

MARINE CLADOCERA IN THE HONG KONG WATERS

Cladóceros marinos en aguas de Hong Kong

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RESUMEN

Se presenta un breve informe sobre los cladóceros marinos recolectados cerca de Kong-Kong.

Among aliquots of plankton samples received from the Smithsonian Marine Sorting Center, eleven were from samples collected by the Hong Kong University from March to July 1954, taken at the surface in the waters in front of the Pearl River mouth (Hong Kong):

22° 09' .8 N - 113° 52' .6 E
22° 27' .0 N - 114° 23' .0 E

The Cladocera, qualitatively, are represented by five species:

SPECIES	March	April	May	June	July
<i>Podon leuckarti</i>	x				
<i>Evadne nordmanni</i>	x	x		x	
<i>Podon schmackeri</i>	x	x	x		x
<i>Evadne tergestina</i>	x	x	x	x	x
<i>Penilia avirostris</i>	x	x	x	x	x

All were present in March only.

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ABSTRACT

A short report on the marine cladocera collected in surface waters near Hong-Kong is presented.

KEYWORDS: Plankton. Cladocera. Hong-Kong.

Penilia avirostris, *Evadne tergestina*, and *Podon schmackeri* were found through March to July.

It may be of some interest to note that *P. avirostris* carried a maximum of 9 embryos in the brood pouch in March, 6 in April and 4 in the other months, including July. This pattern of the diminishing number of embryos in parthenogenetic individuals is associated with the physiological depression preceding the sexual phase, as previously reported (Della Croce & Venugopal, 1973); however, no sexual forms or resting eggs have been found in the aliquots. Only individuals of *E. tergestina* collected in April were producing resting eggs.

The occurrence of *P. schmackeri*, the least known cladoceran possibly because of its scarcity in plankton samples, and its distribution are until now known to be restricted to Indo-West Pacific waters (Onbé, 1983).

The occurrence of *P. schmackeri* in 102 out of

1680 subsamples of cladocerans taken from 3302 samples collected during the "Cooperative Study of the Kuroshio and Adjacent Regions" (CSK) led to the study of its biology (Kim & Onbé, 1989), distribution and zoogeography (Kim & Onbé, 1989 a).

Despite its frequent occurrence in the northwestern Pacific waters (Kim & Onbé, 1989 a), *P. schmackeri* has not been recorded from nearshore and inland seas, but has been found in waters relatively distant from the coast. According to Kim and Onbé (1989 a) the distant neritic character of the species seems also to be the reason why *P. schmackeri* has not been well studied.

The present observation shows that the occurrence of *P. schmackeri* in Hong Kong waters cannot be considered as sporadic, since it is continuous at least from March to July. The first record of *P. schmackeri* in these waters led Gibitz (1921) to consider it as a warm water neritic species, whilst in northwestern Pacific waters it has been considered as a warm water, stenohaline, distant neritic species (Kim & Onbé 1989 a).

It is worth interesting to note that *P. schmackeri* occurs in Hong Kong waters from March to July in association with *E. tergestina* and *P. avirostris*, as in the majority of stations (85 out of 102 stations) in the northwestern Pacific waters (Kim & Onbé 1989 a). Moreover, the species seems to represent a specific ecological situation as it has been found in the same area (Hong Kong) 85 years after it was first collected there and described by Poppe (1888). Finally, the species should be listed

and described in taxonomic papers dealing specifically with the marine Cladocera (Della Croce, 1974), as *P. schmackeri* has been reported recently as present in South Atlantic, in the coastal waters of Brazil (Rocha, 1985).

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