Synclidopus hogani, a new species of soleid fish from northeastern Queensland, Australia.

Jeffrey W. Johnson and John E. Randall


Synclidopus hogani is described as a new soleid fish from the Daintree River, northeastern Queensland. It differs from its single known congener, S. macleayanus, in having a lower median lateral-line scale count (87-97 versus 94-113), a distinctive colouration, which includes about 22-26 highly irregular, mostly discontinuous, transverse brown bands across the head and body, and three longitudinal rows of large dark brown spots, as well as a much smaller maximum size. The new species appears to be highly restricted in distribution and prefers tidal lower freshwater reaches of the river. It has not been recorded during numerous surveys of the Daintree estuary, surrounding coastal waters, or other estuarine or freshwater systems of northeastern Queensland. Synclidopus Chabanaud is redefined to include an important distinguishing feature of a free fleshy sheath that covers the anterior half of the lower jaw and the lower lip on the blind side.

Pleuronectiformes, Soleidae, Synclidopus, Aseraggodes, new species, freshwater, Daintree River, Queensland.

Jeffrey W. Johnson, Ichthyology, Queensland Museum, PO Box 3300, South Brisbane, Qld 4101, Australia (email: Jeff.Johnson@qm.qld.gov.au); John E. Randall, Ichthyology, Bishop Museum, 1525 Bernice Street, Honolulu, Hawaii, 96817-2704, USA; 22 October 2007.

Randall (2005) resurrected the soleid genus Synclidopus Chabanaud, 1943, from the synonomy of Aseraggodes Kaup, recognising the distinctiveness of the type species, S. macleayanus (Ramsay, 1881). He distinguished Synclidopus from Aseraggodes in having: the second lateral line on the ocular side of the head continuing dorsoanteriorly on the body, a deeper body, a shorter and more obtuse head, smaller eyes, its anus and genital papilla on the blind side, a higher number of lateral-line scales (96-113 versus 53-96), 7 dorsal pterygiophores anterior to fourth neural spine (versus 7-16; only one with 7 or 8), and the distinctive colour pattern of narrow dark bars. Synclidopus macleayanus commonly occupies estuarine as well as inshore marine habitats, whereas the numerous species of Aseraggodes are known only from marine habitats (Randall, 2005).

During a long-term monitoring program in freshwaters of the Daintree River, northeastern Queensland, evaluating populations of barramundi (Lates calcarifer) and associated fishes, an unusual soleid fish was collected and sent to the first author for identification. The specimen was initially identified as an undescribed species of Aseraggodes, however, on closer examination it was found to be more closely aligned with Synclidopus, as defined by Randall (2005). Comparisons revealed a previously overlooked character, a well-developed free fleshy sheath that covers the anterior half of the lower jaw and the lower lip on the blind side.

MATERIALS AND METHODS

The holotype of the new species is deposited in Queensland Museum, Brisbane (QM); paratypes are also lodged in Australian Museum, Sydney (AMS), and Bishop Museum, Honolulu (BPBM).

Standard length (SL) is measured horizontally from anterior margin of upper lip to caudal-fin base (end of hypural plate). Body depth is maximum distance between bases of dorsal and anal fins; body width is maximum...