GLOSSARY OF TERMS

(Based mainly on Erdtman, 1952)

**Amb**: Outline of the grain in the polar view, viewed with one of the poles exactly uppermost.

**Anisopolar**: Proximal and distal faces unequal.

**Annulas**: Ring round the pores, formed by the thickening of exine.

**Aperturate**: With apertures.

**Aperture**: Usually well defined weak area of the exine. Pollen grains with equatorial apertures and angular amb are either:

(i) Angulaperturate, when the apertures are situated at the corners of an angular amb,

(ii) Planaperturate, when they are situated at the mid points of the straight sides of an angular amb, and

(iii) Sinuaperturate, when they are equally half way between the angles, the sides being concave. Considering their positions in the tetrad the apertures are proximal, distal, zonal or global in distribution.

**Aperture membrane**: Thin membrane extended over the aperture.

**Apocolpium**: Area at the pole delimited by ends of the colpi.

**Areolate**: Pattern having small usually circular or polygonal areas separated by grooves forming a "negative reticulum".

**Aspis** (Pl. aspides): Shield-shaped, subexinous thickening around the aperture.
Aspidote: With aspides.

Bacula: Radially placed, rod-like excrescences of the exine.

Baculate: With baculae.

Bilateral: With two vertical planes of symmetry.

Colpate: Grains having colpi.

Colpus: (Pl. colpi): Elongate (length at least twice the breadth) aperture with the outer and inner faces congruent.

Colporate: When the outer face of colpus (ectocolpium) is incongruent with the inner face (endocolpium).

Columella: The radial elements constituting the ectine.

Crassi-marginate: With thickened margins.

Dyad: Grains remaining united in pairs at maturity.

Ectine (Syn. Sexine): Outer layer of exine.

Ectoporium: Outer face of a pore.

Endine (Syn. nexine): Inner layer of exine.

Endocolpium: (Syn. Ora) Inner face of a colpus.

Equator: The circle midway between the two poles in radio-symmetric grains dividing the grains into two hemispheres.

Eurypalynous: Having more than one sporomorph.

Exine: Outer resistant layer of the microspore wall.
Foveola: Ornamentation having circular, closely placed lumina.

Foveolate: With foveolae.

Gemma: Globular excrescence with a constricted base.

Gemmate: Bearing Gemmae

Granula: Very minute globose processes.

Granulate: With granules.

Inaperturate: Having no apertures.

Lacuna: A large, shallow, depressed area on the exine. Lacunae are not pores of furrows but are occupied by any one of them.

Lumina: The spaces between the muri of a reticulum.

Mesocolpium: The area delimited by two adjacent colpi in zono-colpate or colporate pollen grains.

Mesoporium: The area delimited by two adjacent pores.

Muri: Ridges separating the lumina of a reticulum.

Pantocolpate: When colpi are uniformly distributed on the exine surface.

Pantoporate: Pores uniformly distributed over the exine surface.

Parasynocolpate: When colpi bifurcate at their ends, and the branches meet, to leave an intact apocolpium.
Polar axis: The hypothetical line passing through the centre of an individual pollen grain to the centre of the tetrad is Proximal and that which is away is Distal.

Polyad: More than four grains remaining united.

Porate: With pores

Pore: A circular aperture, or that in which the length is less than twice the breadth.

Pore membrane: The thin membrane subtending the pore.

Psilate: When the ectine surface is smooth, or patternless.

Puncta: Minute perforations through tegillum of the exine.

Punctate: With puncta.

Reticulum: Pattern consisting of bronchi, having the lumina separated by muri.

Reticulate: Having a reticuloid pattern instead of muri.

Accate: With sacci

Accus: Air-sac formed by the ectine which remain free from the endine.

crobieuli: Pattern having very small circular lumina, distantly apart.

hape: Shape in radiosymmetric grains is expressed from the figure obtained by the ratio of polar and equatorial diameters multiplied by 100 i.e. (P×100/E). Accordingly, the grains are peroblate (less than 50), oblate (50-75), subspheroidal (75-133), in which are subpolute (75-88), prolate spheroidal (100-114) and subrolate (114-133), prolate (133-200) and
perprolate (over 200). In the bilateral grains there are two equatorial
diameters and a polar diameter.

spine: Long, generally sharp, pointed excrescences (length exceeding 3 \( \mu \))

spinules: Small spines not exceeding 3 \( \mu \) in length.

spiraperturate: With spiral aperture.

stenopalous: When plant families or genera are characterized by a slight
variation in their pollen types.

syncolpate: With colpi meeting at the poles.

tectate: With tegillum covering about 80% or more of the total surface of the
grain (apertures, if present, excepted).

tegillum: (Pl. Tegilla): The outermost exinous layer that forms a cover over the
columella.

tenui-marginate: With thin margins.

tetrad: Pollen united in fours.

verrucae: Wart-like processes without having a constriction at its base.

verrucate: With verrueae.

zono-aperturate: When the apertures are situated in a circular zone round the
pollen.

zono-colpate, -colporate, -porate, -pororate: When the respective apertures are
arranged in a circular zone round the pollen.