



**STUDY OF SCIENTIFIC DESCRIPTION OF PLANT LEAF BASE
(AN ALBUM)**



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ABSTRACT

INTRODUCTION:

The album is designed as a guide to the systematic scientific study of plant leaf . There is great variation in leaf shape, size, texture and colour of leaf. The leaf base plays an important role in identification of plants. The base of leaf has important ecological consequences.

Material and methods

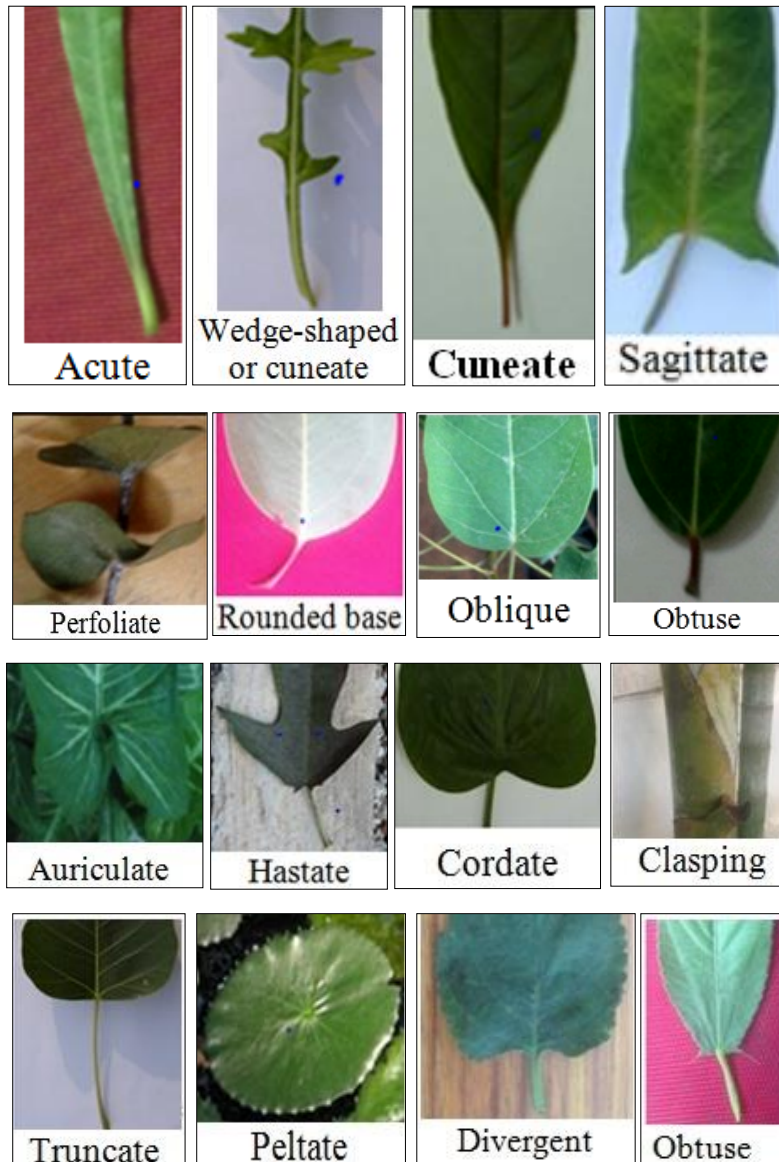
Visits to different areas: To study different parts of leaf such as base of plant leaf visited several places in Marathwada and abroad and collected different types of leaf .

Identification of habit: The base of leaf described in scientific way by following identification key proposed by a great Taxonomist of the region Dr. V. N. Naik (1974).

Confirmative test: Several scientific descriptions, reviews, articles, books and research papers of the concern subject were followed to confirm the type of bases of plant leaf.

RESEARCH PAPER

TYPES OF LEAF BASES



TYPES OF LEAF BASE

The types of leaf bases observed were Acuminate , Auriculate , Peltate, Oblique ,Acute ,Perfoliate ,Connate ,Amplexicaul ,Clasping , Cuneate or wedge shaped ,Hastate ,Decurrent , Sagittate , Subobstuse , Truncate ,Divergent ,Obtuse , Rounded ,Cordate ,Attenuate , Narrowly cuneate & Oblique. **Acuminate:** The base of leaf is elongated with narrow end. **Auriculate:** The bases of leaf resemble an ear. The base of leaf is large expanded structure. **Peltate:** The bases of leaf resemble a spherical shape. **Oblique:** The leaf base of one side of leaf is smaller than other side as in Datura. **Acute:** When the base of leaf is sharply pointed, it is termed as acute. **Perfoliate:** The bases of opposite leaf on stem fused or coincide in this

way that the stem appears to overcome through the leaf. The basal region of leaves surrounded the stem completely. **Clasping:** The base of leaf appear to be surrounded to the stem. **Connate:** The pair of sessile leaves attach the stem in a manner that the leaves meeting each other across the stem. The example is *Swertia chirata*. **Amplexicaul:** In this case the base of leaf surrounds the stem. **Cuneate or wedge shaped:** The shape of leaf may be inversely triangular. The narrow part of leaf tapering towards the basal region of the leaf. **Hastate:** The basal lobes of leaf pointing outward. **Decurrent:** The leaf base is projected downward appear like a winged expanded structure. Such type of leaf bases joined with the stem for some extent. **Sagittate:** When the basal lobes of leaf pointed back toward and the petiole is arrowhead shaped. **Subobtuse:** There are certain plants that possess leaves which are not spherical or roughly spherical. **Truncate:** When the base of the leaf is broad, rectangular in shape. **Divergent:** When the base of leaf is short with lobes on both sides which are directed outward. **Obtuse:** When the base of leaf is blunt not narrow is termed as obtuse base. **Rounded base:** Many of the herbaceous plants possess leaves having rounded base. **Cordate base:** The base of leaf consists of two rounded lobes which are slightly extended below the attachment of petiole. **Attenuate base:** When the leaf is having concave and tapering base. **Narrowly cuneate base:** The leaf base is appearing narrowly convex. **Oblique base:** The leaf base of certain plants (exm: *Datura*) is unequal in length. One lobe of base is slightly larger than basal lobe of other side.

RESULT: Several types of leaf bases described in scientific way and many of the represented in the form of images. An environmental and ecological factor plays a very important role. in development, size, shape of base , apex and colour of leaf.

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