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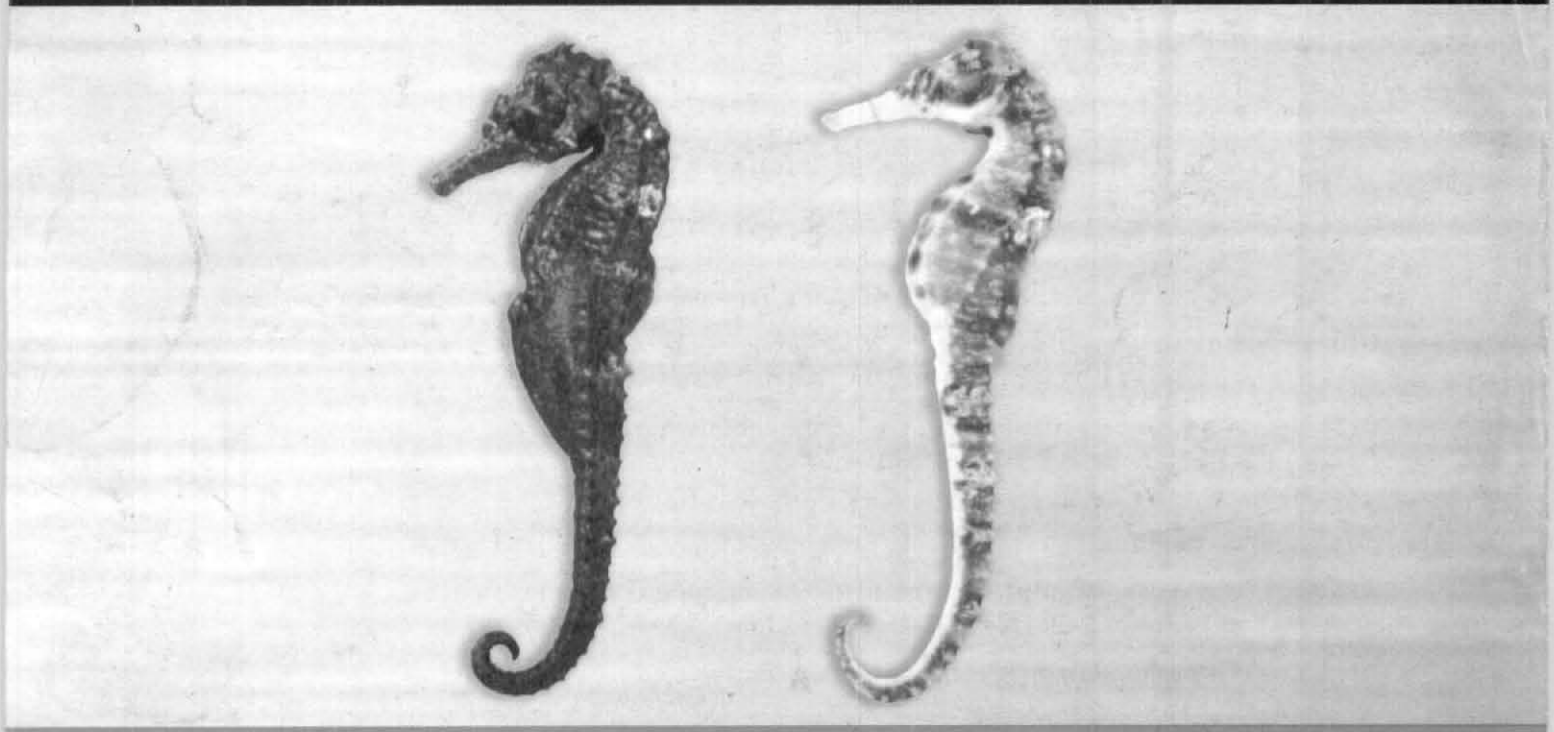

TECHNICAL AND EXTENSION SERIES

CENTRAL MARINE FISHERIES RESEARCH INSTITUTE

COCHIN, INDIA

(INDIAN COUNCIL OF AGRICULTURAL RESEARCH)

Settlement of mussels on rocks in the coastal waters is an important event for mussel fishermen as well as farmers, since this determines the recruitment, species survival and availability of young ones (seeds) for mariculture. Considering the growing interest for mussel culture in Kerala, it has become a necessity to monitor and ascertain its seed availability.

