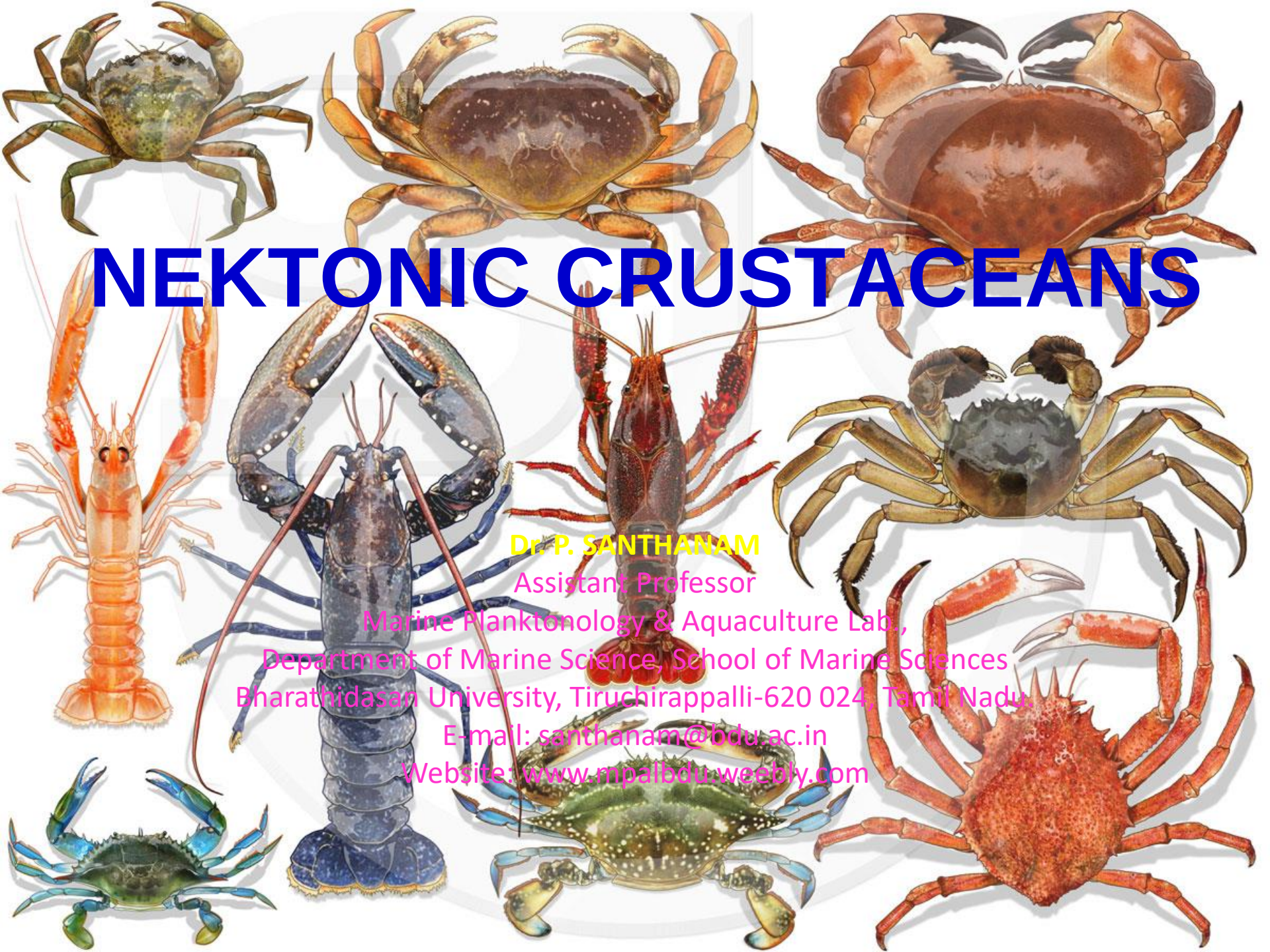




NEKTONIC CRUSTACEANS

Dr. P. SANTHANAM

Assistant Professor

Marine Planktonology & Aquaculture Lab,

Department of Marine Science, School of Marine Sciences

Bharathidasan University, Tiruchirappalli-620 024, Tamil Nadu.

E-mail: santhanam@bdu.ac.in

Website: www.mpalbdu.weebly.com

Tiger shrimp (*Penaeus monodon*)

Black tiger shrimp get their name from the dark stripes that encircle the shell of the black tiger. Black tiger shrimp are also known as giant tiger prawns, or tigers. When cooked, tiger shrimp meat turns white and the black stripes on the shell turn bright red.

Rostrum with both dorsal and ventral teeth; maximum size 330mm in TL. Found in sand/mud, 5-40m

One of the fast growing penaeid shrimps, exclusively considered for brackishwater shrimp farming.

