SCIENCE
INTRODUCTION AND TAXONOMY

INTRODUCTION

Diversity is difference in external appearance of living beings in terms of shape, size, colour, nutrition, behaviour etc.

The living world is too diverse with an estimate of 5–30 million species. It is impractical to study such a large number of species individually and thus there is need of classification of diversity for there identification and study of inter-relationship.

KEY TERMS:

Taxonomy: Branch of biology that is concerned with identification, nomenclature and classification of organism.

Carolus Linnaeus is the father of taxonomy.

Classification: Arrangement of organisms into groups on basis of similarities, difference and relationship.

DIVERSITY IN THE LIVING WORLD

Diversity is the occurrence of the various forms of living beings which differ from one another in external appearance, size, colour, pattern, internal structure, nutrition, behaviour, habitat, etc.

Currently, there are 1.7 – 1.8 million organisms.

They range in size form microscopic bacteria, hardly a few micrometers in size, to Blue Whale (about 30m in length) and Redwood Trees of California (about 100m in height).

Bio diversity is the number and abundance of species of plants & animals in a habitation, terrestrial or aquatic (fresh water or marine water) within large biosphere.

Biodiversity means the diversity of life forms.

The warm and humid tropical regions of the earth between the tropic of Capricorn and the tropic of Cancer are rich in diversity of plant and animal life. This is called the **region of "megadiversity"**.

CLASSIFICATION : The method of placing organisms into groups or subgroups on the basis of the similarities and differences is called **classification**.

TAXONOMY

The science dealing with Identification, nomenclature and classification of organisms is called **Taxonomy** or **systematics**. Swedish scientist Carolus Linnaeus (1707 – 1778) is called **father of taxonomy.** He introduced the system of binomial nomenclature (Philosophia Botanica, 1751).