CLASSIFICATION

On the basis of presence and absence of seeds the vascular plants classified by primitive taxonomists into two divisions, **Pteridophyta** and **Spermatophyta.** The division pteridophyta includes primitive vascular plants which bear no seeds. Later some fern like seed bearing fossil plants (Cycadofilicales) were discovered into 1903. The discovery eliminated the distinction between the two divisions **Pteridophyta** and **Spematophyta.** Sinnott (1935) therefore introduce a new term **"Tracheophyta"** for a division which includes all the vascular plants. Eames (1936) on the basis of some characters of plants and position of sporangia the division Tracheophyta divided into four groups, Psilopsida, Lycopsida, Sphenopsida and Pteropsida. Zimmermann (1930) and Arnold (1947) considered these groups as divisions and Tippo (1942) considered as subphyla.

Classification proposed by Reimers (1954) and Followed by Sporne (1996)

The classification of pteridophytes proposed by Reimers in the 1954 edition of Engler's *syllabus der pflanzenfamilien.*

1. **PSILOPHYTOPSIDA**

Psilophytales	e.g. *Rhynia*, **Asteroxylon**

2. **PSILOTOPSIDA**

Psilotales	e.g. *Psilotum*

3. **LYCOPSIDA**

a) Protolepidodendrales	
b) Lycopodiales	e.g. *Lycopodium, Phylloglossum*
c) Lepidodendrales	e.g. *Lepidodendron*, Lepidocarpor*
d) Selaginellales	e.g. *Selaginella*
e) Isoetales	e.g. *Isoetes*

4. **SPHENOPSIDA**

a) Hyeniales	
b) Sphenophyllales	e.g. *Sphenophyllum**
c) Calamitales	e.g. *Calamites*, Calamostachys**
d) Equisetales	e.g. *Equisetum*

5. **PTEROPSIDA**

(A)Primofilices	
a) Cladoxylales	
b) Coenopteridales	e.g. *Botryopteris*, Zygopteris**
(B)Eusporangiatae	
(a) Ophioglossales,	e.g. *Ophioglossum*
(b) Marattiales,	e.g. *Angiopteris*
(C)Osmundidae	
Osmundales	e.g. *Osmunda*
(D)Leptosporangiatae	
(a) Filicales	e.g. *Hymenophyllum, Adiantum*
(b) Marsileales	e.g. *Marsilea*
(c) Salviniales	e.g. *Salvinia, Azolla*

(Asterisk mark indicates the fossil members).

Classification proposed by Cronquist et al.(1966) and followed by Parihar (1977)

Cronquist, Takhtajan and Zimmerman (1966) classified the pteridophytes into five divisions. The classification has also been followed by Parihar (1977). The outline of classification is following:

1-Division :- Rhyniophyta
- Class :- Rhyniatae
- Order :-Rhyniales

2-Division :- Psilotophyta
- Class :- Psilotatae
- Order :-Psilotales

3-Division :- Lycopodiophyta
- Class :- Lycopodiatae
- Orders :-Asteroxylales, Drepenophycales, Protolepidodendrales and Lycopodiales.

4-Division :- Equisetophyta
- Class: Sphenophyllatae
- Order :-Sphenophyllales and Pseudoborniales
- Class :- Equisetatae
- Order :- Calamitales and Equisetales

5-Division :-Polypodiophyta
- Class:- Polypodiatae (the class divides sub classes.)
- Sub-classes :- Prototeridiidae, Archaeteridiidae, Ophioglossiidae, Noeggerothiidae, Marrattidae, Polypodiidae, Marsilleidae, Salviniidae)

These sub-classes are further divided into orders.

Accordingly ICBN amendment the four major groups of pteridophyta are-
1-Class Psilopsida
2-Class Lycopsida
3-Class Sphenopsida
4-Class Pteropsida