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## A new species of *Eurysticta* WATSON from Australia (Odonata: Isostictidae)

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**Abstract:** *Eurysticta reevesi* sp.n. (♂ holotype: Torrens Creek Gorge, White Mountains National Park, Queensland, Australia) is described after two males. The species is illustrated and compared with the described species of *Eurysticta* WATSON.

**Key words:** *Eurysticta*, new species, Australia.

### Introduction

WATSON et al. (1991) listed three species of *Eurysticta* WATSON from Australia. They are *E. coolawanyah* WATSON, *E. coomalie* WATSON and *E. kununurra* WATSON, all known only from north-western Australia and/or Northern Territory. Recently, however *E. oolawanyah* was tentatively recorded from inland Queensland (REEVES in press). Following a request, Mr D. Reeves (Herston, Queensland) sent me the *Eurysticta* from Queensland for further study.

As it turned out, the *Eurysticta* from Queensland is not *E. coolawanyah* and does not belong to a described species. It is therefore described as new and compared with its congeners below. The terminology used is that of CHAO (1953).

### Description

#### *Eurysticta reevesi* spec.nov. (Figs 1-5)

Primary type: Holotype ♂: Queensland, Torrens Creek Gorge, White Mountains National Park, 20° 28'50"S/144°55'03"E, 580 m, 16-17.4.2000, H.B. Hines). Additional material: 1 paratype ♂, same data as holotype. Holotype and paratype in ANIC (Australian National Insect Collection, CSIRO, Canberra).

Name: Dedication to Deniss Reeves, president of the Australian Dragonfly Society, who was the first to draw attention to the existence of a species of *Eurysticta* in Queensland.

A medium sized damselfly, the male largely brownish yellow with bronze-black markings.

**Male** (Figs 1-5)

**D i m e n s i o n s :** Hindwing 17.6-18.0 mm; abdomen (including appendages) 30.0-31.0 mm.

**H e a d :** Labium off-white; outer face of mandible, and gena to just above postclypeus, pale brownish yellow; labrum yellowish brown with ill-defined brown to black patch in places as long and as wide as the entire labrum; anteclypeus yellowish- to greyish brown; postclypeus yellowish brown, with black along anterior margin, base and midline; anterior frons pale brownish yellow, black along mid-line and along pale spot on anterior face of antennal socket; remainder of top of head dull bronze-black except for pale patch almost equidistant from median ocellus and antennal socket; rear of occiput yellowish brown; postgena pale to dark yellowish brown; scape bronze-black, pedicel black at base and tip, otherwise pale brownish yellow, flagellum black

**P r o t h o r a x :** Anterior lobe of pronotum bronze-black with pale front margin and brownish yellow posterolateral spot on each side; median lobe bronze-black above, with pale to dark yellowish brown band on either side of invagination, continuing around posterior and lateral margins, leaving isolated bronze-black patch beside invagination; posterior lobe bronze-black, fading into yellowish brown at outer ends, capped by slim, brownish yellow horns; propleuron and proepisternum brownish yellow; leg largely brownish yellow, darker on outer faces of femur and tibia, these particularly dark in basal third of femur.

**S y n t h o r a x :** Dorsal carina reddish brown, antealar sinus darker brown; mesanepisternum bronze-black in anterior half, brownish yellow in posterior half, the delimitation being an almost straight line; remainder of pleura almost entirely brownish yellow, lined with black only along mesopleural suture, dorsal third of metapleural suture and at base of mesopostcoxa, and shiny black at the base of the pleural wing processes and along posterior margin of metapostepimeron; terga pale brownish yellow to greyish brown; poststernum pale brownish yellow; legs much as on prothorax but base of femora not as distinctly darkened.

**W i n g s :** Membrane hyaline; veins brown to black; pterostigma brown, slightly longer in hindwing than in forewing; 8-9/7-8 postnodals; second cell behind CuP of hindwing extending more than half length of second postdiscoidal cell.

**A b d o m e n :** Tergum 1 black, with mid-dorsal pale mark in posterior half, above, pale greenish to brownish yellow laterally; tergum 2 brown to black, with reddish brown midline above, brownish yellow expanding into kind of an apical ring laterally; terga 3-6 brown to-black above, with narrow reddish brown midline, pale brownish yellow to pale greyish green laterally, the pale area slightly expanded into basal ring more or less broadly broken medially, the black area progressing to ventral margin apically; terga 7 and 8 largely bronze-black with pattern similar to terga 3-6; tergum 9 black with reddish brown midline only in anterior half and with pale anterolateral spot and large posterolateral patch each side; segment 10 black and brown above, brownish yellow with little brownish black laterally, all pale ventrally; sternum 1 dark brown to black with paler margins, sterna 3-6 brown to black, paler at base, sterna 7-9 mainly dark brown, sternum 8 with basal and distal portions brownish yellow, base of sternum 9 also largely brownish yellow.

