



Ciallusiidae (Ascidiacea, Tunicata), a monotypic family from deeper waters of the tropical Indo-West Pacific

PATRICIA KOTT

Queensland Museum, PO Box 3300, South Brisbane, Qld Australia 4101. E-mail: patricia.mather@qm.qld.gov.au

Abstract

Ciallusia longa Van Name, 1918, the type species of the family Ciallusiidae is confirmed as a junior synonym of *Pterygascidia mirabilis* Sluiter, 1904. Although relationships with *Ciona* and *Perophora* have successively been proposed, examination of 12 newly recorded specimens from the northwestern coast of Western Australia, together with a review of documented specimens, demonstrate a relationship with the Phlebobranchia. As in many Phlebobranchia, the taxon has a large, flat branchial sac, simple branchial tentacles, translucent gelatinous test, specialisation of muscles into long rows of bundles of short parallel bands and a straight gut. However, rather than Corellidae (as Sluiter had proposed on the basis of the lack of ciliated epithelium lining the pharyngeal perforations) the family most closely related appears to be the family Agneziidae (see Huus 1936 and Kott 1985) which has dorsal languets. The newly recorded specimens extend the known geographic range of this species from the tropical western Pacific to the Indian Ocean.

Key words: *Ciallusia longa*, *Pterygascidia mirabilis*, *Pterygascidia inversa*, Phlebobranchia, Aplousobranchia, Agneziidae

Introduction

Previously specimens assigned to *Pterygascidia mirabilis* Sluiter, 1904 were the 11 syntypes from off Timor, nine and a further 20 specimens from the Philippines (Tokioka 1967 and 1971a,b, respectively). Also from the Philippines are the holotype of *Ciallusia longa* Van Name, 1918 and another two specimens (Millar 1963). Believing the genera (though not the species) to be synonymous Millar (1988) and F. and C. Monniot (2003), respectively, assigned a single specimen from Indonesia and another four from the Philippines to *Pterygascidia longa*. The two species now are known to be synonymous. The newly recorded material increases the known specimens by 12 (to 60) and extends the known range into the Indian Ocean off the northwestern Australian continental shelf. The species cannot be said to be rare as, with the exception of Van Name's, Millar's (1963, 1988) and Monniot F. and C.'s records, each of the other five refers to nine to 20 specimens. The relative lack of records of what probably is a common species in these waters is very likely the result of inadequate sampling of the relatively deep continental shelf and upper continental slope waters where, apparently, it abounds.

The morphology and relationships of the taxon are reviewed and its phylogeny discussed below.

Family Ciallusiidae Huus, 1936.

Type genus: *Ciallusia* Van Name, 1918 (< *Pterygascidia* Sluiter, 1904)

This monotypic family presently is known to contain only its type genus (a junior synonym of *Pterygascidia* Sluiter, 1904) which also is monotypic. The genus is characterised by a solitary habit, finely tapering languets