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Forgotten in taxonomic literature: *Acropora aduncata* Zou, 1984 (Scleractinia: Acroporidae)

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Abstract

Acropora Oken, 1815 is the most diverse and abundant coral genus on shallow-water Indo-Pacific reefs and also occurs in the Caribbean and deeper (mesophotic) waters. The genus underwent comprehensive taxonomic reviews by Veron and Wallace (1984) and Wallace (1999), with further updates by Wallace *et al.* (2012). The fossil record of *Acropora* in Indonesia was studied by Santodomingo e*t al*. (2015). The well-resolved taxonomic status of this coral genus adds to its usefulness as a model taxon in ecological studies. Here I report on the species *Acropora aduncata* Zou, 1984, which was neither included in the reviews of the genus, nor in Veron (2000), and hence appears to be forgotten in recent taxonomic literature.

Keywords: Coral, South China Sea, Taxonomy, Systematics

Systematics

Family Acroporidae Verrill, 1902
Genus *Acropora* Oken, 1815
Species *Acropora aduncata* Zou, 1984: 55, Pl. III, Figs 1-3

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Holotype

C81-241, deposited in the South China Sea Institute of Oceanology, Academia Sinica, Shantou, Guangdong, China.

Type locality

Yongle Atoll, Xisha Islands, South China Sea. Collected from 54 meters depth by R. Zou on 29 July 1981.

Diagnosis (according to Zou, 1984)

Colony is side-attached in the form of a plate-table, with meshes of different sizes and shapes, formed by anastomosing flattened branches. The surface of the colony bears a general "hooked" appearance due to sinuous radial corallites. Colour of the living colony was dark brown when it was in the lagoon of Yongle Qundao (Islands) at a depth of 54 m. Axial and radial corallites are hardly distinguishable, because of the relatively few and long-hooked radials. At the margin of a colony they can be distinguished from each other; the former is long tubular with tapering off round openings whilst the latter is suppressed tubular to nariform. On the corallum the radial corallites are oblique nariform. Axial corallites are about 2-3 mm, with an outer diameter of 1-1.75 mm and an inner diameter of 0.5-0.75 mm. The primary septa are well-developed and the narrow plates are up to ¼ of the inner diameter. Some radial corallites are suppressed tubular, nariform, and many have "long hooked noses", hence the appearance of the colony is dominated by the corallites with "hooks". Coenosteum is spiny with points evenly arranged on and between corallites. It does not closely resemble any other deep-water species of *Acropora.* This new species is easily identified by its "hooked radial corallites".

Remarks

This new species was collected together with specimens of *A. granulosa* (Milne Edwards, 1860) and *A. tenella* (Brook, 1892), presumably from the same depth.

Acropora aduncata is mentioned in Huang *et al.* (2008) and Xin-Qing *et al.* (2013). Both publications are not taxonomic treatments of the genus *Acropora*, but instead report on coral reef conservation measures in China and no new information on *A. aduncata* (e.g. new distribution or depth records) was provided. No further mention of the species could be found in scientific literature and, therefore, it appears that the species is currently only known from the holotype and type locality.

Recently, deep-water acroporids have received increasing attention; diverse staghorn coral assemblages on mesophotic reefs have been described (Muir *et al.* 2015) and records down to 110 m have been reported (Muir *et al.* in press). To better understand the diversity and distribution of deep-water *Acropora* it is important to assess the taxonomic status of *A. aduncata*, and more distribution records are needed to understand its distribution.

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