**A n a l a p p e n d a g e s :** Brownish yellow to greyish brown; superiors forcipate, scarcely swollen above near base, inner face with large, broad, obtuse tooth near base, then forming two flanges, the upper leading to blunt, denticulate end of appendage, the

lower ending in blunt spine about half way along inner margin; inferiors elongate, slightly curved, tapered, ending in long, rounded lobe, a small sub-distal dorsal tooth before 2/3 length.

F e m a l e unknown.

### Affinities and Discussion

*Eurysticta reevesi* sp. n. (Figs 1-5) is similar to *E. coomalie* WATSON (Figs 6-9) and to *E. coolawanyah* WATSON (Figs 10-13) in the structure of the bifid male superior anal appendages. The details (large, broad, subbasal tooth of superior anal appendages; elongate, almost straight inferior appendages with dorsal tooth far from apex) are, however, strikingly different. *E. kununurra* WATSON, the only described species with simple superior anal appendages (Figs 14-17), is markedly less similar and appears far more remotely related. The colouration of *Eurysticta reevesi*, particularly of the synthorax, includes fewer and less extensive dark elements than that of all its described congeners.

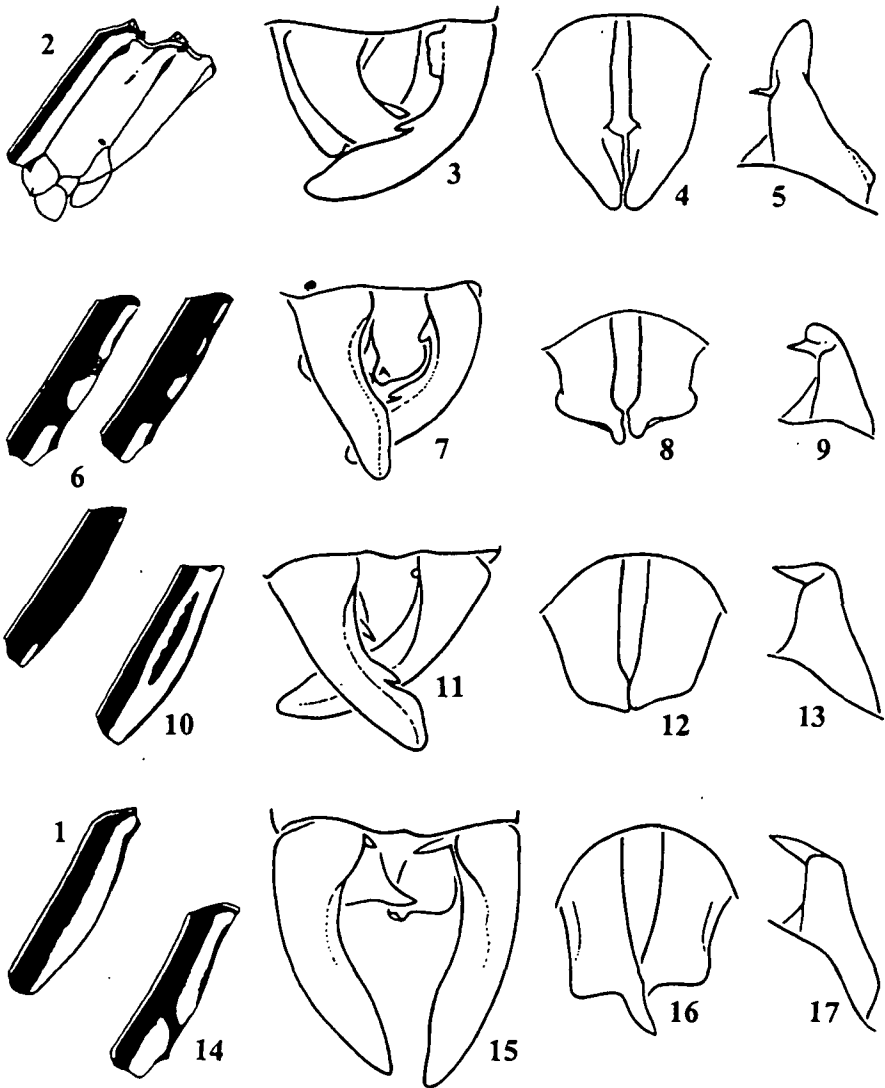
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Figs 1-5. *Eurysticta reevesi* sp. n., male: 1 – mesanepisternum, anterolateral; 2 – synthorax, lateral; 3 – anal appendages, latero-dorsal; 4, 5 – inferior anal appendages: 4 – ventral; 5 – lateral. Figs 6-9. *E. coomalie* WATSON, male: 6 mesanepisternum, anterolateral (3 different specimens); 7 – anal appendages, latero-dorsal; 8, 9 – inferior anal appendages: 8 – ventral; 9 – lateral. Figs 10-13. *E. coolawanyah* WATSON, male: 10 – mesanepisternum, anterolateral; 11 – anal appendages, latero-dorsal; 12, 13 – inferior anal appendages: 12 – ventral; 13 – lateral. Figs 14-17. *E. kununurra* WATSON, male: 14 – mesanepisternum, anterolateral; 15 – anal appendages, latero-dorsal; 16, 17 – inferior anal appendages: 16 – ventral; 17 – lateral.