

## Upon the Identity of *Drunella andaluciaca* Kazanci, 1990 (Ephemeroptera: Ephemerellidae)

by

Javier ALBA-TERCEDOR and Denise STUEDEMANN

J. ALBA-TERCEDOR and D. STUEDEMANN: Upon the Identity of *Drunella andaluciaca* KAZANCI, 1990 (Ephemeroptera: Ephemerellidae).  
Aquatic Insects, Vol. 13 (1991), No. 1, pp. 47-48.

The recent description of *Drunella andaluciaca* Kazanci, 1990 (from the Sierra Nevada Mountains in southern Spain) was compared with the original description and with typical and additional material of *Ephemerella* (*Chitonophora*) *nevadensis* Alba-Tercedor, 1983 (a species widespread in the Sierra Nevada Mountains). Accordingly, *Drunella andaluciaca* Kazanci, 1990 is transferred to the genus *Ephemerella* Walsh, 1862 and synonymy between *Ephemerella andaluciaca* (Kazanci, 1990) and *Ephemerella* (*Chitonophora*) *ikonomovi nevadensis* Alba-Tercedor, 1983 is established.

J. ALBA-TERCEDOR, Departamento de Biología Animal, Ecología y Genética (Zoología),  
Facultad de Ciencias, Universidad de Granada, 18071-Granada, Spain.

D. STUEDEMANN, Entomological Department, Institute of Zoology, Péroles, CH-1700  
Fribourg.

### INTRODUCTION

Recently a new Ephemerellidae (*Drunella andaluciaca* Kazanci, 1990) from the Sierra Nevada mountains (southern Spain) has been described. Previously, four Ephemerellidae species had been recorded in the Sierra Nevada: *Torleya* cf. *belgica* Lestage, 1917, *Ephemerella ignita* (Poda, 1761), *E. mesoleuca* (Brauer, 1857) and *Ephemerella* (*Chitonophora*) *ikonomovi nevadensis* Alba-Tercedor, 1983 (Alba-Tercedor, 1982, 1983; Alba-Tercedor and Sanchez-Ortega, 1982). The typical locality of the new species in the Trevélez River had been prospected by the senior author many times without collecting other different Ephemerellidae species than those previously known from the Sierra Nevada. Therefore we decided to study the identity of this new species.

### RESULTS AND DISCUSSION

Comparing the original description and figures 7, 4, 8, 10, 12, 19 and 16, by Kazanci (1990) for *Drunella andaluciaca* with the description and figures 2b, 2f, 2e, 1c, 1e, 4a and 1b, by Alba-Tercedor (1983) for *Ephemerella* (*Chitonophora*) *nevadensis*, corresponding to hypopharynx, maxilla, labium, pronotum, first leg,

first gill and abdominal pattern, respectively, the evident similarity of both species is noticed. However, the following discrepancies can be noted: Kazanci (1990, Fig. 5) described, for *Drunella andaluciaca*, a long lateral seta on the maxillary palpus and tubercles on the vertex and pronotum, that were not described by Alba-Tercedor (1983) for *E. (Chitonophora) ikonomovi nevadensis*, and the presence of dorsal abdominal tubercles on tergites 5-7 while according to Alba-Tercedor (1983) in *E. (Ch.) ikonomovi nevadensis* they are on tergites 5-8.

Reviewing the typical material of *E. (Ch.) ikonomovi nevadensis* and more than one hundred nymphs collected in the Sierra Nevada Mountains we found that the long maxillar seta can be missing, or can also occur in numbers of 1-2; and that the dorsal abdominal tubercles are on tergites 5-7 but additional and very inconspicuous tubercles can also appear on tergite 4 and/or 8.

With respect to the assignment of the junior species to the genus *Drunella* Needham, 1905, it is necessary to point out that according to Edmunds *et al.* (1976) the nymphs of this genus have the following characteristics, that do fit neither *E. (Ch.) ikonomovi nevadensis* nor *D. andaluciaca*: head, thorax and abdomen with well-developed (not inconspicuous) tubercles. In addition, Studemann and Tomka (1987) noticed the presence of star-like hairs on the whole body in *D. paradinasi* González del Tánago and García de Jalón, 1983.

In conclusion, *Drunella andaluciaca* Kazanci, 1990 should be transferred to the genus *Ephemerella* Walsh, 1862 and the synonymy between *Ephemerella andaluciaca* (Kazanci, 1990) and *Ephemerella (Chitonophora) ikonomovi nevadensis* Alba-Tercedor, 1983 is established.

## REFERENCES

- ALBA-TERCEDOR, J. (1982): Recopilación de citas de Efemerópteros en la Península Ibérica e Islas Baleares. - Trab. Monogr. Dep. Zool. Univ. Granada (N.S.), 4,2 (1981): 41-81.
- (1983): *Ephemerella (Chitonophora) nevadensis* n. ssp. de Sierra Nevada, España. (Ephemeroptera, Ephemerellidae). - Bol. Asoc. esp. Entom., 6 (2): 285-293.
- ALBA-TERCEDOR, J. and SANCHEZ-ORTEGA, A. (1984): Presencia del género *Torleya* Lestage, 1917 (Insecta, Ephemeroptera: Ephemerellidae) en la Península Ibérica. - Bol. R. Soc. Española Hist. Nat. (Biol.), 80 (1982): 81-88.
- EDMUNDS, G.F.Jr., JENSEN, S.L. and BERNER, L. (1976): *The Mayflies of North and Central America*. - University of Minnesota Press, Minneapolis, 330 pp.
- KAZANCI, N. (1990): *Drunella andaluciaca* sp.n. (Ephemeroptera, Ephemerellidae) from Spain. - Mitt. Schweiz. ent. Ges., 63: 237-240.
- STUEDEMANN, D. and TOMKA, I. (1987): Contribution to the study of European Ephemerellidae (Ephemeroptera). I. Completion of description of three endemic Iberian species. - Mitt. Schweiz. ent. Ges., 60: 361-378.