

## **A new record of the damselfly *Palaiargia ernstmayri* (Odonata: Platycnemididae) in the Arfak mountains of New Guinea**

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**Abstract.** This contribution reports and photographically documents a sighting of the little known damselfly *Palaiargia ernstmayri*. A mature male was seen and photographed by the author on 31-vii-2016 in the Arfak Mountains of Western New Guinea, Indonesia. To the author's knowledge this is only the fourth reported sighting of the species, and the second since its formal description by Liefstinck in 1972. All four reports since 1928 come from a 50 by 25 km area in the northeastern part of the Arfak mountains.

Further key words. Zygoptera, little known species, Indonesia

***Orthetrum chrysostigma*, the first predominantly African dragonfly species, introduced to a European country via aquarium trade (Odonata: Libellulidae)**

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**Abstract.** In October 2017 a dragonfly larva has been found in a private aquarium in the city of Leimen, Baden-Württemberg, Germany. It emerged on 30-xi-2017 and the imago has been identified as a female *Orthetrum chrysostigma*. This is the first record of a predominantly African species introduced via the aquarium trade to Europe and Germany.

Further key words. Dragonfly, Anisoptera, larva, exuvia

## Evidence of reproduction of *Lindenia tetraphylla* in Bulgaria (Odonata: Gomphidae)

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**Abstract.** *Lindenia tetraphylla* was found reproducing in a warm man-made lake strongly influenced by one of the nearby lignite-fired Maritsa Iztok thermoelectric power stations in the Thracian Bulgarian plain. The records included a great number of imagines and some exuviae. A significant number of adult individuals were also found in various smaller ponds around, part of them considered as individuals in search of new breeding habitats. The reasons for the species' establishment in this highly disturbed area are discussed.

Further key words. Dragonfly, Anisoptera, exuviae, water reservoirs, range expansion

## Pseudoreplication in species comparisons: do individual differences matter?

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**Abstract.** Pseudoreplication occurs in many behavioral studies of odonates, because a few unmarked individuals are sampled repeatedly and are used as estimators of the species' behavior. This can confound individual differences with species differences. Here, we tallied perches of marked and unmarked male libellulids on artificial perches of seven heights (10–120 cm). We estimated the effect of pseudoreplication on species-level contrasts of mean male perch height by comparing the results of four different analyses: 1) a nested ANOVA (analysis of variance) evaluating individual and species effects on perches by marked individuals; 2) a one-way ANOVA comparing species using mean perch heights of the same marked individuals; 3) a one-way ANOVA comparing species without regard to individuals (pseudoreplication of these marked individuals); and 4) a one-way ANOVA using perches by unmarked individuals observed at the same time (pooling across pseudoreplicated individuals in a larger independent data set). Species differences were qualitatively similar across all analyses, and mean perch heights computed on individual means, pooled (pseudoreplicated) data on marked individuals, and data on unmarked individuals were highly correlated. Pseudoreplication altered patterns slightly, but these effects were overcome in the larger data set on unmarked individuals.

Further key words. Dragonfly, Anisoptera, marking, pseudoreplication

## First record of *Pseudagrion pruinosum* (Odonata: Coenagrionidae) from mainland India

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**Abstract.** *Pseudagrion pruinosum* is recorded for the first time from mainland India as well as from Indian Eastern Himalaya. Five males and one female were collected from Miao village of Changlang District, Arunachal Pradesh, India. Information on the species' distribution and morphological characters are given.

Further key words. Damsselfly, Zygoptera, range extension

## First records of *Trithemis arteriosa* and *Brachytron pratense* on the island of Samos, Greece (Odonata: Anisoptera)

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**Abstract.** *Trithemis arteriosa* is reported from the island of Samos in the East Aegean (Greece) and is shown to be reproducing in Greece for the first time. *Brachytron pratense* is recorded for the first time in Samos but no evidence of local breeding was recorded. The significance of these findings is discussed.

Further key words. Dragonflies, damselflies, Anisoptera, Zygoptera, reproduction, dispersion, range expansion