

TRANSACTIONS
OF THE
ROYAL SOCIETY OF NEW ZEALAND

BIOLOGICAL SCIENCES

Vol. 12

No. 10

20 JULY 1970

A Revision of the Recent Indo-west Pacific Species of the Genus
Lyreidus De Haan (Crustacea, Decapoda, Raninidae)

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[Received by the Editor, 17 April 1969]

Abstract

A KEY is provided to the Recent species of *Lyreidus*. Three species are distributed throughout the northern Indo-west Pacific and one throughout the western Pacific and south-eastern Indian Ocean; one species occurs in the eastern Atlantic Ocean. The four Indo-west Pacific species are compared with each other and illustrated.

Examination of 257 specimens of the Indo-west Pacific species shows that all vary considerably with growth and that there are also sexual differences. Morphometric analysis reveals no statistically significant differences between Australian and New Zealand populations of *Lyreidus* and Japanese specimens of *L. tridentatus* De Haan. *L. australiensis* Ward from Australia and *L. fossor* Bennett from New Zealand are therefore considered to be junior synonyms of *L. tridentatus*. *L. stenops* Wood-Mason is shown to be a senior synonym of *L. integra* Terazaki and *L. politus* Parisi.

The known geographic distribution of all Indo-west Pacific species is extended to the South China Sea—Philippine area and *L. tridentatus* is recorded from the southern part of the western coast of Australia. The species are distributed along the continental shelf and down the continental slope to over 400 fathoms.

INTRODUCTION

A LARGE number of specific names have been given to different forms of *Lyreidus* without full investigation of morphological variation in previously named species. A few species of the genus are very widely distributed geographically while a larger number are rather localised. Both these features are common to many groups of animals. Most previous accounts of the genus *Lyreidus* recognise five Recent species—four Indo-west Pacific and one western Atlantic (Sakai, 1937). However, no less than 10 names are in existence for the Indo-west Pacific species. Since the beginning of the present century it has been recognised that the first described species, *L. tridentatus*, was very widely distributed—from Japan (De Haan, 1841) to East Africa on the one hand (Doflein, 1904) and to eastern Australia and New Zealand on the other (Haswell, 1882; Chilton, 1906). However, within the last 40 years both the Australian and New Zealand populations have, after examination of but a few specimens, been considered specifically distinct from the Japanese form (Ward, 1933; Bennett, 1964). There has been no claim that more than one species exists in New Zealand waters yet three different specific names have been used in the New Zealand brachyuran literature of the last 20

Published by the Royal Society of New Zealand, c/o Victoria University of
Wellington, P.O. Box 196, Wellington.

Trans. R. Soc. N.Z., Biol. Sci., Vol. 12, No. 10, pp. 89-112, 8 figs., 2 pls.