



## Taxonomic Review of the perciform fish genus *Acanthistius* from the east coast of southern Africa, with description of a new species and designation of a neotype for *Serranus sebastoides* Castelnau, 1861

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### Abstract

The genus *Acanthistius* Gill, 1862 comprises ten putative valid species occurring in shallow warm-temperate waters of the Southern Hemisphere: South America (coasts of Ecuador, Peru, Chile, Brazil, and Argentina) southern Africa (Namibia and South Africa), southern Australia, New Zealand, Lord Howe, Norfolk, Kermadec and Easter, and Sala y Gómez islands. Two species: *Acanthistius sebastoides* (Castelnau, 1861) and *Acanthistius* sp are known from shallow waters of the east coast of South Africa (Heemstra and Randall, 1986). The latter taxon, previously known from a brief description of a single specimen, is here described from 23 specimens and named *Acanthistius joanae*. *Acanthistius sebastoides* is redescribed from 13 specimens and compared with *A. joanae* and species of *Acanthistius* known from South America and Australia. A neotype is designated for *Serranus sebastoides* Castelnau, 1861, as the two syntypes are apparently lost.

**Key words:** South Africa, *Acanthistius joanae*, *Acanthistius sebastoides*, new marine fish species

### Introduction

Species of *Acanthistius* are moderate to large (25 to 65 cm total length), demersal fishes, usually associated with coral or rocky reefs. Two species, *A. sebastoides* (Castelnau 1861) and *Acanthistius* sp, are known from southern Africa (Heemstra and Randall, 1986). The latter taxon, briefly described and illustrated as *Acanthistius* sp from a single specimen, is now known from 23 specimens. It is described, named below, and compared with other species of *Acanthistius*. *Acanthistius sebastoides*, the other southern African species of *Acanthistius*, is also redescribed and compared with other species of the genus. In view of the similarities of the South African species of *Acanthistius*, a neotype for *Serranus sebastoides* Castelnau, 1861 is designated to define this species objectively and to clarify its taxonomic status.

### Methods and materials

Counts and measurements were made following Hubbs and Lagler (1964) except as noted below. The spinous rays of the dorsal and anal fins are termed dorsal-fin spines and anal-fin spines; and their numbers are given in Roman numerals in the fin formulae. The soft (segmented) fin rays are called rays and their numbers are given in Arabic numerals. Scales were counted on the left side; for counts of cheek scales and counts of scale rows and scales above and below the lateral line, the small scales near the orbit and along the bases of the dorsal and anal fins were excluded. (The scales excluded from those counts are distinctly and abruptly smaller than adjacent scales in the counted series.) Gill-raker counts include rudiments and are given as A–B / C–D where A – B is the range of counts for the upper limb and C–D the range of counts for the lower limb. Gill-rakers, including rudiments (indicated by lower case Roman numerals), were counted on the right side, with the raker