

Chapter 07

DIVERSITY IN LIVING ORGANISMS

System of Classification:

Living beings have been classified in different ways from time to time by different workers. All living beings are classified into broad categories called kingdoms.

1. Two Kingdom Classification:

Given by Lennaeus 1758, he grouped all plants into kingdom plantae and all animals into kingdom Animalia.

After the invention of microscope with the advancement in Micro – biology the knowledge over micro – organisms have ever increased. So there is a need for extension of classification to place the micro – organisms.

2. Three Kingdom Classification:

Given by ernst – Haeckel, in these classification he gave the separate kingdom for micro organisms. Thus two kingdom classification is extended into three kingdom classification. The new kingdom protista includes all micro – organisms.

- Protista
- Plantae
- Animalia

3. Four Kingdom Classification:

Given by Copeland(1956). In these classification the micro organisms are divided into two kingdom based on prokaryotic & Eukaryotics. All prokaryotes are placed under kingdom Monera, and unicellular Eukaryotes placed under kingdom protista, thus 3 kingdom extended into four kingdom classification.

- Monera
- Protista
- Metaphyta
- Metazoa

4. Five Kingdom Classification:

Robert H. Whitlaker(1969), an american taxonomist has proposed a five – kingdom classification of living organisms on the basic of the following:

Cell organization, body organization, mode of nutrition, source of nutrition, major ecologicalrole, and phylogenetic relationship.

The Five kingdom of classifications are:

- Monera
- Protista
- Fungi
- Metaphyta / Plantae
- Metazoa / Animalia

