Parte III - Crustáceos / Crustaceans

1958

comments by Dr. Lejeune de Oliveira, 1958

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Orgs.

Crustacea: Order Decapoda

Sub-Order Reptantia

1) Tribe Anomura
   Family Porcellanidae
   *Petrolisthes lamarckii* var. *asiatica* Leach, 1820.

   These porcellanidae were formerly numerous on the rocky beaches of the “Ilha do Pinheiro”; oysters grew on these rocks and below there were generally holes of “guaiá” crabs, i.e. *Panopeus herbstii*. In 1948 they were rare and since 1950 they have disappeared.

2) Tribe Brachyura
   Sub-Tribe Brachygnatha
   Family Portunidae
   *Callinectes exasperatus* (Gerstaecker, 1856) Rathbun, 1897.

   “Siriaçu”, or the “large crab”, was formerly frequent near Manguinhos and in the Bay of Inhauma. It became scarce in 1950 and has not been seen since 1953. These “siris” live in mesohyaline to oligohyaline sea-water. They have been found in the lagoons of Maricá, Saquarema and Piratininga which contain a high percentage of dissolved organic matter. They disappeared from the bay of Inhauma as soon as the petrol refinery began to work and the municipal government started to press a great dump of garbage into the soil, i.e. from 1955 on.

   Family Xanthidae
   *Panopeus herbstii* Milne-Edwards, 1834

   V. “Guaiá”, Lejeune de Oliveira’s publication in Memórias do Instituto Oswaldo Cruz, 35(1):153-171, 1940, was carried out on “guaiás” capture on the Ilha do Pinheiro. Now they are entirely gone; they tolerate up to the IV degree of pollution but disappear when the V degree is reached (L. de Oliveira, Memórias do Instituto Oswaldo Cruz, 56(1), 1958). The finding of this species by Lutz in 1922 constitutes excellent proof that formerly the water was pure at Manguinhos. By 1948, they had become rare and were only founded after long and careful search. They are as sensitive to pollution as the oysters and seem to resist polihaline and mesohaline degrees of salinity.

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* Comments by Dr. Lejeune de Oliveira, 1958  
  * Typed text (10p.) found in BR. MN. Museu Nacional, caixa 31, pasta 240. [E.N.]
Family Grapsidae Dana
Sub-Family Grapsinae Dana p. Parte
*Goniopsis cruentala* (Latreille, 1803) Rathbun, 1901
This crab is popularly know as “aratu”; it lived by the hundreds on the Ilha do Pinheiro (1937-1950). It does not burrow and generally does not climb more than half a meter up the trees. The crab used to live in the clefts between the stones of the quay and in the vivarium on the Island. Those I have seen have a reddish carapace, red legs, dark spots and large white spots. I have never seen the yellow form of the same species in the bay of Inhauma. They disappeared altogether from the island pollution (*Memórias do Instituto Oswaldo Cruz*, v.56, n.1, 1956).

This year (1958), the strong ressaca at Leme led to the renewal of the waters of Inhauma Bay, and in April and May a few specimens appeared on the quay of the island.

Sub-family Sesarminae Dana
*Sesarma (Holometopus) rectum* Randall
*Sesarma recta* Randall, 1839
No longer found in the Bay of Inhaúma; the last specimen was captured in 1946.

*Aratus pisoni* Milne-Edwards, 1837
The “Caranguejo marinho”, i.e. “sailor crab” is very agile at climbing trees, up to the lightest and thinnest branches. It was very abundant on the Ilha do Pinheiro until 1940, but gradually became scarcer and is there no more.

*Chasmagnathus granulatus* Dana, 1852
This species is the “catanhem” crab of the state of Rio de Janeiro. The Lagoon of Piratininga is the type-locality from where it was described, in 1852, by Dana.

The catanhens occur by the thousand on the whole perimetral band of the Lagoon of Saquarema. The local fisherman look up on them as “vermin” which destroys the nets and traps. On the “Ilha do Pinheiro”, in the Bay of Inhauma there were formerly bands of several hundreds. After 1950 they disappeared owing to pollution, especially by the petrol refinery. They used to occur in the Lagoon Rodrigo de Freitas, until 1953; from 1954 to 1958 they have not been seen (urban pollution).

