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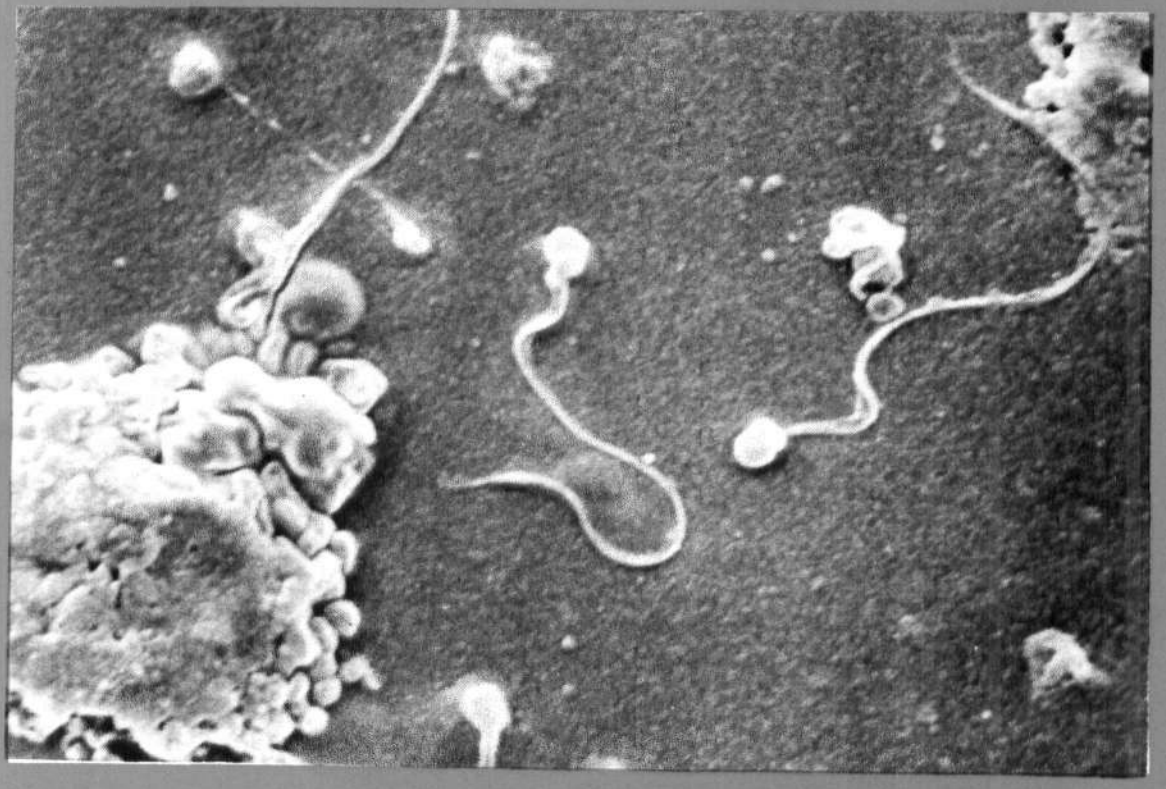

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RECORD PRODUCTION OF *GRACILARIA EDULIS* IN CULTURE SYSTEM IN MINICOY LAGOON*

Attempts at culturing the economically important seaweed *Gracilaria edulis* have been going on since two decades in India, in view of its importance as an industrial raw material for extraction of the phycocolloid agar-agar.

The Central Marine Fisheries Research Institute and the Central Salt and Marine Chemicals Research Institute have been continuously striving to evolve an economically feasible method to culture this agarophyte in order to augment the resource of the same to the seaweed based industries as the production from natural beds has been found to be inadequate to cater to the demands of the agar industry in the country. A certain amount of success has been achieved in this direction with production values ranging from 3 fold increase in 60 days to 4.5 fold in 80 days.

With a view to find out the feasibility of culturing *G. edulis* in Minicoy lagoon, experiments have been started since 1989 and encouraging results were obtained, with a maximum production value of 7.1 fold increase over the initial seed material introduced in the coir ropes or nets in 60 days time.

During 1992 also, the experiments have been continued in Minicoy lagoon and the results obtained are very encouraging, surpassing to a great extent the earlier production values for this ecosystem.

In September 1992, one culture rope harvested at Fisheries Jetty site after 50 days of growth recorded a 31 fold increase over the initial seed material of 300 g (Table) and two other ropes harvested near Navodaya School site have shown an 11 fold and 12.6 fold increase. This is the

TABLE 1. *The maximum values obtained during 1990-92*

Name of culture site	Date of introduction of the culture rope/net	Date of harvest	Initial seed material in kg	Harvest obtained in kg	Rate of increase
Fisheries Jetty	20-7-1992 rope	11-9-1992 50 days	0.30	9.30	31 fold
Navodaya School I rope	21-7-1992 rope	10-9-1992 50 days	0.30	3.80	12.6 fold
Navodaya School II rope	21-7-1992 rope	10-9-1992 50 days	0.30	3.30	11 fold
Fisheries Jetty	3-1-1992 (one rope & one net)	25-2-1992	0.30	2.00	6.6 fold
Fisheries Jetty	31-7-1991 (rope)	26-9-1991 56 days	0.25	1.10	4.4 fold
Navodaya School	15-6-1991 (rope)	30-7-1991 45 days	0.50	1.95	3.9 fold
Fisheries Jetty	13-4-1990 (rope)	11-6-1990 60 days	0.80	6.46	7.1 fold
Navodaya School	26-10-1990 (net)	31-12-1990 66 days	0.60	4.30	7.1 fold

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maximum production recorded for Indian coastal waters and elsewhere also. Further work is in progress. A table showing the details of the culture operations, when maximum values were obtained during these three years from 1990 to 1992 is given to get a comparative picture.

From these results it can be inferred that the grazing of the crop by fishes as reported previously was mainly responsible for the low production values in the earlier instances. Neverthless grazing has been observed during this year also is some of the ropes, but this particular culture rope which escaped the attack by fish and other organisms has given an idea about the real culture potential of the seaweed *G. edulis* in Minicoy Lagoon. Hence this clearly suggests that attempts at preventing grazing of the crop by fishes and other organisms must be taken up in future in seaweed farming to derive maximum benefits.