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Drunella andaluciaca sp.n. (Ephemeroptera, Ephemerellidae)
from Spain

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This paper includes the nymphal description of a new *Drunella* species from Spain, and a nymphal key for the Western Palaearctic *Drunella* species.

INTRODUCTION

In the Western Palaearctic Region the genus *Drunella* has been represented by *D. paradinasi* GONZALES DEL TANAGO et GARCIA DE JALON, 1983 from Spain, *D. euphratica* KAZANCI, 1987 and *D. karia* KAZANCI, 1989 from Turkey. The new species *Drunella andaluciaca* sp.n. is another representative of the genus *Drunella* in the Western Palaearctic Region.

DESCRIPTION

Drunella andaluciaca sp.n.

Mature nymph (female)

Length of body: 4–8 mm. Length of cerci: 4–6 mm.

Head: Head with distinctive tubercles, located in the middle of the vertex and covered with short setae (Figs. 1 and 2). Genae with slight projections (Fig. 1). Head yellowish brown with light brown spots. Second segment of antennae brown, remainders are yellow.

Mouth parts (Figs. 4–8): Terminal segment of maxillar palpus with four spines and second segment with one lateral seta (Fig. 5). Glossae a little longer than broad, paraglossae broad and slightly pointed at the apex, anterolateral edges of submentum pointed (Fig. 8). Labrum and hypopharynx are drawn in Figs. 3 and 7. The hypopharynx of *D. euphratica* (Fig. 9) is given for comparison.

Thorax: Pro- and mesothorax light brown with brown patterns. Pronotum with projections on the anterolateral edges. Pronotum with a single low median and low paired submedian tubercles with low lateral ridges. Mesonotum with a single low anteromedian, paired median, and single posterior tubercles between wing pads (Figs. 10 and 11).

Legs: All legs light brown without distinctive patterns, dorsal margin of femora without long hairs, insertion of stout spines on femora with slight protuberances (Figs. 12 and 13), tarsal claws with 9–11 denticles (Figs. 14 and 15).

Abdomen: Tergites 3–10 light brown median pattern (Fig. 16) and sternites with lateral stripes and median small rounded spots. Dorsal tubercles blunt and covered with spines between tergites 5–7 (Figs. 16 and 17). Whole tergite surface with mushroom-shaped structures without chagrin. Spines on the tergite margin stout and covered with hairs (Fig. 18). Cerci light brown without annulation and with long and thick spines on the posterior margin of each segment. Imago unknown.

Affinities: This new species belongs to the genus *Drunella* according to nymphal characteristics (ALLAN & EDMUNDS, 1962). *D. andaluciaca* sp.n. belongs to the *D. grandis* EATON group, and it seems to be similar to *D. paradinasi* GONZALES DEL TANAGO & GARCIA DE JALON, 1983 from Spain and *D. euphratica* KAZANCI, 1987

