

A NOTE ON THE SUCCESSIVE EGG-LAYING WITHOUT MATING OF SOME INDIAN CRABS

INSTANCES in crabs where egg-laying occurs more than once without repeated copulation have been recorded by a few authors. Hartnoll (1965)¹ observed *Hyas coarctatus* and *Inachus dorsettensis* as laying two sets of eggs and *Microphrys bicornutus* laying upto four sets of eggs without a male being present. He also mentioned that in *Pisa tetraodon* eight ovulations were recorded after one mating.

different species were collected and reared in separate laboratory tanks. On many occasions it was noticed that female crabs of some of these species after release of the first batch of eggs, became ovigerous either on the same day, as in *Philyra corallicola* Alcock, or after a few days.

Actual instances together with dates of observations are given in Table I.

TABLE I

Name of species of crabs	Date of collection of ovigerous females, and condition of eggs	Date of release of first observed batch of eggs	Date of observation of second observed batch of eggs	Date of observation of third observed batch of eggs	Remarks
<i>Philyra corallicola</i>	17-8-1967 eggs dark in colour showing full development	20-8-1967 14-10 hrs.	20-8-1967 17-16 hrs.	1-9-1967	3 batches of eggs could be observed. On 6-9-1967 the eggs were shed in pre-matured condition
<i>Pinnotheres</i> sp.	28-8-1967 eggs dark in colour; fully developed	30-8-1967	2-9-1967	..	2 batches of eggs could be observed. On 4-9-1967 the eggs were shed in pre-matured condition
<i>Doclea gracilipes</i>	16-9-1968 eggs orange-red in colour; developing eggs	24-9-1968	30-9-1968	..	2 batches of eggs could be observed. On 24-9-1968 the female shed eggs in pre-matured condition and developed a fresh batch on 30-9-1968
<i>Schizophrys aspera</i>	17-10-1968 eggs orange-red in colour; developing eggs	22-10-1968	2-11-1968	..	2 batches of eggs could be observed. The female shed pre-matured eggs on 22-10-1968 and became ovigerous on 2-11-1968
<i>Pilumnus vesperilio</i>	20-11-1968 eggs dark in colour; almost developed	25-11-1968	27-11-1968	..	2 batches of eggs could be observed. Female shed the eggs on 29-11-1968 in pre-matured condition

Although studies on the larval development of crabs have been carried out by several authors in India, the successive egg-laying without intermediate copulation does not appear to have been reported so far except by Silas and Alagaraswami (1967)² who mentioned, in their resume of the work done on *Pinnotheres* sp., that female crabs became ovigerous in laboratory tanks in the absence of a male.

During the course of studies on larval hatching in the laboratory in Bombay and at Ratnagiri, several ovigerous female crabs of

I am grateful to the Department of Fisheries, Maharashtra State, for facilities, and to Dr. N. K. Panikkar, Director, National Institute of Oceanography, Goa, for useful suggestions.
Taraporevala Marine Biological Res. Station,
Bombay, October 15, 1970.

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1. Hartnoll, R. G., *Crustaceans*, 1965, 9, Part I, 16.
2. Silas, E. G. and Alagaraswami, K., *Proceedings of the Symposium on Crustacea*, 1965, Part III, pp. 1161, 1227.