

THE IDENTITY OF *CANCER EPHELITICUS* LINNAEUS, 1763  
(DECAPODA, BRACHYURA)

BY

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ABSTRACT

The identity of *Cancer epheliticus* Linnaeus, 1763, is clarified. The original name could be applied to either of two species currently known as *Hepatus epheliticus* (Linnaeus, 1763) (as a senior synonym of *Cancer decorus* Herbst, 1794) or *Atergatis floridus* (Linnaeus, 1758) (as a junior synonym). To conserve the usage of the species name *epheliticus* for the American *Hepatus*, a neotype for *Cancer epheliticus* Linnaeus, 1763, is here designated.

RÉSUMÉ

L'identité de *Cancer epheliticus* Linné, 1763, est éclaircie. Le nom pourrait être appliqué à l'une des deux espèces connues, l'une comme *Hepatus epheliticus* (Linné, 1763) (en tant que synonyme plus ancien de *Cancer decorus* Herbst, 1794), l'autre comme *Atergatis floridus* (Linné, 1758) (en tant que synonyme plus récent). Pour conserver l'usage du nom spécifique *epheliticus* pour l'*Hepatus* américain, un néotype est désigné ici pour *Cancer epheliticus* Linné, 1763.

In revising the taxonomy of the poisonous Indo-West Pacific crab *Lophozozymus pictor* (Fabricius, 1798), the first author encountered a nomenclatural problem with one of Linnaeus' (1763) species, *Cancer epheliticus*. The name *epheliticus* was used by Miers (1880, 1884, 1886) for the species *L. octodentatus* (H. Milne Edwards, 1834), which is now regarded a junior synonym for *L. pictor* (Fabricius, 1798) (see Guinot, 1979). The problem is that the name *Cancer epheliticus* Linnaeus, 1763, has also been used for the American calappid *Hepatus epheliticus* (fide Rathbun, 1897).

In describing *Cancer epheliticus*, Linnaeus (1763: 414-415) gave the locality as "Habitat in Carolina". According to Linnaeus, the specimen he examined was collected by "Garden", i.e. Dr. Alexander Garden (1730-1791), a physician from Charleston, South Carolina, U.S.A. Linnaeus' animal is now generally known as *Hepatus epheliticus* (Linnaeus, 1763). Rathbun (1897: 37) first used the name *epheliticus* Linnaeus for the American calappid crab previously known as *Hepatus decorus* (Herbst, 1794), but without any explanation. Since Linnaeus had

cited the species' locality as Carolina, this presents no serious problem, *decorus* Herbst simply becomes a subjective junior synonym of *epheliticus* Linnaeus. Rathbun was followed by most subsequent authors and the specific name *epheliticus* is now generally accepted for the species of *Hepatus*, the name *decorus* is no longer used.

The problem is that Linnaeus (1763) also listed Rumphius (1705: "T. 8 f. 5") in the synonymy of *Cancer epheliticus*. Miers (1880) evidently based himself solely on Linnaeus' reference to Rumphius' plate and used the name *epheliticus* for *Lophozozymus octodentatus* (H. Milne Edwards, 1834). Miers (1886: 115) subsequently recognised *Cancer epheliticus* Linnaeus as the type species of the genus *Lophozozymus* A. Milne Edwards, 1863. This is incorrect as A. Milne Edwards (1863: 276) did not mention Linnaeus' species at all when describing *Lophozozymus* but listed *Xantho octodentatus* H. Milne Edwards, 1834, *X. incisus* H. Milne Edwards, 1834, and *X. superbus* Dana, 1852. The type species of *Lophozozymus* A. Milne Edwards, 1863, was selected by Ward (1932: 243). Ward's choice, *Xantho incisus* H. Milne Edwards, 1834, is perfectly valid. Miers' belief that *Cancer epheliticus* and *Xantho octodentatus* were synonymous does not change the fact that his type designation was invalid. Rumphius' Pl. 8 fig. 5, however, does not depict *Lophozozymus pictor* (*L. octodentatus*) but *Atergatis floridus*