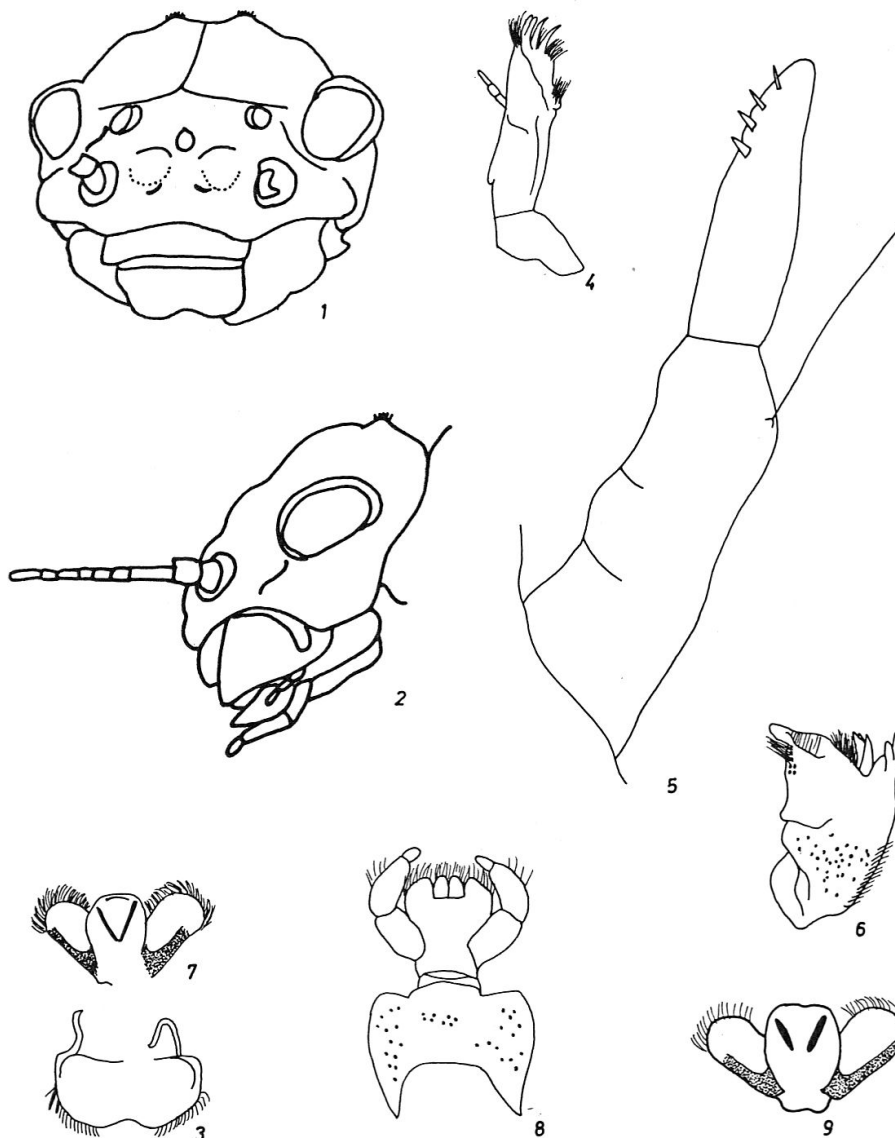
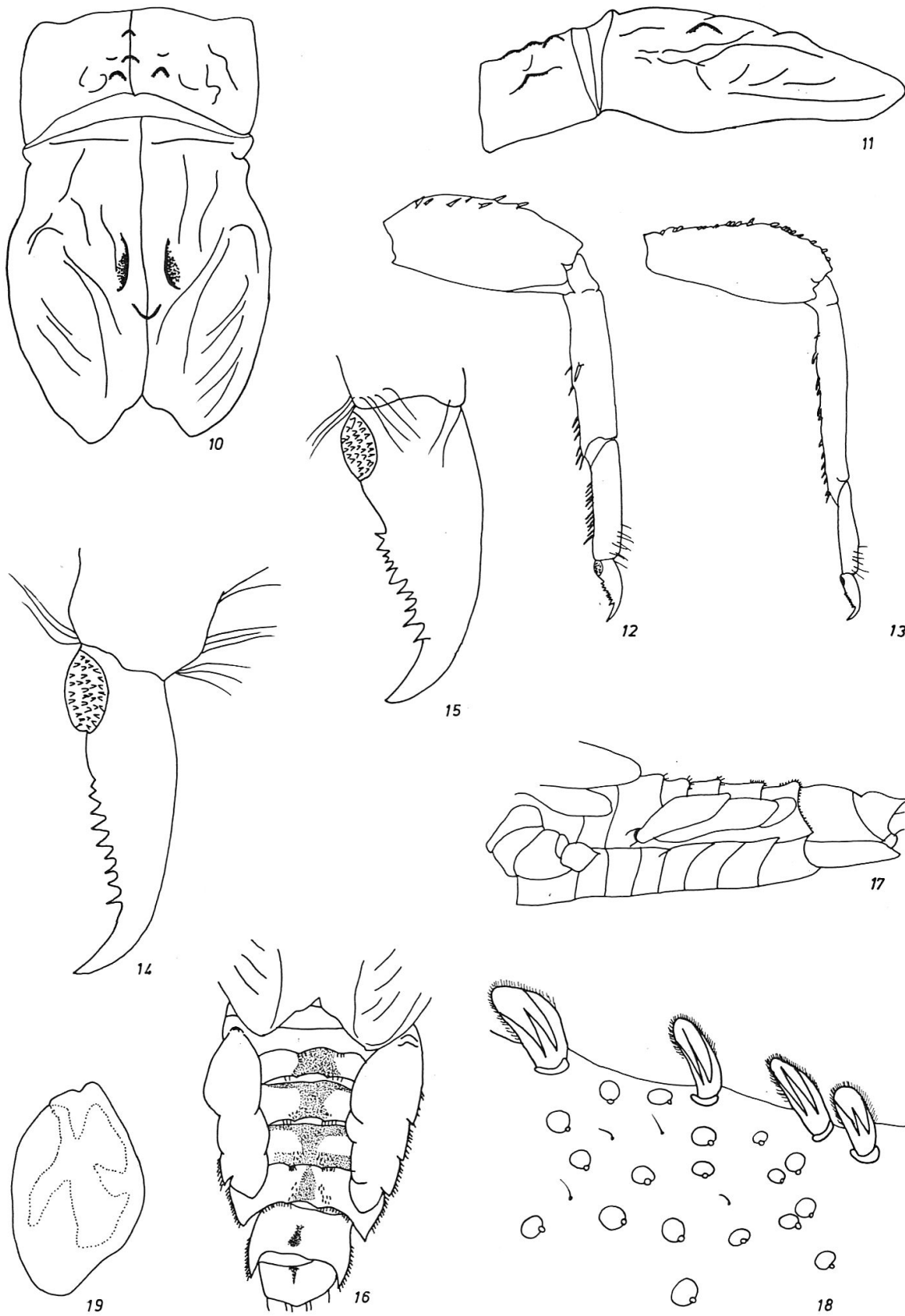


