DEPARTMENT OF ZOOLOGY

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B.Sc. Zoology Part III

ORIENTAL REGION

INTRODUCTION

- ✓ It is extended over those parts of continental Asia which are not included in Palearctic and Ethiopian realms along with Malayan Archipelago islands.
- ✓ It includes the whole of India, Indochina, Srilanka, Burma.
- ✓ Siam, South China, Thailand, Malaya, Peninsula and Malayan Islands such as Sumatra, Java, Bali, Borneo, Philippines, Formosa etc. all located to the Western side of Wallace's line.
- ✓ It is bounded by the Himalayas in the North and by the Indian and Pacific oceans on its other sides.
- ✓ But there is no physical boundary in the South-East corner where the islands of the Malaya Archipelago string out until they reach Australia.
- ✓ The Oriental realm is divided into following four sub-realms:-

1. Indian sub-realm:-

- ✓ The entire India extending from the Suleiman range and the lower slopes of the Himalayas to Cap Comorin is included in this sub-realm.
- ✓ Its eastern side is bounded by the deltas of the Ganges and Brahmaputra, North-West side by Kashmir while it is extended up to the valley of the Indus in South.

2. Srilanka and South Indian sub-realm:-

It includes islands of Srilanka and the remaining part of the Indian peninsula (South to Nilgiri) not included in the Indian sub-realm.

3. Indo-China sub-realm:-

✓ It includes China South to the Palearctic realm boundary, Burma, Siam and the island of Hainan, Formosa and Andaman.

4. Indo-Malayan sub-realm:-

✓ It includes Malayan peninsula and all islands of Malayan Archipelago such as Borneo, Java, Sumatra, Philippine islands and Nicobar Islands.

CLIMATIC PECULIARITIES

- ✓ The whole realms comes under tropic but the Northern part of India is temperate.
- ✓ It is plane and desert, more particularly in the water sheds of great rivers the Indus and Ganges.
- ✓ Its Eastern part including Burma, Indochina and North-East Asia contains rain forests.
- ✓ Western peninsular part is desert.
- ✓ The Southern part of India, Srilanka and Malayan islands are recovered with thick luxuriant tropical forests.
- Thus, High Mountain and thick forests constitute the characteristic features of the Oriental realm.
- \checkmark The fauna of Oriental region shows resemblance with that or Ethiopian region.
- \checkmark The primitive forms are not represented in the oriental region.
- ✓ This region may be considered as a center from where several groups of vertebrates have spread to other regions.
- ✓ The fauna of Oriental regions is represented by following fresh water and terrestrial vertebrates.

1. Fishes:-

- \checkmark A large number of fresh water fishes are found in this region.
- ✓ Primitive groups are absent.
- \checkmark Fishes dominating this region belong to carps and catfishes.
- ✓ Fishes fauna of this region belongs to families: Anabantidae, Osteoglossidae, Cypriniformes, Notopteridae, Mastacembelidae, Homalopteridae, Pristolepidae, Ophiocephalidae and Siluridae.
- ✓ Out or these fishes belonging to family Luoiocephalidae, Ophiocephalidae and Mastacembelidae are characteristic.

2. Amphibians:-

- Amphibian fauna includes caecilians, few salamanders, many frogs and *Hyla*.
- ✓ Tailless amphibians are numerous but tailed amphibians are rare in this region.
- ✓ These belong to families: Buffonidae, Ranidae, Hylidae, Rhacophoridae, Brevicipitidae, Discoglossidae and Pleobatidae.

3. Reptiles:-

- ✓ 35 families of reptiles are present.
- ✓ These include: snakes, lizards, crocodiles and tortoises,

- ✓ These include following animals: Typhlops (worm snake), Uropeltis (Burrowing snake), Python (rock snake), Eryx (Sand boa), Natrix (water snake), Naja naja (cobra), Naja Hanna (king cobra), Bungarus (karait), Hydrophis (sea snake), Enhydrina (sea snake), Russell's viper, Crotalus (rattle snake), Crocodilus, Gavialis, Varanus, Geomyda (land tortoise), Testudo (land tortoise), Trionyx (soft Shelled turtle), Draco (flying lizard), Chameleon, Hemidactylus (house lizard), Mabuya, Carinatae, Geckos, Skinks.
- ✓ The characteristic reptilian families to this region are: Xenopeltidae, Uropeltidae, Acrocordidae, Lanthanotidae, Gavialidae and Plalysternidae

4. Birds:-

- ✓ Bird's fauna of this region includes 71 families.
- ✓ Most of them are widely distributed, three shared with Ethiopian fauna, five with Australian and some have doubtful relationship.
- ✓ Birds of this region are Babblers (Garrulase, Layardia, Timalia etc). Peacocks (pavo), Passerine, Woodpeckers, Barbets, Cuckoos, Bee eaters (Nyctiornis), Weaver birds (Ploceus and Munia), Sun birds (Aethopyga, Nectarophila, Anthreptes), King crows (Dicrurus), Green bulbuls (Phyllornis), Swallow shrinkes (Artamus), Pittas (Eucichla), Fire-backed pheasants (Euplocamus), Jungle fowl (Gallus), Kingfisher, Hornbills, Flower peckers (Piprisome, Prionochitus) etc.
- ✓ Only family Eurylaemidae (Peacock) is exclusive to this region.

5. Mammals:-

- ✓ Mammalian fauna includes about 35 families in this region, out of these only four are endemic.
- ✓ Mammals found in this region are:- Shrew, Rabbit, Squirrel, Cat, Dog, Bison, Hedgehog, Civet, Porcupine, Pig, Loris, Monkey, Ape, Pangolin, Elephant, Rhinoceros, Bear, Deer, Moles, Tapirs, Tarsiers, Gibbons, Flying lemurs, Bats, Lion, Fox, Dolphin, Tiger, Leopard, Whale, Antelope etc.
- ✓ In the Indian sub-region are found four horned antelopes (Tetraceros), Black buck (Antelope), Nilgiri (Bose lephus) and Sloth bear (Melursus).
- ✓ In Srilanka sub-region spiny rat and loris are characteristic.
- ✓ Indo-China sub-region has Takin (Budorcas), Hapalomys and Panda (Ailurus).
- Indo-Malaya sub-region has Proboscis monkey (Nasalis).
- ✓ Malayan Badger (Mydus), Viverridae (Cynogale and Hemigale).