

A New Record for the Turkish Cladoceran Fauna: *Camptocercus uncinatus* Smirnov, 1971*

Banu YALIM

Department of Biology, Faculty of Science - Arts, Akdeniz University, Antalya - TURKEY

Received: 05.06.2000

Abstract: The occurrence of *Camptocercus uncinatus* Smirnov in Turkey is determined. A brief description and the necessary figures of the species are given.

Key Words: *Camptocercus uncinatus*, freshwater, new record, Turkey.

Türkiye Cladocera Faunası İçin Yeni Bir Kayıt: *Camptocercus uncinatus* Smirnov, 1971

Özet: Bu çalışmada *Camptocercus uncinatus* Smirnov türünün Türkiye'de bulunduğu ilk kez kaydedilmiştir. Bu türe ait gerekli şekiller ve özet bir deskripsiyon verilmiştir.

Anahtar Sözcükler: *Camptocercus uncinatus*, tatlısu, yeni kayıt, Türkiye.

Introduction

The genus *Camptocercus* Baird, 1843 (Cladocera, Chydoridae) has eight species in the world. Although some species of the genus show limited distribution, most of them are widespread in different regions. Some species show limited distribution. For example, *C. australis* Sars, 1896 live in Australia, *C. fennicus* Stenroos, 1898 in the northwest of European USSR (basin of rivers Pechora and Kolyma), *C. lilljeborgi* in European USSR (1, 2), *C. rotundus* Herrick, 1882 in Minnesota and *C. oklahomensis* Mackin, 1930 in the USA (1). The other species of the genus *Camptocercus* show widespread distribution in the world, i.e., *C. aloniceps* Ekman, 1900 in Africa, South America (1), *C. uncinatus* Smirnov, 1971 in White Nile (Sudan), Chita region (USSR), Romania, Israel and Syria (1, 2, 3) and *C. rectirostris* Shoedler, 1862 in Indo-Malayan regions, New Zealand, Europe, Asia and USA, with four subspecies (1, 2). To date, among these eight species only *C. lilljeborgi* has been recorded from Turkey (West Black Sea and Marmara regions) (4).

Properties of Yamansaz lake

Yamansaz is a freshwater lake located in the east of Antalya (Turkey) about 14 km from the city centre and 2 km from the coast of the Mediterranean Sea. It has about 15 km² surface area and 2-2.5 m depth.

The temperature of the water in Yamansaz begins to increase at the beginning of spring, reaching a maximum in July and then decreases in the middle of autumn (10°C in March to 27°C in July). Dissolved oxygen values are low during summer periods but it has been recorded as increasing during the spring and winter months (7.32 mg/l in March to 5.24 mg/l in July). In the study area, pH values vary between 7.22 and 7.78 (8).

Materials and Methods

Samples were collected monthly by using a 55 µm mesh-sized plankton net (5) from March 1997 to February 1998. The samples were fixed in alcohol (70%) in the field. Specimens were dissected in glycerol under a binocular stereomicroscope. Figures were drawn under a

* The study is a part of MS thesis completed in 1998.

compound microscope with the aid of a camera lucida (Figures 1-6).

Results

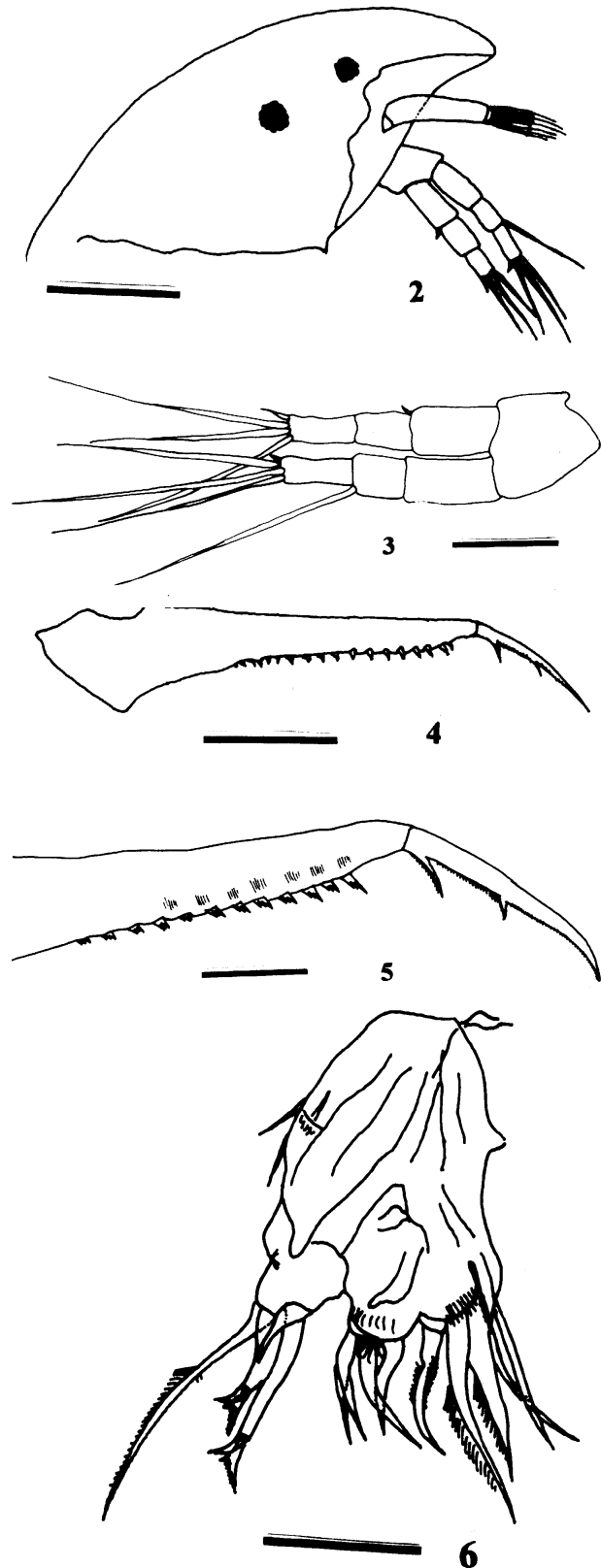
***Camptocercus uncinatus* Smirnov, 1971**

