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## CHAPTER-16

### NUTRITION AND FEED MANAGEMENT OF COMMERCIALY IMPORTANT LOBSTERS

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#### Introduction:

Lobsters are economically most important organism in marine environment that belongs to class crustacea under the phylum arthropoda. They are under the order decapoda and the important families are palinuridae, scyllaridae, nephropidae and synaxidae. Palinuridae consists of spiny lobsters, are one of the world's most valuable seafood's with high market demand in Asia, Europe and America. Most of the captured lobster fisheries are either over-exploited and diminishing or controlled for maximum sustainable yield. The only long-term way of satisfying market demand for spiny lobsters appears to be aquaculture (Williams, 2009). For several species of spiny lobsters, laboratory-scale rearing of the larvae from egg to puerulus has been achieved, such as *Panulirus japonicus*, *Panulirus longipes*, *Jasus lalandii*, *Jasus edwardsii* and *Sagmariasus verreaux*. Nevertheless, commercially viable hatchery development of spiny lobsters also takes some time off. Until hatchery production becomes commercially feasible, catching juveniles from the wild and growing them to market size is the only realistic way to increase the amount of marketed spiny lobster, thereby circumventing the high natural mortality that otherwise occurs (Phillips *et al.* 2003).

Two big rostral spines and hundreds of tiny forward-pointing spines covering the carapace give the spiny lobster family its name. For navigation, self-defence and communication, their long antennae are used. They can live for more than 20 years and grow to weigh 5 kg. But fishermen rarely catch animals heavier than 3 kg due to fishing