

A New Seahorse Species (Syngnathidae: *Hippocampus*) From the Great Barrier Reef

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ABSTRACT. A new seahorse, *Hippocampus queenslandicus* (family Syngnathidae) is described from northern Queensland, Australia. Diagnostic characters include meristics: 15–18 dorsal-fin rays, 16–17 pectoral-fin rays, 10–11 trunk rings, 34–36 tail rings, and the presence of body and tail spines, as well as a moderately low coronet with five distinct spines.

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Seahorses, pipefishes and seadragons collectively belong to the family Syngnathidae. Syngnathids occur in coastal waters of temperate and tropical regions of the world in habitats ranging from sand, seagrass beds to sponge, algae, rubble and coral reefs (Vincent, 1997; Kuitert, 2000). A recent revision of the seahorses, genus *Hippocampus*, recognizes 32 species world-wide (Lourie *et al.*, 1999). The number of valid Australian seahorse species has been estimated at seven (Gomon, 1997) and 13 (Lourie *et al.*, 1999).

Materials and methods

A total of 226 specimens (height range: 56–143 mm, 111 males, 115 females) of a new *Hippocampus* species, together with five specimens of *H. zebra* Whitley, 1964, and four of *H. dahlia* Ogilby, 1908, were collected between October 1997 and December 1998. Seahorses found dead in trawl nets were immediately frozen. Upon return to shore, frozen

seahorses were placed in FAACC (formaldehyde–acetic acid–calcium chloride fixative) for 48 hours then removed to 100% ethanol.

Macroscopic description of seahorses included sex, number of body segments and colour morphs. Standard seahorse measurement protocol was followed (Lourie *et al.*, 1999). Meristic values were recorded to within 0.1 mm using dial callipers and include; height (measured from top of crown to tip of tail, HT), wet weight, head length (HL), snout length and snout depth, eye diameter (horizontal measurement of the left eye), tail length, dorsal-fin length (length of fin base) and abdominal width. In males, the pouch length (measurement from top of opening slit to ventral point where pouch meets tail) was also recorded. Using a stereo dissector the number of rays in the dorsal, anal and pectoral fins of each individual were counted. All specimens examined, including types, were collected by the author. Types are deposited in the Museum of Tropical Queensland in Townsville (QM), Museum Victoria (NMV) and the Australian Museum, Sydney (AMS).