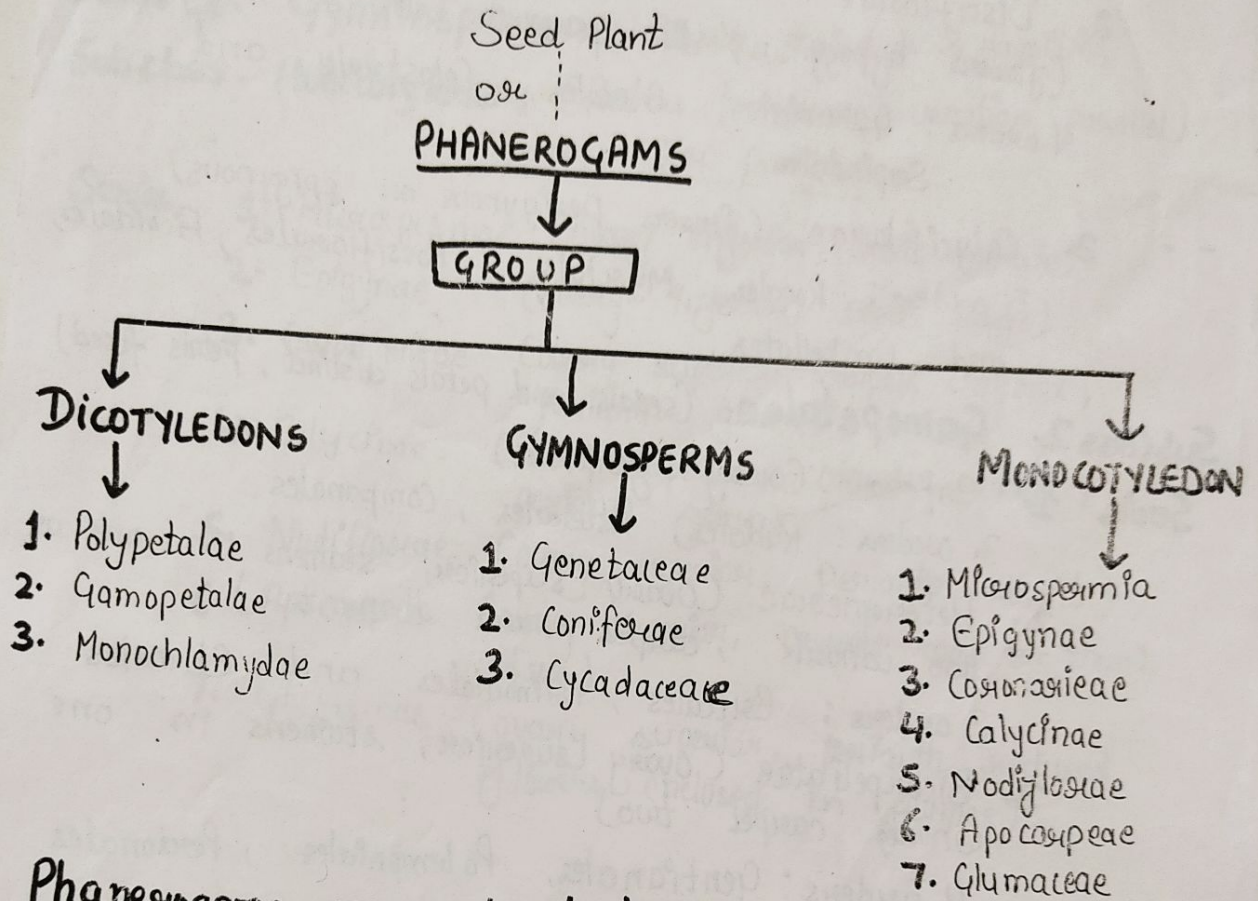


BENTHAM AND HOOKER'S CLASSIFICATION



Phanerogams or seed plants :-

Class 1. Dicotyledons

Seed with 2 cotyledons, flowers - pentamerous or tetramerous,
14 series, 25 orders, 165 families

Subclass 1. Polypetalae (sepal and petal distinct, petals free)

Series 1. Thalamiflorae

(flowers hypogynous, stamens many, disc absent)

6 orders: Ranales, Parietales, Polygalineae, Caryophyllineae,
Guttiferales and malvales

2. **Disciflorae**

(flowers hypogynous, disc present below the ovary)
4 orders: Geraniales, Olacales, Celastrales, and
Sapindales.

