



A new species of the sentinel crab *Macrophthalmus (Mareotis)* Barnes, 1967 (Crustacea: Brachyura: Macrophthalmidae) from Western Australia

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Abstract

Specimens previously identified as *Macrophthalmus japonicus* from Shark Bay, Western Australia, are described as a new species, *M. pistrosinus*. The new species differs both in behaviour and morphology from its closest relatives, particularly in characters such as proportions of male abdomens, setation patterns of claws, carapace dentition and leg morphology.

Key word: *Macrophthalmus pistrosinus*, new species, Brachyura, Macrophthalmidae, taxonomy, Australia

Introduction

Barnes (1967: fig. 8, plate 2d) described material of a crab from Shark Bay in Western Australia as belonging to *Macrophthalmus japonicus* (De Haan, 1838), whilst noting various differences from ‘typical’ members of that species belonging to the northern Japanese, Chinese and Korean populations. Wada (1978) later described two different forms of Japanese *M. japonicus* mainly on the basis of differences in their waving displays, but also on morphological grounds, but not the same two forms of *M. japonicus* previously described as separate subspecies by Tai & Song (1984). Wada & Sakai (1989) then described one of Wada’s two forms as a new species, *M. banzai*. Subsequently, molecular sequence (mtDNA) data of *M. japonicus*, *M. banzai* and the Australian Shark Bay material (Kitaura *et al.* 2002, 2006) indicated that the disjunct Australian population differed more from the two northern species than either did to the other, and that it should therefore be regarded as being specifically distinct within the *M. japonicus* species complex. This Australian material is re-examined and here described as a new species.

Abbreviations: WAM—Western Australian Museum, Perth; QM—Queensland Museum. Measurements in millimetres (mm) are of the carapace breadth (measured at the widest point) followed by length.

Taxonomy

Macrophthalmus (Mareotis) pistrosinus sp. nov.

(Figs. 1–4)

Macrophthalmus (Mareotis) japonicus Barnes, 1967: 224–226, fig. 8, pl. 2(d).

Macrophthalmus (Mareotis) aff. *japonicus* Kitaura *et al.*, 2006: 46.

Material Examined. Holotype: WAM 655-65, 1 male (30.9 x 20.4 mm), Teggs Channel, Shark Bay, WA,