CLASSIFICATION FOLLOWED
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The fundamental basis for an understanding of any group of plants is a reliable system of classification, which is a taxonomic treatment that expresses phylogeny. The relationship (in terms of the evolutionary progression) of one group of plants to the others, in a logical sequence, can only be deduced from morphological resemblances. However, an analysis of the criteria taken into consideration by different workers, suggests that various available interpretations of the taxonomy and evolution of the homosporous ferns are possibly not totally acceptable. The divergence of treatment is obviously due to differences of opinion among various authors regarding the relative significance of different known morphological features in assessing phylogeny and in interpreting evolutionary trends among the ferns (Nayar, 1974).

This has resulted in the publication of a number of statements of interrelationships of these plants, i.e. Christensen, 1938; Ching, 1940; Copeland, 1947; Holtum, 1947, 1949; Reimers, 1954; Alston, 1956; Pichi Sermolli, 1958, 1959, 1977 etc.; Nayar, 1970, 1974 etc., each differing from the other in quite substantial features [Table – 5 (I)]. In view of such a situation in taxonomy and phylogenetic interpretations of ferns, most of the present day authors prefer to list families and genera in alphabetical sequence as suggested by Kramer (1990).

Nayar (1970, 1974) visualized homosporous ferns as a monophyletic group, having evolved from common ancestors, and specialized as a composite group. In his scheme of classification, 35 families were recognized, corresponding to 6 orders and 3 sub-classes.
In the present work, delimitation of families and genera is based mainly on Pichi Sermolli (1977, 1982) (with some minor modifications of Ching, 1978a, b), because of easy workability and the obvious advantage of the numbering of genera in cataloguing. A broad outline of the system of classification of ferns, occurring in our area is presented here.

Classification Followed*:

Division: Pteridophyta

Sub-division: Filicophytina (contains 2 classes)

A. Class: Ophioglossopsida
   Sub-class: Ophioglossidae
   Order: Ophioglossales
   Family: Botrychiaceae
   Family: Ophioglossaceae

B. Class: Filicopsida (contains 6 sub-classes)
   I. Sub-class: Osmundidae
      Order: Osmundales
      Family: Osmundaceae
   
   II. Sub-class: Gleicheniidae
       Order: Polypodiales
       Sub-order: Polypodiineae
       Family: Polypodiaceae
   
   III. Sub-class: Schizaeidae
        Order: Pteridales
        Sub-order: Pteridiineae
        Family: Sinopteridaceae
        Family: Cryptogrammaceae
        Family: Pteridiaceae
        Family: Pteridaceae
        Family: Adiantaceae
        Family: Hemionitidaceae

IV. Sub-class: Marsileidae
    Order: Marsileales
Family: Marsileaceae

V. Sub-class: Hymenophyllidae (contains 3 orders)
   a. Order: Dennstaedtiales (contains 2 sub-orders)
      1. Sub-order: Dennstaedtiineae
         Family: Dennstaedtiaceae
      2. Sub-order: Lindsacineae
         Family: Lindsaeaceae
   b. Order: Aspidiales (contains 3 sub-orders)
      1. Sub-order: Thelypteridinae
         Family: Thelypteridaceae
      2. Sub-order: Aspleniineae
         Family: Aspleniaceae
      3. Sub-order: Aspidiinae
         Family: Woodsiaceae
         Family: Athyriaceae
         Family: Dryopteridaceae
   c. Order: Blechnales
      Family: Blechnaceae

VI. Sub-class: Salviniidae

Order: Salviniales

Family: Azollaceae
Family: Salviniaceae

*After Pichi Sermolli (1977, 1982); Ching (1978a, b), with some modifications due to recent generic concepts; contains Kashmir specific taxa only.
The figures within parenthesis are for the present work only.
Table 5 (I): Systems of classification of ferns followed by different workers.

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