

**A RARE SPECIES RECORD FOR TURKEY: *Sisyra nigra*
(INSECTA, NEUROPTERA, SISYRIDAE)**

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ABSTRACT

*In this study male and female genital drawings, wing pictures, and morphological characters of *Sisyra nigra* which has records once before from Turkey and its world distribution are presented.*

Keywords: *Sisyridae, *Sisyra nigra*, Turkey*

**TÜRKİYE İÇİN NADİR BİR TÜR KAYDI; *Sisyra nigra*
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ÖZET

*Bu çalışmada daha önce Türkiye'den bir kez kaydedilen *Sisyra nigra*'nın dişi ve erkek genital çizimleri, kanat resimleri ve morfolojik karakterleri verilmiş olup dünyadaki yayılışları da sunulmuştur.*

Anahtar Kelimeler: *Sisyridae, *Sisyra nigra*, Türkiye*

1. INTRODUCTION

Neuroptera is commonly terrestrial order. Only two families Sisyridae and Neurorthidae which are belong to this order have aquatic stages. These families are largely aquatic. Neuroptera has 12 families in Europe. All of these families are distributed in Bulgaria and Greece [1]. Canbulat [2] indicated 193 species and 6 subspecies which are belong to 10 families except for Sisyridae and Neurorthidae. Rausch and Weißmair [3] added three new Sisyridae species to Turkish Neuroptera fauna. As a result,

Turkish Neuroptera fauna has 11 families, 195 species and 6 subspecies now.

Sisyridae which is a small family of Neuroptera has almost 50 species which is belong to cosmopolitan *Sisyra* and four genera [4]. But only 5 species of these are found in Europe [5]. This family has been recorded once before from Turkey [3].

Sisyridae eggs are laid on freshwater sponges. Larvae are found in deep lakes, slowly flowing streams and rivers to prey on sponges and bryozoon, but its pupal and prepupal stages are found in terrestrial habitats [6]. Adults which are nocturnal can be found near larval habitats.

In this study the wing venations and genital terminology of *Sisyra* is based on Aspöck *et al.* [7].

2. MATERIALS AND METHODS

Total 3 specimens were collected on July 2007. Specimens which have been killed in jar with ethyl acetate were labeled and prepared for museum. Genital drawings were made with Olympus CX41 with a drawing tube and Olympus IX81 and wing photos were taken with the same microscopes. Samples are deposited in Entomology Museum of Sakarya University.

2.1. Material Examined: 2♂♂, 1♀, TURKEY, Yalova, Altınova, Tevfikiye Village, 40°35'N/ 29°28'E, 292 m a.s.l., 20.07.2007.

2.2. World Distribution: *Sisyra* widely distributed in the Nearctic; USA, Canada and Palearctic area; Austria, Belgium, Bulgaria, Caucasian, Croatia, Czech Republic, Denmark, Early Yugoslavia, Estonia, Finland, France, Germany, Great Britain, Greece, Holland, Hungary, Iran, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Norway, Poland, Romania, Russia, Siberia, Slovenia, Spain, Sweden, Switzerland and Ukraine [5, 3].

2.3. Diagnostic Morphology: Head blackish brown; antenna monoliform; scapus and pedicellus brown; flagellum brownish basally, gradually becoming dark brown to black apically (Figure 1).

Forewing length of female 5,5-6 mm, male 4,5-5 mm; longitudinal veins brown and single file bristly, membrane more or less light brown, pterostigma darker than membrane, apex oval. R2 not forked, R1, R3, R4, R5 forked but R4 and R5 more deeply from edge than R1 and R3. Mp1 + Mp2 always forking into almost even branches to edge. Cua with 5 branches to edge. There are 1 cross veins between Sc and Rs + Ma and 3 radial cross veins (Figure 2).

Hindwing length of female 4,5-5 mm, male 3,5- 4 mm. Membrane mostly light brown, pterostigma darker than membrane. There are 2 radial cross veins. Forks of R2, R4, R5 are more deeply from edge than R3. Cua with 5 branches to edge.

