FOUR SPECIES OF *ALLONISCUS* DANA, 1854, FROM
THE WEST COAST OF NORTH AMERICA AND HAWAII
(ISOPODA, ONISCOIDEA)

BY

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Six species of *Alloniscus* Dana (1854) have been described from the west coast of North America and from Hawaii: *A. perconvexus* Dana (1854), *A. mirabilis* (Stuxberg, 1875), *A. cornutus* Budde-Lund (1885), *A. oahuensis* Budde-Lund (1885), *A. floresianus* Dollfus (1898) and *A. thalassophilus* Rioja (1964). Of these six, only four (*A. perconvexus*, *A. mirabilis*, *A. oahuensis* and *A. thalassophilus*) are considered here to be valid.

*Alloniscus* was instituted by Dana (1854) on *A. perconvexus* from California (no more specific location was given). The second species, *Rhinoryctes mirabilis* Stuxberg (1875) was recorded from San Pedro (now part of Los Angeles). Stuxberg's species was later redescribed as *A. cornutus* by Budde-Lund (1885). Two species have been recorded from Hawaii—*A. oahuensis* Budde-Lund (1885) and *A. floresianus* Dollfus (1898), but *A. floresianus* is considered here to be a junior synonym of *A. oahuensis* so *A. oahuensis* is the only species known from Hawaii. Rioja (1964) subsequently described *A. thalassophilus* from the west coast of Mexico near Zihuatanejo, Guerrero, thus bringing to four the number of valid species of the genus from western North America and Hawaii. The four species are the only members of *Alloniscus* Dana considered here.

Other species of *Alloniscus* Dana from Africa were included in the extensive works of Ferrara (1974: 202) and Ferrara & Taiti (1979: 105). Roman (1977: 133) also did work on species from Africa and included a list of over 35 species considered to be in the genus. The above workers considered the family to be in the subfamily Scyphacinae or family Scyphacidae. Vandel (1973b) raised the Scyphacinae to full family, based in part on his limited considerations of *Alloniscus* Dana.

Apparently all species in the genus live in marine coastal habitats or along the shores of the lower reaches of rivers which enter directly into the sea. Some of the species have been recorded to burrow into the sand of beaches. They usually are considered to be scavengers and eat dead organic material present on the beach. A tentative redefinition of the genus is given here based mainly on the four species included in this work. The definition can be modified or expanded when specimens from other locations are more fully known.
Definition. — Body elliptical, moderately arched; surface generally smooth. Eyes conspicuous with anterolateral corners of cephalon moderately long. Antenna 1 with several to many aesthetascs. Antenna 2 shorter than one-third body length and with three flagellar articles. Maxilliped with large tufts of setae on palp articles. All pereaeopods with dactylian organ and with many setae on inner margins of segments. Setae especially thick on inner margins of carpus and merus of male pereaeopod I. Coxal sutures well defined on pereaeonal segments II, III and IV in females of some species. Pleon not abruptly narrower than pereon. Thin posterolateral borders with several to many setae present on pleopods 1 to 5. Uropods with flattened basis with short rami. Pleotelson triangular.

Type-species. — *Alloniscus perconvexus* Dana, 1854. Type by monotypy.

Derivation and gender of name. — The name is from the Greek “*allos*” meaning strange or different. The gender is masculine.

*Alloniscus perconvexus* Dana (figs. 1, 2, 5E)


*Alloniscus (Alloniscus) perconvexus* Dana: Arcangeli, 1959: 41, pl. 3 figs. 4, 5, pl. 4 figs. 21. nec *Alloniscus perconvexus* Dana sensu Mulaik, 1960: 151, pl. 15 figs. 173-180; Hayes, 1974: 838 [see *A. cornutus*].

The species, the type-species of the genus, was described by Dana (1854) on specimens from “California”. They were probably collected on the central coast of the state since many specimens of animals collected by John L. LeConte came from that region. Dana’s descriptions, both of the genus and species, were brief. Three flagellar articles on antenna 2 were mentioned and the spines on the pereaeopods were apparently conspicuous enough to be mentioned. Budde-Lund (1885), who had specimens from California, added, among other things, that antenna 2 was short (not as long as the width of the body). He stated that there was a protuberance on the frontal margin of the cephalon and the pleotelson was triangular. He also stated that the posterolateral angles of the cephalon were not well developed (“mediocres”). Later Budde-Lund (1908, pl. 15 fig. 48) illustrated the specimens of *A. perconvexus* and showed a broad posterolateral margin on the basis of the uropod. His illustration of *A. cornutus* in the same work (fig. 46) showed a narrower margin on the basis of the uropod.

Stafford (1912) redescribed what she called *A. perconvexus* on specimens from Laguna Beach, California. She illustrated what seems to be the species, but which in the text is described as having sutures cutting off coxal plates on