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## On the identities of the molluscan names described in *A Short Zoology of Tahiti in the Society Islands* by Anthony Curtiss in 1938 (Mollusca: Cephalopoda, Gastropoda)

MARTYN E.Y. LOW<sup>1</sup> & SIONG KIAT TAN

Raffles Museum of Biodiversity Research, National University of Singapore, Block S6, Science Drive 2, Singapore 117546, Republic of Singapore. E-mail: m.low@me.com; dbstsk@nus.edu.sg

<sup>1</sup>Corresponding author

### Abstract

Anthony Curtiss described two species of cephalopod and nine species of gastropod molluscs from Tahiti. Herein, we discuss and determine the identities of these eleven names. Ten of these names are considered to be junior subjective synonyms of well-known taxa, and one an unavailable name.

**Key words:** French Polynesia, shells, cephalopods, gastropods, snails

### Introduction

Anthony Curtiss (b. 19 May 1910, d. 12 July 1981) was a precocious naturalist who spent the early years of his life travelling (Evenhuis 2010). In 1938, Curtiss published a book entitled *A Short Zoology of Tahiti in the Society Islands* based on his time in Tahiti, which detailed the natural history of the island (Fig. 1). In this work, Curtiss (1938) applied new binominal Latin names to many of the island's animals (including molluscs) but assigned them to Linnaean era genera, which elicited criticism from some members of the scientific community (Evenhuis 2010). As discussed by Evenhuis (2010), it was Curtiss's intention to publish a more comprehensive work on the zoology of Tahiti, but all the materials that formed that basis of Curtiss's (1938) *A Short Zoology of Tahiti* were destroyed when a fire engulfed his home in 1940.

In 1944, Curtiss published a follow-up work to his 1938 book, which also contained new names (but not for the molluscs). Ng *et al.* (2011) recently discussed the identities of the new names proposed by Curtiss (1938, 1944) in the Crustacea. Herein, we discuss the identities of the new names proposed by Curtiss (1938) in the Mollusca. The only publication that has been located in which Curtiss's (1938) names have been used is in a compilation of Tahitian animal and plant names (Goo & Banner 1963) which utilised the identifications of local Tahitian names by Curtiss's (1938), and in which two names proposed by Curtiss were used (*viz. Sepia flagellata* and *Patella tahitica*). No comment on the validity of these names was made by Goo & Banner (1963).

Seven of the eleven species-group names in the Mollusca proposed by Curtiss (1938) are herein identified with widely-distributed Indo-West Pacific species (Table 1). As discussed by Ng *et al.* (2011: 44), Tahiti and the other islands of French Polynesia represent the extralimital range of many Indo-West Pacific species and it is possible that some of these taxa from French Polynesia may be recognised as cryptic (and/or new) species (see Meyer 2004). It is therefore important that the names proposed by Curtiss (1938, 1944) should be made widely known so that they can be considered and/or applied should future studies warrant the recognition of new taxa. The original descriptions of Curtiss's (1938) names for the Mollusca are reproduced herein for the same reason.

Of the four other species-group names in the Mollusca proposed by Curtiss (1938), three are junior subjective synonyms of species endemic to French Polynesia and the last is an unavailable name (Table 1).

Curtiss (1938, 1944) did not designate any type specimens, and did not illustrate any of his material. The material on which Curtiss (1938, 1944) based his descriptions is also considered to be lost (see above). As all of the

outer lip has a sharp edge, but is thicker further down. The entrance is closed with the dull brownish-yellow membrane of the bottom of the foot, when the animal is inside. The shell is rounded out, almost like a half a globe, the first whorl of the spire being large, and the rest of the spire pretty flat and small. The under side of the shell is flattish. This is found on rocks near the sea-side, and is called by the Indians *hihi*. (*Nerita tautirana*. (Seaside, near Tautira.))”.

**Identity.** The detailed description of the conchological characteristics (notably the whitish shell marked with spiral furrows and an aperture with four teeth on the inside of the inner lip, and six on the inside of the outer lip) easily identifies this species with *Nerita plicata* Linnaeus, 1758, a widespread Indo-West Pacific species. Confusion with other congeners recorded from the French Polynesia by Tröndlé & Boutet (2009) is unlikely.

### ***Nerita vaiatahiana* Curtiss, 1938, a synonym of *Nerita argus* Récluz, 1841**

**Original description (pp. 192, 193).** “The black Tahiti nerita, which shares with the last the name of *hihi*, is five-eighths of an inch long, dull black above and whitish underneath. Its shell is smooth, without the furrows of the last-described sort. Its spire is very indistinct, much more so than that of the whitish nerita. The opening is semi-circular, with very small teeth. The edge of the outer lip is sharp and black, further down, the lip becomes thicker and whiter. The animal resembles a snail, and closes its entrance with the brown membrane on the bottom of its foot. It is found on rocks along the seaside. (*Nerita vaiatahiana*. (Seaside, near Tautira.))”.

**Identity.** The description of this “black Tahiti nerita” agrees well with *Nerita argus* Récluz, 1841, which is known from the French Polynesia (Tröndlé & Boutet 2009). Although the similarly relatively smooth and black *N. picea* was not listed by Tröndlé & Boutet (2009), it is apparently also found in Tahiti (Spencer *et al.* 2007). However, *N. picea* has incised spiral grooves on its dorsal surface (see Kay 1979) and its conspecificity with *N. vaiatahiana* is unlikely.

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