

Topic: **Role of Palynology in Taxonomy**

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Role of Palynology in Taxonomy

Palynology in taxonomy :Role 3.

Generic Level:

The Following are few examples of the taxonomic significance of palynology at the level of genus:

- Pollen Characters have been extensively employed in classifying the genera of the Acanthaceae and the Primulaceae.
- The two genera *Phytolacca* and *Rivinia* of the Phytolaccaceae, can be recognized on the basis of palynological characters. The pollen of *Phytolacca* is 3-zonocolpate, whereas that of *Rivinia* is pantocolpate.

- Herberg (1946) has suggested the division of the genus *Polygonum* into seven genera based on pollen morphology viz. *Koenigia*, *Persicaria*, *Polygonum*, *Pleuropteropyrum*, *Bistoria*, *Tiniaria* and *Fagopyrum* which are distinct in their pollen types, and is accepted by several recent taxonomists.
- In the family *Betulaceae*, the thickening of exine around the pores make a distinguishing character for different genera, which is knob-like in *Betula*, club-shaped in *Corylis*, unexpanded in *Caprinus*, and an arcus is present between adjacent pores in *Alnus*.
- The genera *Salix* and *Populus* under *Salicaceae* can be distinguished on the basis of pollen characters. *Salix* has long and narrowed 3-furrowed pollen, while *populus* has spherical pollen without distinct apertures.