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Two new species of eelpouts (Teleostei, Zoarcidae) of the genus Seleniolycus from the Ross Dependency, Antarctica

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Abstract

Detailed examination of eelpouts (Zoarcidae) in recently collected material from the Ross Dependency, Antarctica, and held by the Museum of New Zealand Te Papa Tongarewa, revealed two undescribed species of *Seleniolycus* Anderson, 1988. They both differ from the type species *Seleniolycus laevifasciatus* (Torno, Tomo & Marschoff, 1977) from the Scotia Sea, Banzarre Bank and Falkland Rise, by having scales on the posterior part of the body (vs. naked), more numerous anal fin rays (69–73 and 64–66 vs. 53–58), total vertebrae (88–97 and 86–89 vs. 74–80), and suborbital head pores (6 and 6–7 vs. 5). *Seleniolycus robertsi* sp. nov. and *S. pectoralis* sp. nov. can readily be separated from each other by pectoral fin length (7.9–9.4 vs. 11.1–11.5% SL) and shape (fin entire vs. lower rays exserted), as well as several meristic and morphometric characters. *Seleniolycus robertsi* inhabits slightly shallower depths than *S. pectoralis* (1455–2290 vs. 1948–2594 m). The new species have several more generalised character states than *Seleniolycus laevifasciatus*, and seem to represent the basal-most branch in the *Seleniolycus-Melanostigma* lineage. A key to the known species of *Seleniolycus* is provided.

Key words: Seleniolycus robertsi sp. nov., Seleniolycus pectoralis sp. nov., Gymnelinae, deep-sea fishes, toothfish fishery

Introduction

The Southern Ocean has a long geological history and a fish fauna dominated by notothenioids (Clarke & Johnston, 1996; Eastman, 2005). With 24 known species, the family Zoarcidae is the fourth most speciose benthic fish family in Antarctic waters, comprising 10.8% of the fish fauna (Eastman, 2005; Eastman & McCune, 2000; Møller *et al.*, 2005). Zoarcids are believed to have originated in the North Pacific, migrating south via isothermic submergence before radiating in the Southern Ocean (see Anderson, 1990;