



A second New Zealand species of the stargazer genus *Kathetostoma* (Trachinoidei: Uranoscopidae)

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Abstract

A new species of the uranoscopid genus *Kathetostoma* Günther, 1860, is described from New Zealand waters, where it is broadly sympatric with its sole local congener *K. giganteum* Haast, 1873. The new species is readily recognised by its broad, saddle-like dark bands that cross the body dorsally (versus bands absent or only faintly developed), rather robust and short body (vs slender and elongate), and fewer numbers of vertebrae (30–31 versus 33–34), dorsal fin rays (15–17 versus 17–19) and anal fin rays (15–16 versus 17–18). Although both species have extremely broad depth distributions, the new species appears to be restricted to less than about 500 m, with its greatest abundance at 100–300 m, while *K. giganteum* reaches over 1000 m, and has its greatest abundance at 200–400 m. A brief redescription of *K. giganteum* is also provided. *Kathetostoma fluviatilis* Hutton, 1972, the oldest New Zealand name that applies to this genus, is regarded as a *nomen dubium*.

Key words: Uranoscopidae, stargazer, *Kathetostoma*, new species, New Zealand

Introduction

The trachinoid family Uranoscopidae is thought to comprise eight genera and nearly 50 species (Nelson, 2006), of which seven genera and about half of the species occur in the Australasian region, making it the most diverse geographical region for the family worldwide. The numerically dominant genus, *Uranoscopus* is mostly confined to the tropics with seven species recorded from Australasia (Bray & Hoese, in Hoese *et al.*, 2006), while the most diverse genus having a predominantly temperate distribution in the Australasian region is *Kathetostoma* (Günther, 1860) comprising a total of at least eight species, three of which are endemic to the distant coastal waters of the Americas: *K. albigutta* Bean, 1892 and *K. cubana* Barbour, 1941 in the central Western Atlantic, *K. averruncus* Jordan & Bollman, 1890 in the central Eastern Pacific, *K. canaster* Gomon & Last, 1987, *K. laeve* (Bloch & Schneider, 1801) and *K. nigrofasciatum* Waite & McCulloch, 1915 in southern Australian waters, and *K. giganteum* Haast, 1873 and an undescribed species in New Zealand and the eastern Tasman Sea. Smith *et al.* (2006) verified the specific stature of the second New Zealand species using both genetic and meristic information and gave evidence for a closer relationship of *K. giganteum* to the Australian *K. canaster* than to its undescribed New Zealand congener. A name and formal description of the new species, together with a brief redescription of *K. giganteum*, is presented below.

Methods and material

The description of the new species is based on the holotype with variations observed in paratypes for features following as parenthetical expressions. Counts, measurements and terminology follow Hubbs & Lagler (1947) and Gomon & Johnston (1999), with measurements associated with the head not identified in these two publications illustrated in Fig. 1. Morphometric information was recorded and is presented here to three significant digits. The