephalomorpha, Dipsocoromorpha, Nepomorpha, Gerromorpha, and Leptopodomorpha (Hemiptera: Heteroptera) of Turkey, with new records. Zoosystema, 2856: 1-84.
- Fidan, E. C., Şirin, Ü., Kısım, E., Destire, C. & Çalışkan, H.** 2014. Contribution to the knowledge of Carabidae fauna from Eskişehir Osmangazi Meşelik Kampüsü. Mun. Ent. Zool., 9 (1): 258-265.
- Önder, F., Karsavuran, Y., Tezcan, S. & Fent, M.** 2006. Heteroptera (Insecta) Catalogue of Turkey. İzmir: Ege Üniversitesi Ziraat Fakültesi, Turkey. 164 p.
- Özgen, İ., Şen, S. & Anlaş, S.** 2012. Diyarbakır İli Eğil İlçesi Mera-Meşe Ekosisteminde Üç Farklı Örnekleme Yönteminde Insecta Biyoçeşitliliği. 21. Ulusal Biyoloji Kongresi, 3-7 Eylül. İzmir. 1062-1063 s.
- Özgen, İ., Anlaş, S., Khachikov, E. A. & Temizer, A.** 2015. Contribution to the knowledge of Staphylininae (Staphylinidae, Coleoptera) in Elazığ province of Turkey. Journal of Entomological and Zoology Studies, 3 (1): 224-226.
- Sert, O., Turan, Y., Şabanoğlu, B., Anlaş, S. & Fırat, S.** 2013. Faunistical, Ecological and Zoogeographical Evaluations on the Subfamily Paederinae (Coleoptera: Staphylinidae) in the Central Anatolian Region of Turkey. Türk. entomol. derg., 37 (4): 477-492.