

Topic: **Role of Palynology in Taxonomy**

B.Sc. Botany Hons. II

Paper: III Group: B

Dr. Sanjeev Kumar Vidyarthi

Department of Botany

Dr. L.K.V.D. College, Tajpur, Samastipur

L.N. Mithila University, Darbhanga

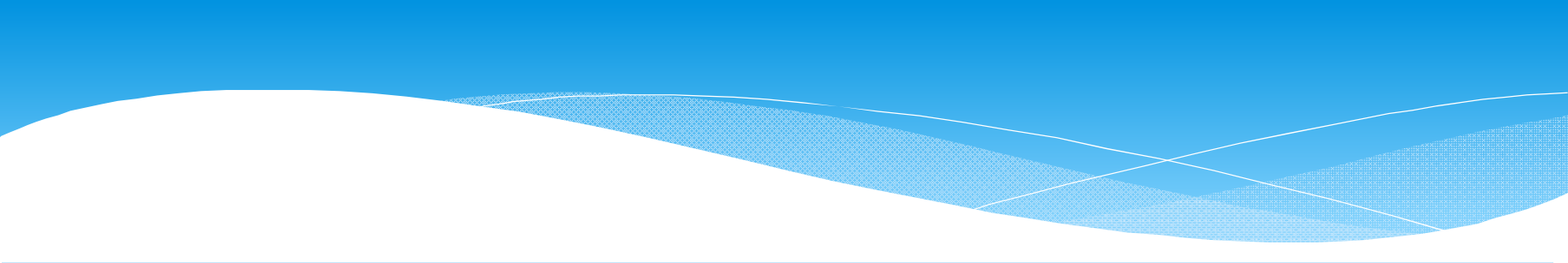
Role of Palynology in Taxonomy

Palynology in taxonomy :Role 4.

Species and Infra Specific Level:

Pollen characters have also proved helpful in distinguishing the species within a genus. The following are a few examples-

- Sharma (1987) investigated the pollen morphology of 16 Indian species of *Cyperus*, and prepared a key to differentiate all of them on the basis of pollen characters.
- Species of *Anemone* can be distinguished on the basis of germinal aperture of pollen. It is 3-zonocolpate in *A. obtusiloba*, pantoporate in *A. alchemillaefolia*, pantocolpate in *A. rivularis* and spiraperturate in *A. fulgens*.

- 
- The exine pattern has been useful in recognizing different species of Bauhinia. According to Nair (1974), pollen are psilate in *B. acuminata*, striate in *B. krugii*, spinulate in *B. malabarica*, reticulate tuberculate in *B. purpurea*, reticulate in *B. racemosa*, and verrucate in *B. retusa*.
 - Pollen size is helpful in distinguishing two species of Malva, *M. rotundifolia* (pollen 74- 84 μm) and *M. sylvestris* (pollen 105-126 μm).