

Interesting Images

# The Spotted Cleaner Shrimp, *Periclimenes yucatanicus* (Ives, 1891), on an Unusual Scleractinian Host

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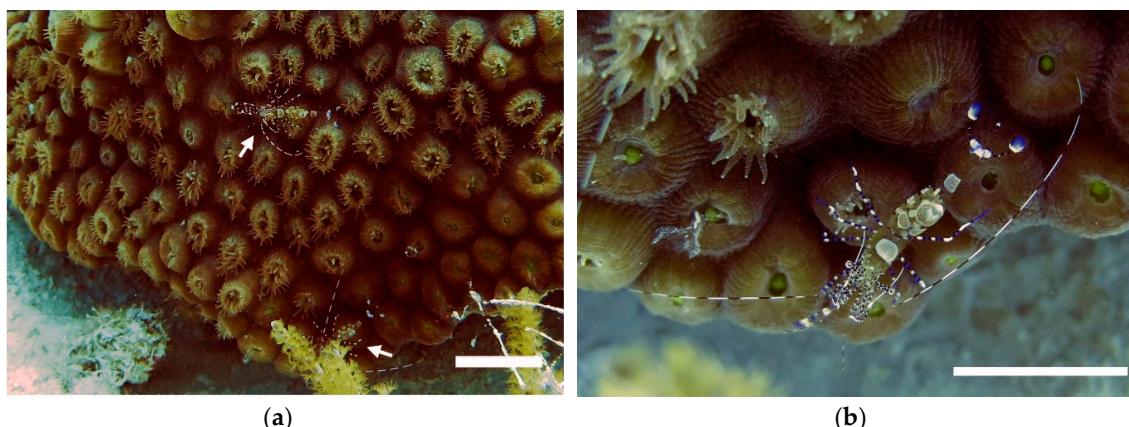
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The spotted cleaner shrimp, *Periclimenes yucatanicus* (Ives, 1891), forms symbioses with sea anemones that may serve as cleaning stations for reef fishes [1]. This Caribbean palaemonid shrimp has usually been reported in symbiotic association with several species of actiniarian hosts, such as *Condylactis gigantea* (Weinland, 1860) and *Bartholomea annulata* (Le Sueur, 1817), or even with some corallimorpharians and a scyphozoan jellyfish [2]. During a field survey at Alacranes coral reef (26 June 2016; 22°27.14' N, 89°45.79' W; 13 m depth) on the Campeche Bank, Yucatán Peninsula, México, two spotted shrimps were observed swimming and walking above the polyps of the head coral *Montastraea cavernosa* (Linnaeus, 1767). Because none of the usual hosts of *P. yucatanicus* were detected nearby, we hypothesize that the shrimps were using the scleractinian coral as a host. Some other shrimp species commonly associated with actiniarians were previously reported to be living on stony corals, such as *Ancylomenes holthuisi* (Bruce, 1969) on *Heliofungia actiniformis* (Quoy and Gaimard, 1833) in New Guinea [3], and *Periclimenes rathbunae* Schmitt, 1924 on *Dendrogyra cylindrus* Ehrenberg, 1834 in Curaçao [4]. The observation (see Figure 1) of *Montastraea cavernosa* hosting *Periclimenes yucatanicus* is the second report of a palaemonid shrimp in association with a scleractinian coral in the Atlantic Ocean. The ecological implications of this association are unknown but could be related to a low local availability of usual hosts.



**Figure 1.** (a) Two anemone shrimps *Periclimenes yucatanicus* (arrows) on the scleractinian coral *Montastraea cavernosa*. (b) *P. yucatanicus* dorsal side. Scale bars: 1 cm.

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