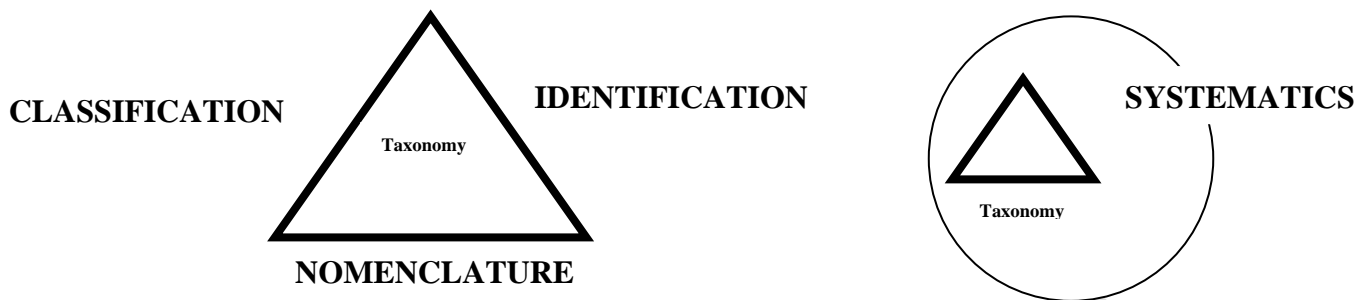


TAXONOMY- “*Taxonomy is a Science that includes **identification, nomenclature** and **classification** of objects and is usually restricted to object of biological origin*”



According to Simpson- Taxonomy is DINC *i.e.* DESCRIPTION, IDENTIFICATION, NOMENCLATURE and CLASSIFICATION

DESCRIPTION of a taxon* is a listing of its features or morphological characteristics referred to as taxonomic characters.

A shorten description consisting of only those important taxonomic characters which is useful in separating a taxon from the related taxa is called **DIAGNOSIS**.

IDENTIFICATION- is the determination of a taxon as being identical with or similar to another and already known element; the determination or recognition occurs when the specimen under consideration is similar (this is checked by matching certain characters of flowers, fruits, leaf or stem) to a previously known plant which is named previously. If comparison of specimen with all similar species reveals that differs from them then it may be named as new species (thus nomenclature is needed). Identification may be done by- Expert determination, Herbarium Consultation or by using Taxonomic Literature.

NOMENCLATURE- is the aspect of taxonomy with orderly application of names (*viz.* determination of correct name) of a taxa* in accordance of ICN[International Code of Botanical Nomenclature for Algae, Fungi and Plants], (previously known as ICBN)- the code of nomenclature. This code provides the procedure for selection of the correct name or formulation of new name.

Taxon-** *Taxonomic group of any rank is referred to as Taxon (pl. Taxa).* Species, Genus, Family these are called ranks, therefore ***Hibiscus which is a taxonomic group (containing all the species of *Hibiscus*) under the rank of genus **can be called a taxon**. Similarly **Malvaceae** which is taxonomic group (containing all genus and their species of the family Malvaceae) can be called a **Taxon** also.

CLASSIFICATION is the placing of a plant (or groups of plants) in groups or categories according to a particular plan or sequence and in conformity with a nomenclatural system. Every *species* is classified as a member of particular *genus*, every genus belongs to an *order*, every order to a *class* and so on.

SYSTEMATICS is a science which encompasses traditional **taxonomy**, the description, identification and classification of organisms and has its primary goal the reconstruction of **phylogeny** or evolutionary history, of life.