



Two new stingrays (Chondrichthyes: Dasyatidae) from the eastern Indonesian Archipelago

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Abstract

Two new stingrays, *Dasyatis longicauda* **sp. nov.** and *Himantura javaensis* **sp. nov.**, are described from material collected in the eastern Indonesian Archipelago. These species, which are both relatively small stingrays (both probably smaller than 40 cm DW), have been confused with closest relatives in the region. *Dasyatis longicauda* **sp. nov.**, known from West Papua, differs from its congener, the Australian endemic *D. fluviorum*, in having a slightly lower vertebral count, lower pectoral-radial count, a longer tail, larger and less numerous thorns along the mid-disc and tail, as well as a different CO1 Barcode. *Himantura javaensis* **sp. nov.**, known only from southern Java (near Cilacap), belongs to a complex of small whiprays which also includes another Indonesian species, *H. walga*. Apart from major differences in squamation and a different CO1 Barcode, *Himantura javaensis* is more brownish in coloration, has more vertebrae, a longer tail, smaller eye and orbit, more posteriorly positioned sting, shorter adult claspers, shorter pelvic fin, and differs in various measurements around the head.

Keywords: *Dasyatis longicauda*, *Himantura javaensis*, new species, Java, West Papua, eastern Indian Ocean

Introduction

Indonesia has one of the richest elasmobranch faunas in the world, coupled with the largest fishery for elasmobranchs globally (White *et al.*, 2006). The first detailed accounts of the elasmobranch fauna of Indonesia were produced by the Dutch natural historian, Pieter Bleeker, who described more than 1100 new fish species, including many elasmobranchs. His work led to the production of the *Atlas Ichthyologique des Indes Orientales Néerlandaises* (published in 36 volumes between 1862 and 1878). Since Bleeker's work, there was very little published work undertaken on the Indonesian elasmobranch fauna until the 1980s. Several surveys of demersal fish faunas have been undertaken in the last few decades. The Joint Eastern Tropical Indian Ocean Fishery Survey (JETINDOFISH, see Gloerfelt-Tarp & Kailola, 1984) in the early 1980s trawled along the southern coasts from Sumatra to Timor. The French-Indonesian "KARUBAR" exploratory survey in 1991 surveyed deep waters of the Banda and Arafura Seas. Most recently, the Japan–Indonesian Deep Sea Fishery Resources Joint Exploration Project undertook deep water trawls (200–1000 m depth) along southern Sumatra and Java (Inada & Wudianto, 2006).

The most detailed study on the elasmobranch fauna of Indonesia is that of White *et al.* (2006) based on surveys of fish landing sites in Indonesia between 2001 and 2006. This bilingual guide provided species treatments for 78 sharks and 56 rays, including a number of potentially undescribed species. Detailed surveys of fish landing sites of Borneo between 2002 and 2008 culminated in a similar book on the elasmobranch fauna of the Malaysian and Indonesian parts of this island (Last *et al.*, 2010). This book provided species treatments for 52 shark and 65 ray species. The stingrays, family Dasyatidae, are by far the most speciose group of rays present in the Indonesian fauna. The two aforementioned guides combined treated 34 species of dasyatids from Indonesian waters. Of these, 7 were discovered and named as a consequence of these studies: *Dasyatis parvonigra* Last & White, 2008; *Himantura hortlei* Last, Manjaji-Matsumoto & Kailola, 2006; *H. leoparda* Manjaji-Matsumoto & Last, 2008;