In order to study the relative abundance of mussel young ones, the intertidal and submerged rocks along the southwest coast of India between Kanyakumari (Tamilnadu) and Pozhikkara near Paravoor (Quilon District, Kerala) were surveyed during November-December 2000, after the north-east monsoon. The distribution and details of the area where mussel seeds occurred on submerged rocks were obtained from local divers involved in mussel fishery. Samples of mussels were collected at random from settled areas of different seed beds by scraping small portions of settlement from the rock surface as sheets. The periphery of these sheets were trimmed in such a way that each sample sheet has a rectangular, square or circular shape. This enable easy calculation of the area of the samples. The weight and length of mussels from the samples were recorded and were used for estimating the same (average of pooled data) for an area of 1 m^2.

On the west coast of Tamilnadu, the brown mussel *Perna indica* was noticed off Kovalam near Kanyakumari, Muttom, Kadiapatanam, Colachel-Kodimuna, Vaniakudi-Kurumpana and Melemidalam-Enayam, while on the south Kerala coast, they were found off Pulinkudi, Mulloor, Vizhinjam, Avaduthura-Kovalam, Valiathura, Thazhe-Vettoor and Odayam near Varkala. Among these, Kadiapatanam, Colachel, Enayam, Pulinkudi, Mulloor and Vizhinjam were the major centres of mussel fishery. Mussels were distributed mainly on submerged rocky areas and less in the intertidal region at all centres. Those found in the latter region were comparatively smaller in size. The length-wise distri-

Table. Length-wise distribution of biomass per m^2 (in kg) of *Perna indica* at different centres

Length-interval (mm)	Kovalam	Muttom	Kadia-patnam	Colachel-Kodimuna	Kurum-pana-Vaniakudi	Enayam-Midalam	Pulinkudi	Mulloor	Vizhi-njam	Avadu-thura-Kovalam	Valia-thura	Thazhe-vettoor	Odayam
10-15	0	0.60	0	0	0	0	0.02	0	0	0	0	0	0
15-20	0.28	0.63	0	0	0	0	0.13	0	0	0.07	0	0	0.13
20-25	0.36	2.90	0.13	0.07	0.15	0	0.15	0.60	0	1.31	0	0.35	0.87
25-30	0.83	3.33	0.37	0.22	0.00	0	0.07	2.95	1.23	1.80	0	0.68	1.31
30-35	1.28	0.68	1.65	0.62	0.30	1.11	0.35	2.09	0.27	1.11	0	1.81	4.54
35-40	0.21	1.21	2.76	3.90	0.83	1.96	1.33	0.91	2.05	0.95	0	4.35	7.64
40-45	0.00	0.00	6.75	4.46	3.36	4.13	3.14	0.51	2.39	0.72	11.2	6.09	3.97
45-50	2.61	0.91	1.49	3.69	4.29	3.12	3.06	0.68	2.56	3.72	0	1.57	0.00
50-55	3.57	4.89	2.78	3.08	5.49	6.55	1.99	2.13	0.92	3.15	0	3.92	1.77
55-60	6.23	2.32	0.41	0	1.18	1.66	2.27	1.17	1.09	3.74	0	2.06	0
60-65	8.55	0	0.00	0	0	0.95	0.48	1.00	0	0.60	0	0	0
65-70	4.80	0	0.59	0	0	0	0	0	0	0.67	0	0	0
70-75	1.67	0	0	0	0	0	0	0	0	0	0	0	0
Total	30.37	17.45	16.93	16.05	15.60	19.49	13.01	12.05	10.53	17.84	11.2	20.83	20.24

bution of biomass per sq. meter (in kg) is presented in Table. Exploitation of the resource, environmental factors and time of settlement are important factors determining the abundance and size distribution. The Table provides information on the comparative availability of suitable sized seeds at different centres and is useful to mussel farmers for making appropriate decisions.

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