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***Pocillopora aliciae*: a new species of scleractinian coral (Scleractinia, Pocilloporidae) from subtropical Eastern Australia**

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Lack of morphological features of diagnostic value and high levels of environmental phenotypic plasticity obscure species boundaries for most taxa in the genus *Pocillopora* Lamarck, 1816 and complicate the definition of taxonomically distinct units. Species of the genus are colonial, generally ramose, rarely massive or encrusting and mostly hermatypic; corallite arrangement is plocoid, septa are generally poorly developed and usually arranged in two cycles; the columella is mostly poorly developed (Veron & Pichon 1976). Verrucae are common, although reduced in some species. Currently 17 species are formally acknowledged within the genus (Veron 2000).

Using a molecular phylogenetic approach, recent studies were able to identify genetically distinct lineages in *Pocillopora*, indicating that *Pocillopora damicornis* (Linnaeus, 1751) consists of a cryptic species complex (Souter 2010; Schmidt-Roach *et al.* 2012a). One of these species, previously considered a temperate ecomorph of *P. damicornis*, is here described as a novel species, based on its distinct morphology, unique mitochondrial haplotype and incongruity with previously described taxa in *P. damicornis*. *Pocillopora aliciae* **sp. nov.** exhibits a flat, plate-like growth (usually displayed by deep-water morphs of pocilloporids) at all depths, which clearly differentiates it from *P. damicornis* colonies at subtropical Lord Howe Island or Rottneest Island. Furthermore, *Stylophora pistillata* Esper, 1797, which is equally known to exhibit flat deep-water morphs, maintains its common gross morphology at equal depth to *P. aliciae* **sp. nov.**

The new species is described below. Types are deposited in the Museum of Tropical Queensland (MTQ), in Townsville Australia.

Order Scleractinia

Family Pocilloporidae Gray, 1842

Genus *Pocillopora* Lamarck, 1816

***Pocillopora aliciae* sp. nov.**

Holotype: MTQ-G65423 Black Rock, off South Solitary Island, Eastern Australia (30°12'0.55"S; 153°15'27.05"E). 8 m, (19.12.2011) (Coll. S. Schmidt-Roach).

Paratypes: MTQ-G65424 Same location as the holotype, 12 m, (19.12.2011) (coll.: S. Schmidt-Roach); MTQ-G65425 Smoky Cape, 30°54'22"S; 153° 5'9"E (coll. J.E.N. Veron).

Skeletal characteristics of the holotype: The colony measures 170.4 mm in length, 168 mm in width and 95.6 mm in height. Ten main branches ascend flat, prostrate, radial from center in an approximate 30° angle. Most sub-branches follow the prostrate direction of the main branches giving the specimen an overall plate-like appearance and only few arise in an upward direction (Fig. 1[1–2]). True verrucae are absent. The inner corallite diameter ranges between 0.8–1.1 mm (Fig. 1[5–6]). The columella is weakly developed. Septa are rudimentary developed to obsolete, sometimes just indicated by irregular developed, short septa teeth, which increase in length towards the centre. They are arranged hexamerally in two equally developed cycles. The columella is flat and irregularly ornamented with short spinulae. The coenosteum is ornamented with thick, short spinulae.