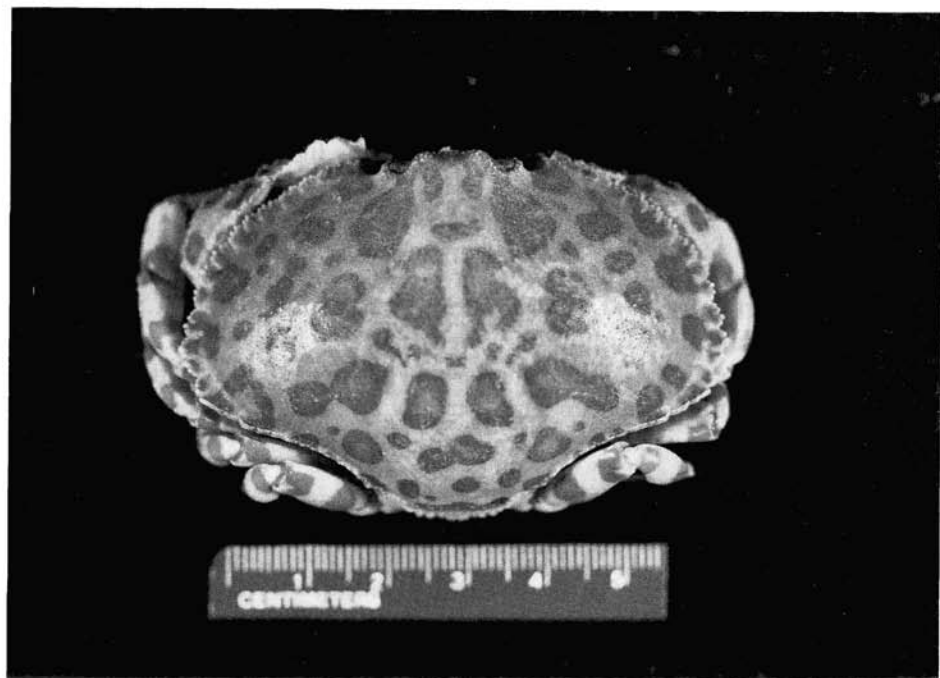


Fig. 1. *Cancer epheliticus* Linnaeus, 1763. Neotype male, carapace width 66.0, carapace length 44.0 mm (USNM 256922), southern coast of South Carolina, U.S.A.

(Linnaeus, 1758), a well known and wide-ranging Indo-West Pacific species. The species now known as *Lophozozymus pictor* is actually depicted on Rumphius' Pl. 5 fig. M and Pl. 11 fig. 4.

*Cancer epheliticus* Linnaeus, 1763, is thus a composite species, referable to what is now generally known as *Hepatus epheliticus* as well as to *Atergatis floridus*. No lectotype has ever been selected for Linnaeus' species. The whereabouts of Linnaeus' specimen(s) of *Cancer epheliticus* from Carolina (probably South Carolina) is not known and the material is believed to be lost. Rathbun (1937: 238) noted that the type specimen could not be located. The same is true of Rumphius' specimen. In any event, if Rumphius' specimen was chosen as the lectotype, *Cancer epheliticus* would disappear in the synonymy of *Atergatis floridus*, and the name *decorus* would have to be resurrected for the American *Hepatus*. This is clearly unsatisfactory.

It is therefore in the interest of stability that as neotype for *Cancer epheliticus* be selected a specimen of the species that at present is best known as *Hepatus epheliticus*. In order to comply with Art. 75d (5) of the International Code of Zoological Nomenclature, this neotype should come "as nearly as practicable from the original type locality". As Dr. Garden's specimen, which he sent to Linnaeus came from Carolina, most probably South Carolina, we now select as neotype for *Cancer epheliticus* L., 1763, a male specimen (carapace length 44.0, carapace width 66.0 mm), collected off the southern coast of South Carolina, 31°51.1'N 80°53.1'W, from a depth of eight to nine metres, by Mr. Pearse Webster in 1992. This specimen is in the collection of the National Museum of Natural History, Washington, D.C., U.S.A., under registration number USNM 256922, and a photograph of it is provided here as fig. 1.

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