



Six new species of aglajid opisthobranch mollusks from the tropical Indo-Pacific

TERRENCE GOSLINER

Department of Invertebrate Zoology, California Academy of Sciences, 55 Music Concourse Drive, San Francisco, CA 94118, U.S.A.
E-mail: tgosliner@calacademy.org

Abstract

Six new species of aglajid opisthobranchs are described from various localities in the tropical Indo-Pacific. *Philinopsis falciphallus* **n. sp.**, found from the Marshall Islands to the Red Sea, is distinguished by its reddish body color, a distinct black or maroon longitudinal line on the foot, a posterior projection on the posterior shield and a penis with a chitinous, sickle-shaped spine and numerous smaller spines. *Philinopsis coronata* **n. sp.**, known only from the Philippines, is similar to *P. falciphallus* but dominated by yellow body color and a ventral surface of the foot with yellow and maroon spots. It has a trumpet-shaped penis with a crown of rounded tubercles on the apex and anterior and posterior zones of penial spines. *Philinopsis ctenophoraphaga* **n. sp.** is found from the Philippines, Indonesia and the Red Sea. It feeds on platyctene ctenophores, including *Coeloplana meteroris*. It can be distinguished by its elongate posterior lobe of the head-shield, reddish color with white spots, thinly muscularized buccal mass and simple, unarmed penis. *Chelidonura mandro-roa* **n. sp.** is characterized by its black body with orange patches lined by yellow. It has a simple penis with a cuticularized apical papilla. This species has been found from Japan, Taiwan, the Philippines, Indonesia, Madagascar and Kenya. *Chelidonura alisonae* **n. sp.** is apparently restricted to the central and eastern Pacific of the Hawai'ian Islands, Johnston Island, the Marianas Islands and Easter Island. It is similar in coloration to *C. hirundinina*, but has orange lines on the dorsal and lateral shields and has a broad right posterior lobe rather than an acutely pointed one. The penis is simple and unarmed. *Odontoglaia mosaica* **n. sp.**, found from the Indian Ocean of Madagascar and South Africa, differs from *O. guamensis* by possessing a reticulate pattern on the notum rather than a pattern of brown spots. It also has a shorter penial papilla that is bifurcate rather than undivided one.

Key words: Aglajidae, Indo-Pacific, new species, biodiversity

Introduction

The members of the Aglajidae are widely distributed throughout the temperate and tropical regions of the world. The systematic relationships of the family have been reviewed by Rudman (1972a; 1972b; 1972c; 1974; 1978), Gosliner (1980), and Baba (1985).

The Indo-Pacific tropics support the greatest diversity of aglajid opisthobranchs with 23 described species documented from the region (Gosliner *et al.* 2008). Several relatively recently described species have been added to the Indo-Pacific region since the systematic reviews cited above. These include *Chelidonura flavolobata* Heller & Thompson, 1983; *Chelidonura castanea* Yonow 1994a; *Chelidonura livida* Yonow, 1994b and *Melanochlamys papillata* Gosliner, 1990. Recent field work around the Indo-Pacific from the Philippines and Madagascar has resulted in the discovery of specimens of several species of undescribed aglajid opisthobranchs, including three species of *Philinopsis*, two species of *Chelidonura* and a species of *Odontoglaia*. This paper describes these new taxa and compares them to previously described species.

Methods

Over the last two decades, new specimens of aglajids were collected from Batangas Province, Luzon Island, Philippines, the Hawaiian Islands and the Radama Islands of Madagascar and preserved for identification and analysis. Specimens collected prior to 2005 were generally preserved in Bouin's fixative and are therefore unlikely to be