PARASITIC MITES ON HERMIT CRABS

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Hermit crabs live in old gastropod mollusk shells, their long, soft abdomen thrust into and stored within the shell, with only their heads protruding. When disturbed they withdraw into the interior of the shell, but normally they walk about actively carrying their shelter with them.

Amongst the several species of hermit crabs found in Jamaica only one, *Cenobita clypeatus* Herbst [= syn. *C. diogenes* (Latreille)], lives on land for the greater part of its life. Once each year it returns to the sea to spawn, but for the rest of the time it prowls about amongst rotting vegetation on the beaches and adjacent areas in search of food. *C. clypeatus* is immediately recognizable because it sports one exceedingly large, purple, pinching claw which is a neat and extraordinary adaptation. When the crab withdraws into its shell this large pincer is drawn in last. It is so shaped that it fits

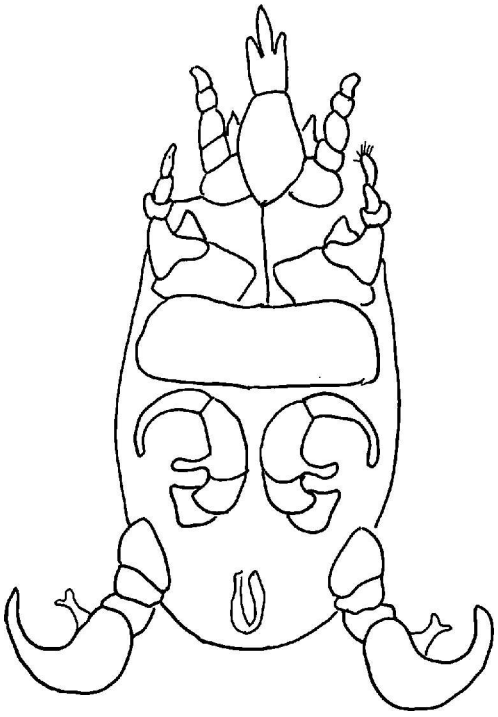
perfectly into the opening of the shell, acting as an operculum or plug, and ensuring the complete protection of the crab inside.

In the summer of 1952, I collected a number of *C. clypeatus* on two of the Port Royal Cays, Maiden Cay and Lime Cay. While examining these specimens some months later, I noticed some protuberances among the gill lamellae; it clung to the tissue by means of the two posterior pairs of legs which are modified into grasping hooks, curiously similar to those of lice. I was unable to secure any larval stages. There were great numbers of these mites in every specimen I examined. They were approximately 0.5 mm in length.

The mite, a new record for Jamaica, has been identified as *Ewingia cenobitae* Pearse, first described from *C. clypeatus* collected at the Tortugas, Florida, in 1939. Pearse (1943) notes that *Ewingia* has a most curious distribution at the Tortugas, being found on the crabs of some cays, while it is not found on the crabs of others a few miles distant. I was not able to determine if there is a similar spotty distribution amongst the Port Royal and Old Harbour cays; but the distribution of this mite about the island would make an interesting problem for some student of natural history. Pearse (1929) also found a different species of mite, *Laelops cancer* Pearse, on the gills of the large *Nassau* or land crab, *Gecarcinus lateralis* (Freminville). Unfortunately I had no

material on this crab and at the time was unable to determine it the Jamaican *Gecarcinus* is also infested.

It is significant that Acarina are found only on these two crustaceans which visit the sea but once a year. Such mites have never been found on the ghost crab, *Ocypoda albicans* (Bosc), which although it lives on sand beaches well above the water-line, visits the sea several times a day to moisten its gills.



Ventral view of female *Ewingia cenobitae* Pearse

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