3. **Calyciflorae**: (flowers perigynous or epigynous)

5 orders: Rosales, Myrtales, Passiflorales, Ficoles,
and Umbellales.

Subclass 2. Gamopetalae: (sepals and petals distinct, petals fused)

Series 1. Inferae (Ovary inferior)

3 orders: Rubiales, Asterales, Compositales.

2. **Heteromerae** (Ovary superior, stamens in one or
two whorls, carpels more than two)

3 orders: Ericales, Primulales and Ebenales

3. **Bicarpelatae** (Ovary superior, stamens in one
whorl, carpel two)

4 orders: Gentianales, Polemoniales, Personales
and Lamiaceae

Sub Class 3. Monochlamydeae (flowers, apetalous, perianth
lacking or if present not differentiated into
sepals and petals)

Series 1. Curvembryae (embryo coiled, ovule usually 1)

2. **Multiovulatae aquaticae** (aquatic plants, ovules many)

3. **Multiovulatae terrestres** (terrestrial plants, ovules many)

4. **Microembryae** (embryo minute)

5. **Daphnales** (carpel 1, ovule 1)

6. **Achlamydosporae** (Ovary inferior, uniflorous Ovules)

7.) Unisemales (flowers unisexual)

8. Ordines anomali (relationship uncertain)

Class 2. Gymnospermae (ovules naked) 3 families

Subclass. Monocotyledons (flowers trimerous, venation parallel)
7 series, 34 families

- Series**
1. Microspermae (Ovary inferior, seeds minute)
 2. Epigynae (Ovary inferior, seeds large)
 3. Carionaceae (Ovary superior, carpels united, perianth green)
 4. Calycinae (Ovary superior, carpels united, perianth green)
 5. Nudiflorae (Ovary superior, perianth absent)
 6. Apocarpae (Ovary superior, carpels more ~~to~~ than 2, free)
 7. Glumaceae (Ovary superior, perianth reduced, flowers enclosed in glumes)

ENGELER AND PRANTL CLASSIFICATION

SPERMATOPHYTES
(Phanerogams)

2 Sub-Divisions

Gymnospermae

7 classes

1. CYCADOFILICALES
2. CYCADALES
3. BENNETTIALES
4. GINKGOALES
5. CONIFERALES
6. CORDAITALES
7. GNETALES

Angiospermae

2 classes

DICOTYLEDONAE

2 Sub-classes

Archichlamydae

33 = Orders
201 = Families

Metachlamydae

11 = Orders
60 = Families

MONOCOTYL

11 = Orders
45 = Families

Plant Kingdom

Division 1. $\frac{3}{3}$

Thallophytes

Division 11. $\frac{3}{3}$

Division 12. ----- Embryophyta Asiphonogama

Subdivision 1. Bryophyta

Subdivision 2. Pteridophyta

Division 13. ----- Embryophyta Siphonogama

Subdivision 1. Gymnospermae

Subdivision 2. Angiospermae

Class 1. Monocotyledonae — 11 Orders, 45 families

Order 1. Pandanales (first family Pandanaceae)

Order 11. Microspermae (last family Orchidaceae)

Class 2. Dicotyledonae — 44 Orders, 258 families

Subclass 1. Archichlamydeae (Petals absent or free)

— 33 Orders, 201 families

Order 1. Verticillatae (family Casuarinaceae only)

Order 33. Umbelliflorae (last family Cornaceae)

Subclass 2. Metachlamydeae (Petals united)

— 11 Orders, 57 families

Order 34. Diapensiaceae (family Diapensiaceae only)

Order 44. Campanulatae (last family Compositae)