Lepas was picked up from the beach of Kailua Bay, Oahu, Hawaii, along with several living specimens of *Physalia*. These were placed in a 50-gallon sea-water aquarium. Surface-water movements set up by the filter system soon caused the snail and one of the *Physalia* to drift together. The barnacles immediately seized the pendant polyps of the *Physalia* and began to ingest them. The barnacles near the bottom of the cluster seized the longer dactylozooids (pl. I fig. 1), while others nearer the surface fed on the shorter digestive and reproductive polyps. Within a few minutes, the snail began to feed on the pneumatophore and the shorter polyps (pl. I fig. 2). Within 48 hours the *Ianthina* and the barnacles ate all or most of six *Physalia* which had pneumatophores ranging from 20 to 40 mm long. Bayer (1963) reported that a single *Ianthina* consumed a much larger *Physalia* within 1 day. Attempts to free the *Physalia* by pulling it away along the surface of the water caused the *Ianthina* to lose its hold, but the barnacles retained their grasp while the colony was towed rapidly several times the length of the aquarium.

The presence of the cluster of *Lepas* on the snail may be advantageous to the snail in the procurement of food. For example, the barnacles, extending in many directions around the shell, contact potential food in a volume of water greater than that within the snail's sweep. The barnacles may secure large prey such as *Physalia* against being blown or washed away by wind or waves. The contribution of the snail to mutualism appears to be only that of providing a substratum, and there is no evidence that *Lepas anserifera* prefers the shells of *Ianthina* over other available floating objects such as pumice, wood, or glass.

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HETEROCRYPTA TOMMASII COSTA, 7 NOVEMBER 1959, AND *HETEROCRYPTA CALEDONIANA* GARTH, IN HOLTHUIS, 12 NOVEMBER 1959 (DECAPODA BRACHYURA, PARTHENOPIDAE), SYNONYMY AND RELATIVE PRIORITY

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Almost simultaneously, in the end of 1959, two papers appeared which contained the description of a new species of *Heterocrypta* from off the north and

north east coast of South America. Dr. Henrique Rodriguez da Costa, in Avulso no. 2 of the Centro de Estudios Zoologicos of the Faculdade Nacional de Filosofia, Universidade do Brasil, published a note (4 unnumbered pages, 1 figure) entitled "Heterocrypta tommasii nova especie de Crustacea Brachyura (Oxyrhyncha Parthenopidae)". Da Costa's material of *Heterocrypta tommasii* was collected on the east coast of Brazil near Cananéia, southern São Paulo State. The other species, *Heterocrypta caledoniana,* was published as new by Dr. John S. Garth of the Allan Hancock Foundation, Los Angeles, U.S.A., on pp. 193 and 194 of a paper by myself entitled "The Crustacea Decapoda of Suriname (Dutch Guiana)" (1959, Holthuis, Zool. Verhand. Leiden, **44**: 1-296, text-figs. 1-68, pls. 1-16). Dr. Garth's material was collected in Caledonia Bay, Panama (Atlantic coast), while in my text I listed some specimens from Suriname, one of which was figured on pl. 6 fig. 2.

Dr. da Costa was kind enough to send type material of his *Heterocrypta tommasii* both to Dr. Garth and myself. An examination of the material fully confirmed our opinion (based on comparison of the descriptions) that *Heterocrypta tommasii* and *H. caledoniana* are the same species. My paper was dated 12 November 1959 and was distributed exactly on that date. Dr. da Costa's paper was dated "30 de octubre de 1959", but this author very obligingly wrote me in a letter of 8 December 1959: "It should have been issued on September (evidently a slip for October) 30, but some difficulties retarded it (it was issued November 7)". The important point is thus that the actual date of publication of Dr. da Costa's paper is 7 November 1959, and that his name *Heterocrypta tommasii* has five days priority over *Heterocrypta caledoniana* Garth. The former name is thus the valid name for the species and the latter falls as a junior synonym.

It is interesting to note that three authors independently from one another discovered a new species almost simultaneously. Only the fact that Dr. Garth and I were in contact with each other when I discovered my Suriname specimens of *Heterocrypta tommasii* prevented me from creating a second synonym for the species, which was known to Dr. Garth long before I started working on my material.

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