This is one of the most popular varieties of shrimp on the Asian, European, and American markets.



Green Tiger Shrimp

Penaeus semisulcatus

Rostrum with both dorsal and ventral teeth; maximum size 240mm in TL

Found in sand and sea grass beds; 5-30m; juveniles in the bar mouth areas of estuaries and adults in marine

Larger ones processed and exported under “flower” variety



White shrimp (*Penaeus indicus*)

This is one of the major commercial species of the world. Rostrum with dorsal and ventral teeth; rostral crest elevated but not in triangular profile.

Body with yellow colour with numerous white spots; antennal flagellum yellow in colour; maximum size 228mm in TL. Found in sand or mud, 5-40m; post larvae, juveniles in brackishwater and adults in marine

It is the most important shrimp caught off the East African coast, and is probably also the most important Indian commercial species, especially for the inshore fisheries and for rice field culture in Kerala.

It is important in Iran, Bangladesh, Malaysia, Thailand, Indonesia and the Philippines. A large population was discovered fairly recently in Northwest Australia.



White leg shrimp (*Litopenaeus vannamei*)

Formerly *Penaeus vannamei*, also known as **Pacific white shrimp**, is a variety of prawn of the eastern Pacific Ocean commonly caught or farmed for food.

Litopenaeus vannamei grows to a maximum length of 230 millimetres, with a carapace length of 90 mm. Adults live in the ocean, at depths of up to 72 metres, while juveniles live in estuaries. The rostrum is moderately long, with 7–10 teeth on the dorsal side and 2–4 teeth on the ventral side.

Whiteleg shrimp are native to the eastern Pacific Ocean, from the Mexican state of Sonora as far south as northern Peru. It is restricted to areas where the water temperature remains above 20 °C throughout the year.



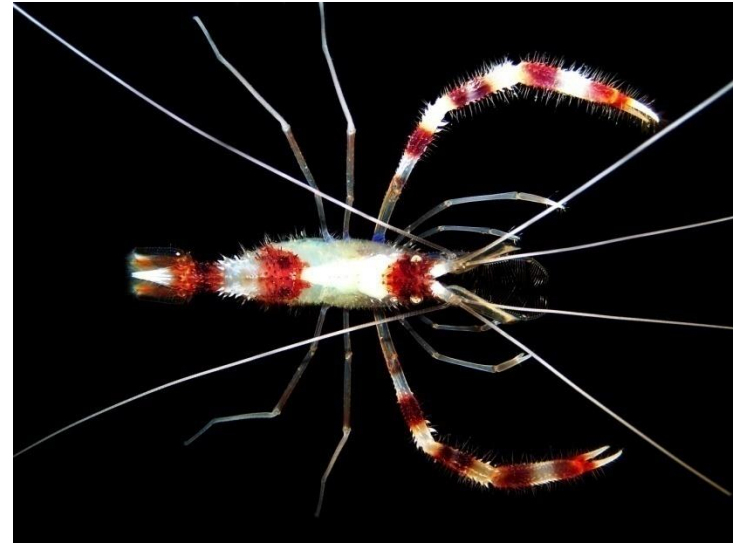
Banded Coral Shrimp (*Stenopus hispidus*)

The banded coral shrimp is distinguished by its colorful red or purple bands and its large claws.

This shrimp is very popular among marine aquarium hobbyists.

It is nocturnal, and scavenges the reef at night in search of scraps of food.

They will also occasionally clean parasites from fish.



Anemone Shrimp (*Periclimenes brevicarpalis*)

The anemone shrimp is a small transparent species that is often found living within the stinging tentacles of sea anemones.

They usually grow to about one inch in length.

Anemone shrimps can sometimes be found sharing a large anemone with one or more clownfish or anemone crabs, where they feed on scraps.



Blood Shrimp (*Lysemata debelius*)

The blood shrimp gets its name from its dark blood-red color.

The red color appears black underwater, helping this shrimp to hide from predators.

The bright colors of this species make it a desirable but expensive addition to the home aquarium.

They are found in the waters of the Indian ocean.



As with other seafood, shrimp is high in **calcium** and **protein**.

A shrimp-based meal is also a significant source of **cholesterol**, from 7 mg to 251 mg per 100 g of shrimp, depending on the method of preparation

Dried shrimp is commonly used as a flavoring and as a soup base in Asian cuisines while fried shrimp is popular in North America.

In Europe, shrimp is very popular, forming a necessary ingredient in Spanish, French, Italian, Portuguese and many other seafood dishes.





CRABS

Portunus pelagicus

Carapace very broad, nine anterolateral teeth and ninth teeth stout and long.

