

Need for classification

To organize the vast number of plants and animals into categories that could be named, remembered, studied, and understood, classification avoids confusion among the different varieties of organisms. Moreover, it makes the study of organisms easier.

CLASSIFICATION OF ORGANISM ACCORDING TO THE NO OF KINGDOM

Carolus Linneaus (Father of Taxonomy) - He gives the 2 kingdoms system.

Hackel - He gives the 3 kingdom systems.

Copeland - He gives the 4 kingdom systems.

R.H Whittaker - He gives the 5 kingdom system and is the popular one.

Carl Woese - He gives the 6 kingdom system and is the latest.

Taxonomic Hierarchy

Arrangement of various steps (categories or taxa) of classification are termed a taxonomic hierarchy.

Ascending order of taxonomic categories showing hierarchical arrangement is species-genes-family-order-class-phylum-kingdom-domain

DOMAIN

The domain is the highest rank in biological classification. There are three domains—Archaea, Bacteria, and Eukarya. The Archaea and the Bacteria each contain prokaryotes (single-celled organisms that lack a true nucleus) but differ in structural, genetic, and biochemical characteristics. The domain Eukarya contains eukaryotes—organisms whose cells contain a nucleus and membrane-bound organelles.