

# MORPHOLOGICAL STUDY OF EQUISETUM

By:- Dr. Aruna Kumari  
Gandhi Nagar, Ramna,  
Motihari, Bihar -845401

Equisetum is the living member of division ArthropHYta.

The genus equisetum consists of about 25 species. Equisetum is normally called as "Horse-tails." Few number of sps. are living in Indian Climate.

Chowdhary (1973) recorded 8 species of Equisetums occurring in India. These species are *E. arvense*, *E. maximum*, *E. diffusum*, *E. ramossissimum*, *E. dedible*, *E. Palsustre*, *E. giganteum*, *E. hymale*.

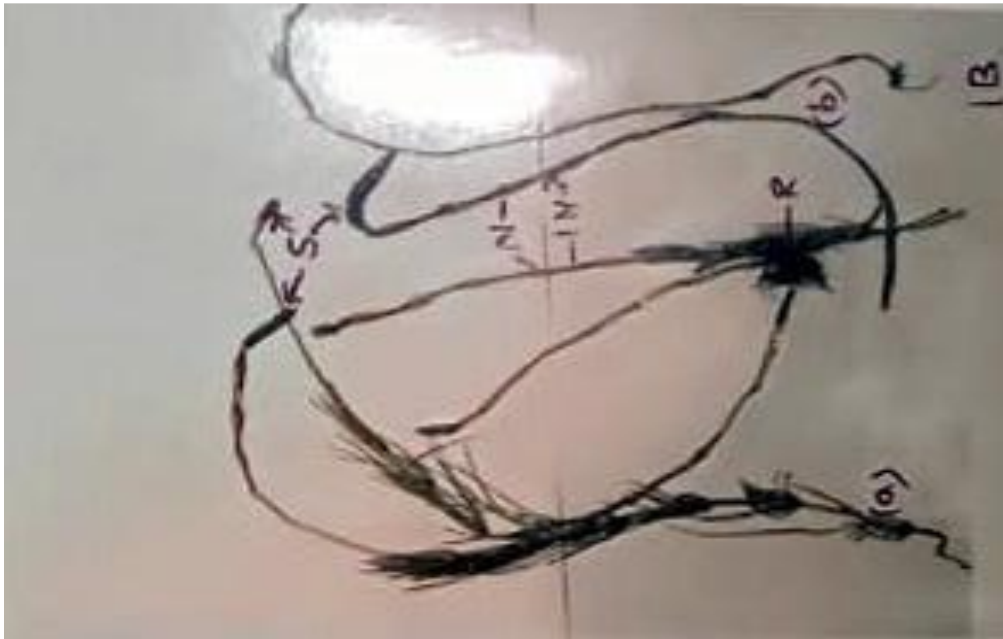
All of the species of equisetum are herbaceous, perennials with widely creeping. Rhizome are much branched from which arise erect, aerial branches. The aerial shoots are usually annual but may be perenniall. Stems are differentiated nodes and internodes.

A stem f branches grows vertically upwards from the nodes of undergrounds rhizome portion. Aerial stem are both chlorophyllous and non-chlorophyllous. The aerial chlorophyllous portion manufactures all of the food for the plant. It is consist of two order of branches, the primary and secondary (lateral). In many sps. the primary branch or stem bears Secondary (lateral) branches not axillary.

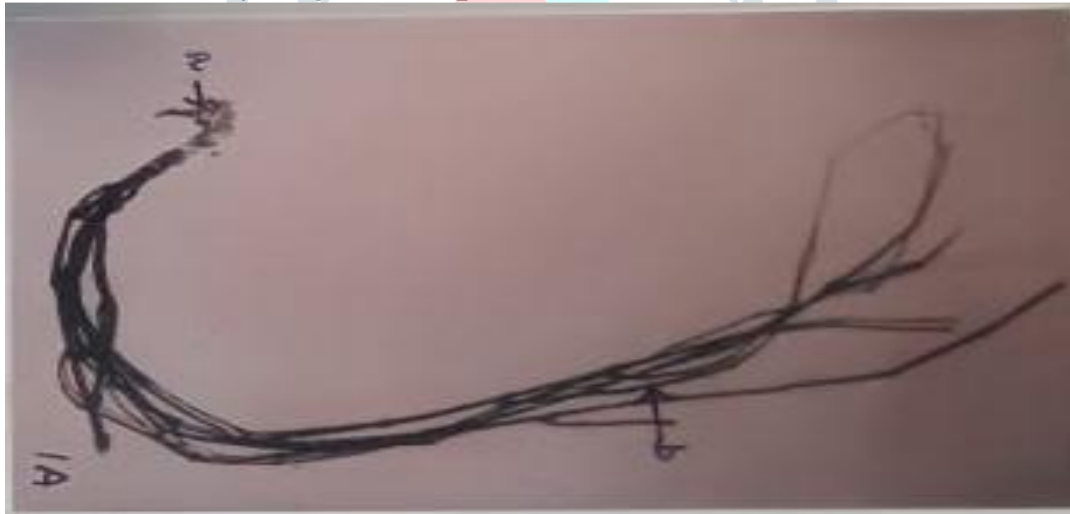
The leaves are small. Simple, uninerved, slender and scale like, they are arranged in whorls.

All roots are adventitious. The cross section of the root shows a epidermis, cortex and stele.

Strobilus is present on the sporangiophore. The sporangiophore bears sporangia.



- (A) Herbarium Photograph of *E. debile* with marked
- Rhizome
  - Branches showing node and Internode No. fertile part seen only vegetative part seen.



- (B) Herbarium Photograph of
- E. ramosissimum* (a)
- E. diffusum* (b)
- Rhizome (R), Nodes (N), Internodes (IN) and Strobilus (S)