

**COMPARISON OF DIFFERENT CULTURE
METHODS OF *Kappaphycus alvarezii* WITH RESPECT
TO ENVIRONMENTAL CONDITION OF KIRANCHI
BAY/KILINCHCHI**

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ABSTRACT

The development of commerce based on *Kappaphycus alvarezii* is an outstanding example of widespread farming that evolved from simple methods refined mainly by farmers in the field. This phenomenon has led to current production exceeding 150,000 dry tons/yr from at least ten countries. Coastal areas of tropical regions where seaplants are the main source of income. The information base for *Kappaphycus alvarezii* is expanding but has not yet achieved useful stability. Much "knowledge" about the biology of *Kappaphycus alvarezii* is practical conjecture extrapolated from studies of other seaweeds.

Kappaphycus alvarezii production is discussed in light of the plants' biology and the agronomic techniques employed by farmers. Socio-economic factors discussed but emphasis is laid on the characteristics of cultivar populations, factors involving farm location and practical agronomy.

Producing red alga *Kappaphycus alvarezii* were cultured in Kiranchi bay, Kilinochi over two months period using monoline and cage culture methods.

Seawater temperature ranged from 28 to 31 °C. Ammonia accounted for 55.1–89.8% it depending on the season, and salinity did not change significantly. Temperature was the only environmental factor that explained 96% of the observed variation in *Kappaphycus alvarezii* growth rate The highest average growth rates June to August.

The growth rates of *Kappaphycus alvarezii* were exponential during April to June. As propagule weight increased the growth rate was reduced.