Fig. 1–8. *Drunella andaluciaca* sp.n.; Fig. 9. *Drunella euphratica* KAZANCI, 1987.
1. Head, 2. Head in lateral view, 3. Labrum, 4. Maxilla, 5. Maxillary palpus, 6. Right mandible, 7. Hypopharynx, 8. Labium, 9. Hypopharynx of *D. euphratica*.



Figs. 10–19. *Drunella andaluciaca* sp.n.; 10. Thorax in dorsal view, 11. Thorax in lateral view, 12. First leg, 13. Third leg, 14. Tarsal claw of first leg, 15. Tarsal claw of third leg, 16. Abdomen in dorsal view, 17. Abdomen in lateral view, 18. Structure of tergite surgave and marginal spines, 19. First gill.

from Eastern Turkey. The new species differs from *D. paradinasi* and *D. euphratica* in the body coloration and patterns, in the body tubercles and ridges, and in the shape of the mouth parts. The structure of the tergite surface is similar to that of *D. euphratica*; by the lack of star-like hairs it differs from *D. paradinasi*.

Material: Holotype and 15 paratypes, nymphs. Rio Trevelez 1600 m. (Granada, Spain), 28.7.1989.

KEY FOR THE NYMPHS OF *DRUNELLA* SPECIES FOR THE WESTERN PALAEARCTIC REGION

1. Head tubercles located near the base of compound eyes, gena without protuberance, prothorax narrow, a light and slender species, legs with distinctive dark spots, femora slender (see KAZANCI, 1989, Figs. 1, 9, 11, 12) *karia*
- Head tubercles located in the middle of the vertex, gena with slight protuberance (Fig. 1), prothorax shield-shaped (Fig. 10), dark and stout species, legs without distinctive dark spots, femora broad (Figs. 12 and 13) 2
2. Whole body is covered, with star-like hairs (see STUDEMANN & TOMKA, 1987, Figs. 2 and 3) *paradinasi*
- Body without star-like hairs 3
3. Abdominal tubercles are small almost equal in size in different segments and present in segments 3–9 (Fig. 16) *andaluciaca*
- Abdominal tubercles are well developed, but small between segments 2–4 and almost equal in size between segments 5–9 (see KAZANCI, 1987, Figs. 8, 9) *euphratica*

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