Family Gecarcinidae Dana
*Cardisoma guanhumi* Latreille, 1825
“Guaiamu” were formerly abundant at Manguinhos but are no longer there because of filling up, urbanization and hunting. They remained on at the Ilha do Pinheiro. In 1950, the zone inhabited by them exhibited a guaiamu hole about every meter and a half, and there were about 10,000 burrows in 18,000 m², almost all of them occupied. Now they are almost entirely gone, not because of persecution, which is not permitted on the island, but mostly on account of the oil and other pollution which flowed into their burrows.

*Ucides cordatus* (L.)
Know as the true crab, they were very abundant on the beaches of the Bay of Inhauma, near the mouth of the river Faria on the Ilha do Pinheiro. They are still there but have become more scarce. By 1950 they were already gone from the
beaches of Manguinhos. They tend to disappear consequent on urban and marine pollution.

Family Ocypodidae
Sub-family Ocypodinae
= *Uca pugnax* Smith, 1870
= *Gelasimus vocator* Kingsley = *Uca vocator* Ortmann

The “chama-marê” i.e. “tide-callers” (fiddler crab) were extremely abundant on the beaches of the Bay, at Manguinhos, at the mouth of the river Faria and on the Ilha do Pinheiro.

In the estuary of the rio Faria there was the mangrove-swamp of Manguinhos which is no longer there. The populations of the Ilha do Pinheiro are becoming more and more scarce and are on their way out, due to urban, industrial and maritime pollution. The light layers of oil on top of the water holes, small lagoons and saturated margins of sea-water, where their larvae develop kills the juvenile stages on hatching.

Their physiology was studied on the Ilha do Pinheiro by Dr. Jocelyn Crane of the New York Zoological Society.

*Gelasimus vocator* Kingsley became *Uca vocator* Ortmann in 1897. In 1901 *U. vocator* “sensu lato” was found to comprise several species, which were described by Rathbun. The one studied by Lutz is now called *Uca pugnax* (Smith, 1870), that is:

= *Gelasimus pugnax* Smith 1870,
= *Uca vocator* Ortmann 1897 (pro part),
= *Uca pugnax* Rathbun 1900 (pro part),
= *Uca pugnax* Smith 1870, var. *Rapax* Rathbun 1901.

Sub Tribe Oxystomata
Family Callapidae

*Hepatus princeps* (Herbst 1794) von Marstens, 1872

In the Adolpho Lutz Collection there is a “Siri-baú” or “trunk-crab” caught in Manguinhos. From 1937 on, we never found the “trunk-crab” in the Bay of Inhauma nor on the Praia (beach) de Manguinhos. The presence of this species, proved by its capture by Adolpho Lutz is important, because it is an indicator of very pure and limpid water and shows the complete absencense of pollution in 1920; at that time many true shrimps were caught on the old Island of Bom Jardim, in front of Manguinhos and of the spot where the Petrol Refinery now stands. In 1922, many mangrove oysters were also to be found on this former island.

Order Stomatoda
Family Squillidae

*Squilla prasinolineata* Dana, 1852

This species was found in the Collection of Professor Dr. Lutz and was still common in the Bay of Inhauma in 1939, when Dr. Lejeune De Oliveira began to study the genus *Panopeus*, on the Ilha do Pinheiro; a fisherman offered these “blue tamburutacas” to Dr. Henrique Aragão three times. In 1947, several specimens were put into the aquaria of the Hydrobiologic Station when the circulation of water was established. From February to April 1948 they were abundant; they were
caught by fisherman J. Porsino da Silva and placed in the aquaria, where Prof. Pierre Drach, then in Rio, much admired their vivacity and the beautiful bluish color of the keels in life. The collectors of “siris” used to get them also, but when fishing for siris came to an end the *Squilla prasolineata* had also disappeared (1953). This species is rather sensitive to pollution. Some of the specimens caught in 1948 were sent to the Marine Biological Station at Roscoff by Profs. Drach and Aragão.

*Lysiosquilla scabricauda* (Lamarck, 1818) Miers, 1850

The larger “tamburutaca” or “mother of shrimps” attains 24 to 25 cm approximately 10 inches, of length. It used to be caught by the fisherman together with shrimps (*Penaeus* sp.). In 1948 they were not doing well in our aquaria, for which water was pumped in from the Canal of Sapucaia. They used to be taken in the dregs of the nets, which brought along communities of the ascidian, *Tethium plicatum* Lessuer, several Bryozoa, *Bugulla* spp., and sea-weeds, i.e. *Enteromorpha intestinalis* Link and the sea-lettuce *Ulva lactuca* L. It was in the midst of this so-called rubbish that the mother of shrimps occasionally occurred.

From 1950 on they have no longer been seen in Inhauma Bay.