

Merits and demerits of Hutchinson system of classification

John Hutchinson was a British botanist associated with Royal Botanic Gardens, Kew, England. He developed and proposed his system based on Bentham and Hooker and also on Bessey. His phylogenetic system first appeared as "The Families of Flowering Plants" in two volumes.

The first volume contains Dicotyledons (published in 1926) and second volume contains Monocotyledons (published in 1934). He made several revisions in different years. The final revision of "The Families of Flowering Plants" was made just before his death on 2nd September 1972 and the 3rd i.e., the final edition, was published in 1973.

Following are the merits and demerits of his system of classification:-

Merits of Hutchinson's Classification:

- i) It is most phylogenetic system of classification based on natural characteristic of plants.
- ii) This system is based on evolutionary tendencies and interrelationship among angiospermic plants.
- iii) Magnoliales representing arborescent plants and ranales representing herbaceous plants which shows parallel evolution.
- iv) Several big orders have been broken into small orders like

rosales, paritales, malveles, leguminales etc.

v) Many families have been raised to the rank of orders, leguminosae famile raised to order leguminales.

vi) Reshuffling or genera and families

vii) Origin of monocots from dicots and placement of first dicot and then monocot families is correct in all respect.

viii) Placing of gymnosperms before angiosperms in flowering plants.

Demerits:

1. There is undue fragmentation of families.

2. Too much emphasis is laid on habit and habitat. Thus, creation of Lignosae and Herbaceae is thought to be a defect reflecting the Aristotelean view.

3. The origin of angiosperms from Bennettitalean-like ancestor is criticised by many, because the anatomical structures of the early dicotyledons are not tenable with such ancestry.