Body colour dark grey with several irregular markings all over carapace.

Found in sand or mud, intertidal to 40m deep.

Large quantities are caught in the mechanized trawling. Commercially exploited



R. Promdam, 2004



Potunus sanguinolentus

Carapace very broad; body colour light greenish brown with three blood red spots on the posterior half of carapace.

Found sand or mud, from intertidal region to 40m deep.

Large quantities are caught in the mechanized trawling.



Scylla serrata

Carapace convex with feeble 'H' mark in the middle; nine antereolateral sharp teeth; front cut into six blunt teeth

Body colour dark green; no polygonal markings on chelipeds and on legs; maximum size is 170mm in CW

Found in sand/mud/mangroves upto 30m deep; after attaining adulthood, lives in burrow

Commercially exploited by indigenous gears from estuaries where mangrove forests are abundant



Scylla tranquebarica

Carapace depressed with feeble 'H' mark in the middle; nine antereolateral sharp teeth; front cut into six pointed teeth

Body colour light green; polygonal markings on chelipeds and on legs; maximum size is 214mm in CW

Found in sand/mud/ upto 40m deep

Exploited heavily from inshore and brackishwater environments by indigenous gears



Charybdis feriatus

Carapace broader than long with six anterolateral teeth; six front teeth with round tip; arm with three sharp spines on anterior border and no spine on posterior border.

Body colour dark pink with characteristics cross mark in the centre of carapace with white and pink colour bands on legs

Found in sandy or rocky, 10-30m.

Caught in appreciable number by trawl net



Arrow Crab (*Stenorhynchus seticornis*)

These rather peculiar looking creatures get their name from the triangular or arrowhead shape of their bodies.

Their long legs give them a spider-like appearance.

They can reach a leg span of about six inches, and are notorious for pulling feather duster worms out of their tubes with their long claws.



Red Hermit Crab (*Dardanus megistos*)

The hermit crab is a curious species that carries its home around on its back.

Because the crab's abdomen is soft and vulnerable, it uses discarded snail shells to protect itself.

As the crab grows larger, it must continually seek out larger shells.

Hermit crabs are skilled scavengers, and will feed on just about anything they find.



Purple Shore Crab (*Hemigrapsus nudus*)

The purple shore crab is commonly found on the open rocky seashores of the pacific coast of North America.

It has a purple and red shell with a white underbelly, and grows to about 2 inches in length.

This small crab can be seen scavenging the seashore where it feeds on algae and dead animal matter.



Anemone Crab (*Neopetrolisthes ohshimai*)

The anemone crab is a small, colorful crab with a porcelain-like shell.

Like the clownfish, this crab has developed an immunity to anemone stings.

This crab is usually found within the stinging tentacles of a number of anemone species where it uses its large well-developed claws to keep clownfish from stealing its home.



VALUE OF CRABS

Crabs make up 20% of all marine crustaceans caught and farmed worldwide, with over 1½ million tonnes being consumed annually.



Portunus trituberculatus and other important taxa include Portunus pelagicus.

Several species in the genus Chionoecetes, the blue crab (Callinectes sapidus), Charybdis spp., Cancer pagurus,

The Dungeness crab (Cancer magister) and Scylla serrata, each of which provides more than 20,000 tonnes annually





LOBSTERS

Spiny Lobster (*Panulirus argus*)

The spiny lobster gets its name from the large long spines protruding from the front of its shell.

They vary in color from pale almost white, to deep orange, to dark red and brown.

These lobsters occasionally participate in mass migrations where a lead lobster will be followed by thousands of others marching in a single file line.



Slipper Lobster (*Scyllarides nodifer*)

This species of lobster is characterized by the fact that it has no antennae.

Instead it has hard well-developed plates around its head.

The slipper lobster uses these to dig through the sand in search of food.

It is a scavenger and feeds on small crustaceans, worms, and just about anything else it can find.



Lobsters uses

Lobsters live on rocky, sandy, or muddy bottoms from the shoreline to beyond the edge of the continental shelf.

They generally live singly in crevices or in burrows under rocks.

Lobster is a valued foodstuff; well-known recipes.

Lobster is best eaten fresh, and they are normally purchased live.





BARNACLES

Common Barnacle (*Lepas anserifera*)

The barnacle is a very common site around the ocean.

They are frequently seen in clusters attached to boats, docks, and even whales.

Barnacles are filter feeders. They feed on plankton and other floating debris and spend their entire lives permanently attached to one spot.



Barnacle (*Amphibalanus amphitrite*)

Amphibalanus amphitrite is a species of acorn barnacle in the Balanidae family.

Its common names include the **striped barnacle**, the **purple acorn barnacle** and **Amphitrite's rock barnacle**.

It is found in warm and temperate waters worldwide.