Description: Body curved. Rostrum blunt, ocellus situated slightly nearer to eye than to apex of rostrum (Figure 1). Antennules all reaching apex of rostrum (Figure 2); antennal seta formula $\frac{0-0-3}{0-3}$, antennal spin

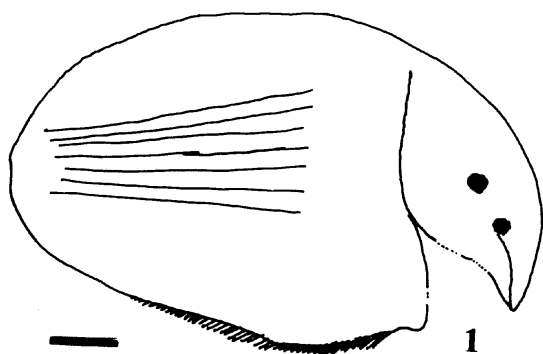
formula $\frac{1-0-i}{0-0}$ (6) (Figure 3). Posterior margin of the

valves curved and convex, ventral margin with setae, valves with distinct longitudinal lines laterally (7); postero-ventral corner of valves without denticles (Figure 1). Postabdomen with approximately 16 pointed anal denticles decreasing in size proximally, most anal denticles multicuspid (Figure 4); lateral denticles indistinct and forming groups (Figure 5); claw with a distinct denticle in the middle of concave side and with a row of setae proximally, setae decreasing towards the base; basal spine of claw tapering (Figure 5).

Leg I with 3 setae on outer branch of endite, one of them is shorter than other. The basal setule on both long setae is very large and hook-shaped (1) (Figure 6).



1 - 6: *C. uncinatus*, female:
 1- lateral view of body (scale 0.05 mm)
 2. antennule and rostrum (scale 0.1 mm)
 3. second antennae; antennal seta, antennal spin (scale 0.05 mm)
 4. postabdomen (scale 0.1 mm)
 5. claw (scale 0.05 mm)
 6. leg 1 (scale 0.05 mm)



Acknowledgements

I would like to thank my advisor Dr. Battal ÇIPLAK (Akdeniz University) and Dr. Ertunç GÜNDÜZ (Hacettepe

University) for their helpful comments on our study. This study was supported by Akdeniz University Research Fund (Project No: 9701012106).

References

1. Smirnov, N. N., Chydoridae fauni Mira, Fauna of the USSR. Crustacea. 1: (2), Leningrad, 1971, 531 p.
2. Negrea, S., T., Fauna rebuplici socialiste Romania: Crustacea, Cladocera. Academia Repiblicii Socialiste Romania. 4, 12, Bucaresti, 1983, 399 p..
3. Bromley, H. J. A., Checklist of the Cladocera of Israel and Eastern Sinai, Hydrobiologia, 257: 21-28, 1993.
4. Gündüz, E., Türkiye içsularında yaşayan Cladocera (Crustacea) türlerinin listesi, Tr. J. of Zoology, 21(1): 37-45, 1996.
5. Edmondson, W. T., A Manual on methods for the assessment of secondary productivity in freshwaters. Great Britain. 1971, 355 p.
6. Edmondson, W. T., Fresh-Water Biology. John Wiley and Sons Inc. New York, 1959, 1203 p.
7. Margaritora, G. F., Fauna d'Italia. Cladocera. Consiglio Nazionale Delle Ricerche, 1983, Italy, 168 p.