Male and female genital drawings of *Sisyra nigra* are presented in Figure 3-4.



Figure 1. *Sisyra nigra*, male, without wings.

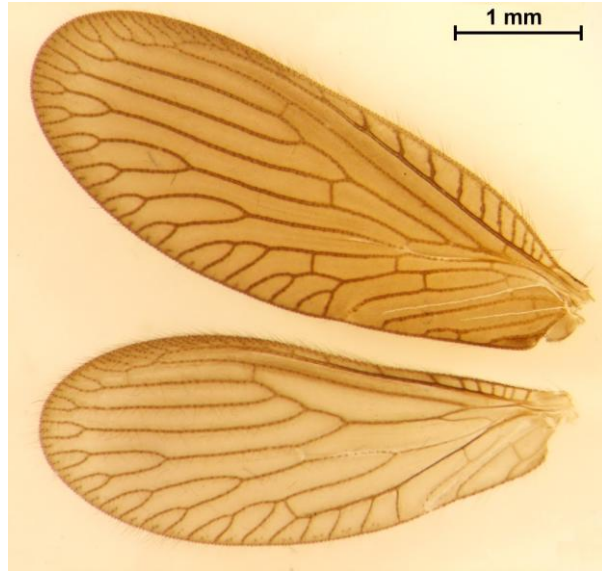


Figure 2. *Sisyra nigra*, wings.

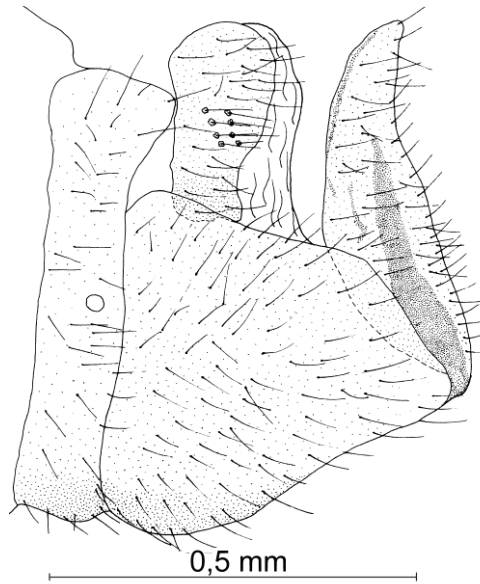


Figure 3. *Sisyra nigra*, female genitalia, lateral

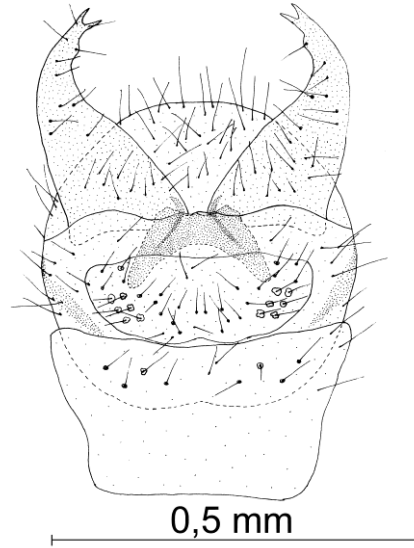


Figure 4. *Sisyra nigra*, male genitalia, ventral.

4. REMARKS

Sisyra nigra was firstly described in Denmark by Retzius in 1783. This species has been recorded from Bulgaria [1] which is neighbour country of Turkey. In 2007 Rausch and Weißmair [3] added 3 Sisyridae species to Turkish Neuroptera fauna. These species are *Sisyra corona* (founded Çanakkale province, 10m, June), *S. bureschi* (founded Balıkesir, Çanakkale and Manisa provinces, between 10-300 m, May and June) and *S. nigra* (founded Balıkesir, Çanakkale, Kırklareli and Manisa provinces, between 10-270 m, June). We found *Sisyra nigra* in July so *Sisyra* species are active between May and June. Due to their very small size, sponge-flies are not still well known in Turkey. We think that if the field works about Sisyridae are risen, the new species records are belong to this family will increase in Turkey.

5. REFERENCES

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