

THE LIVING WORLD

TAXONOMICAL AIDS

TAXONOMICAL AIDS

Biologists have established certain procedures and techniques to store and preserve the information as well as the specimens some of these are explained to help you understand the usage of these aids.

- (1) **Herbarium/Dry garden:-** Herbarium is a store house of collected plant specimens that are dried pressed and preserved on sheet. Standard size of herbarium sheet is 11.5 x16.5 inches. Further these sheets are arranged according to a universally accepted system of classification. These specimens along with their descriptions on herbarium sheets become a store house or repository for future use. The herbarium sheets also carry a label providing information about date and place of collection. English local and botanical names, family, collector's name, etc. Herbaria also serve as quick referral systems in taxonomical studies.
- (2) **Botanical Gardens :-** These specialised gardens have collections of living plants for reference. Plant species in these gardens are grown for identification purposes and each plant is labeled indicating its botanical/scientific name and its family. The famous botanical gardens are at Kew (England). Indian Botanical Garden, Howrah (India) and at National Botanical Research Institute, Luck now (India).
- (3) **Museum :-** Biological museums are generally set up in educational institutes such as schools and colleges. Museums have collections of preserved plant and animal specimens for study and reference. Specimens are preserved in the containers or jars in preservative solutions. Plant and animal specimens may also be preserved as dry specimens. Insects are preserved in insect boxes after collecting, killing and pinning. Larger animals like birds and mammals are usually stuffed and preserved. Museums often have collections of skeletons of animals too.
- (4) **Zoological Parks :-** These are the places where wild animals are kept in protected environments under human care and which enable us to learn about their food habits and behavior. All animals in a zoo are provided, as far as possible, the conditions similar to their natural habitats. Children love visiting these parks, commonly called Zoos.

(5) **Key :-** Key is used for identification of plants and animals based on the similarities and dissimilarities. (A booklet containing a list of characters and their alternates which are helpful in identification of various taxa.)

- The keys are based on the contrasting characters generally in a pair called couplet. It represents the choice made between the two opposite options. This results in acceptance of only one and rejection of the other.
- Separate taxonomic keys are required for each taxonomic category such as family, genus and species for identification purpose.
- Each statement of couplet in the key is called a lead.
- Keys are generally analytical in nature.

Catalogue - It is a small booklet which gives account for books related to botanical titles, full name of authors and their publication. (A list that enumerates methodically all the species found in an area with brief description aiding identification.)

Flora - It contains the index, name and actual account of habitat and distribution of plants of a particular area.