



First record of the coral crab *Carpilius corallinus* (Crustacea: Decapoda: Carpiliidae) on the coast of Bahia, Brazil

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Abstract – This work reports the occurrence of the coral crab *Carpilius corallinus* for the coast of Bahia State, Brazil, found on the shore at Salvador. A male specimen of *C. corallinus* was accidentally collected by a fisherman using a bottom longline at April 13th, 2002, in Itapuã, Salvador, Bahia (12°58'35"S, 38°20'24"W), at approximately 30 m depth. This record reduces the biogeographical gap of this species on the coast of Brazil.

Additional key words: Bahian coast, Brachyura, occurrence.

Resumo (Primeiro registro do caranguejo guajá *Carpilius corallinus* (Crustacea: Decapoda: Carpiliidae) para a costa da Bahia, Brasil) – Este trabalho reporta a ocorrência de *Carpilius corallinus* para a costa da Bahia, Brasil, encontrado no litoral de Salvador. Um espécime macho de *C. corallinus* foi coletado acidentalmente por um pescador com um espinhel de fundo, no dia 13 de abril de 2002, na praia de Itapuã, Salvador, Bahia, Brasil (12°58'35"S, 38°20'24"W), a profundidade de cerca de 30 m. Este registro reduz o hiato biogeográfico da espécie na costa Brasileira.

Palavras-chave adicionais: Brachyura, litoral baiano, ocorrência.

The family Carpiliidae Ortmann, 1893, includes only one genus *Carpilius*, with three species: *C. convexus* (Forsk., 1775), *C. corallinus* (Herbst, 1783), and *C. maculatus* (Linnaeus, 1758) (Ng et al. 2008). *Carpilius maculatus* is distributed in the Hawaiian islands, Indian Ocean, and Red Sea; *C. convexus* occurs in Hawaii, Indo-Pacific, Indian Ocean, and Red Sea (Wetzer et al. 2003); and *C. corallinus* is distributed in the West Atlantic – Florida, Gulf of Mexico, Antilles, Colombia, Venezuela, and Brazil, from Ceará to Pernambuco (including Fernando de Noronha) and São Paulo (Melo 1996; Melo et al. 1998).

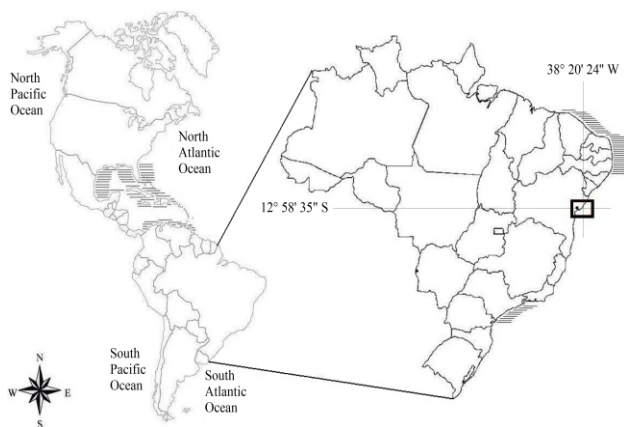


Figure 1. Distribution of *Carpilius corallinus* in Brazil, emphasizing the new occurrence in the coast of Bahia (black square).

Carpilius corallinus occurs in low tide to 20 m depth, living over coral reefs and sandstone, or in sandy seafloors (Melo 1996). A male specimen of *C. corallinus* was accidentally collected at approximately 30 m depth, with a

bottom longline, from Itapuã beach, in Salvador city, Bahia (12°58'35"S, 38°20'24"W) (Figure 1), on April 13th, 2002. The specimen was measured using a digital pachymeter with 0.01 mm accuracy. The sample was fixed in formol 10% and preserved in glycerin and alcohol 70%. The material is deposited at the Museu de Zoologia da Faculdade de Tecnologia e Ciências, Salvador, Bahia, Brazil (MZFTC).

The following biometrical measurements of the specimen (Figure 2) were obtained: carapace ca. 121.82 mm long, major carapace ca. 162.45 mm wide, front ca. 40.30 mm wide, front-orbital ca. 61.95 mm wide; right cheliped 229.58 mm long; left cheliped 219.09 mm long.

Material examined – BRAZIL. BAHIA: Salvador, Itapuã beach (12°58'35"S, 38°20'24"W), 13 Apr. 2002, J. Silva, 1 male (MZFTC 677).

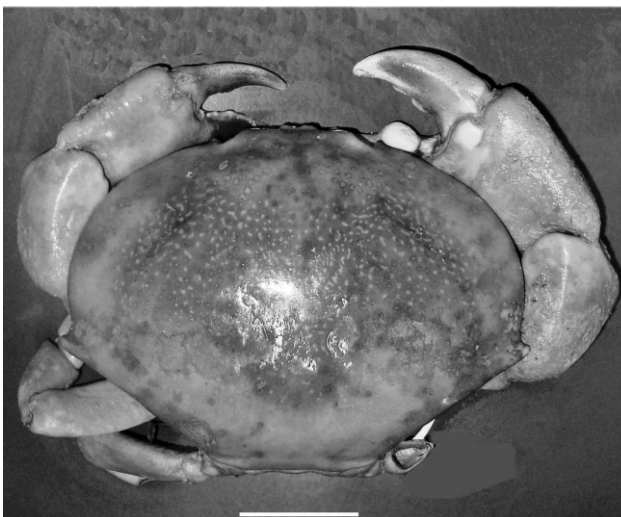


Figure 2. A male specimen of *Carpilius corallinus* collected in Itapuã beach, Salvador, Bahia, Brazil, on April 13th, 2002 (Photo: Sivanildo Campos; Bar = 30 mm).

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Carpilius corallinus inhabits part of the Brazilian Biogeographical Province, with its southernmost occurrence in Pernambuco (Melo 1996). However, Melo et al. (1998) recorded the species for the São Paulo shore, noting a biogeographical gap for the species distribution. This record for the coastal Bahia reduced this gap along the Brazilian coast.

Guinot (1966) observed that *C. corallinus* is more active at night, which probably explains why the specimen was caught with a bottom longline. This fishing technique is generally armed at sunset, and disarmed only at the morning

of the following day, suggesting that the specimen was caught during its nocturnal activity.

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REFERENCES

- Guinot, D.** 1966. *Les Crabes Comestibles de L'Indo-Pacifique*. Fondation Singer-Polignac, Paris.
- Melo, G.A.S.** 1996. *Manual de Identificação dos Brachyura (Caranguejo e Siris) do Litoral Brasileiro*. Plêiade/FAPESP, São Paulo.
- Melo, G.A.S.; Torres, M.F.A. & Campos, O.** 1998. Malacostraca – Eucarida Brachyura Dromiacea and Oxystomata. In: P.S. Young (ed.), *Catalogue of Crustacea of Brazil*. Série Livros. Museu Nacional, Rio de Janeiro, p. 439–454.
- Ng, P.K.L.; Guinot, D. & Davie, P.J.F.** 2008. Systema Brachyurorum: Part I. An annotated checklist of extant brachyuran crabs of the world. *The Raffles Bulletin of Zoology* 17: 1–286.
- Wetzer, R.; Martin, J.W. & Trautwein, S.E.** 2003. Phylogenetic relationships within the coral crab genus *Carpilius* (Brachyura, Xanthoidea, Carpiliidae) and of the Carpiliidae to other xanthoid crab families based on molecular sequence data. *Molecular Phylogenetics and Evolution* 27: 410–421.