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HUTCHINSON SYSTEM OF CLASSIFICATION - This system of classification was proposed by John Hutchinson which is based on Phylogenetic system. He developed each system based on Bentham and Hooker and also on Bessey.

He proposed a phylogenetic classification in his book "The family of flowering plants". The first volume dealing with the Dicotyledons in 1926 and second volume with monocotyledons in 1934. Hutchinson gave some rules to determine the primitive of plants. These rules are also known as principle of phylogenetics. These are:-

1. Evolution is upward and downward.
2. Evolution does not necessary involved all organs of the plant at a time.
3. Evolution has been generally consistent.
4. Tree and shrub are more primitive than herb.
5. In one family and genera the tree and shrub are older than climber.
6. Perennial are primitive than binial.
7. Aquatic flowering plants are are drive from terrestrial.
8. Collateral vascular bundle arising in a primitive condition.
9. Spiral arrangement of the leaf is a primitive condition.
10. Hermaphrodite are primitive than unisexual.
11. Simple leaf is primitive than compound leaf.
12. Solitary flower are more primitive than flowering inflorescence.
13. Spiral arrangement spirally imbricate floral part are more primitive than whorl and valvet.
14. Polymerous condition is primitive than definite number.
15. Epipetalous flower are drive from petalous form.
16. Polypetalous is primitive than gamopetalous.
17. Actinomorphic is primitive than zygomorphic.

- 18. Hypogynus is primitive than epigynus.
- 19. Epicarpus is primitive than syncarpus.
- 20. Many carpel is primitive than syncarpels.
- 21. Endospermic seeds are primitive.
- 22. Indefinite number of stamen is primitive condition.
- 23. Simple fruit are primitive than primitive food
- 24. Simple fruit are one than aggregate fruit.

Hutchinson divided the phylum angiosperm into two **sub-phylum Dicotyledons** and **Monocotyledons**. The dicotyledons are further dived into two **divisions Lignosae** and **Herbaceae**. Lignosae are woody groups derived from **magnoliales** and **herbaceae**. It Includes most of the predominantly and herbaceous families derived from Ranales. The sub Phylum Monocotyledon are divided into three divisions-**Calyciferae**, **Corolliferae** and **Glumiflorae**.

- The division **Lignosae** was further divided into **54** orders beginning with **Mognoliales** and ending in **verbenales**.
- The division Herbaceae was divided into **28** orders beginning with **Ranales** and ending in **Lamiales**.
- The (sub phylum **Monocotyledon**) division **Calyciferae(distict calyx and corolla)** was divided into **21**orders beginning with **Butamels** and ending in **Zingiberals**.
- The division **Corolliferae (corolla and calyx almost similar)** was divided into **14** orders beginning with **Liliales** and ending in **Orchidales**.
- The division **Glumiflorae (perianth redued)** was divided into **3** orders beginning with **Juncales** and ending in **Graminales**.

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In this system **Dicotyledons** consist of **83** orders and **349** families and **Monocotyledons** consist of **29** orders and **69** families

Merits

- The families and orders in this system are of small size and very closely related taxa.
- This system is in conformity with the modern view of phylogeny of angiosperms as it considers the Ranales and Mangoliales as the starting points among dicots.
- In this system , monocot are discussed after dicots.

Demerits

Dicots have been divided in to two major groups Lignosae Herbaceae in this system.this kind of classification is outdated as the habit used to be the main basis of classification inthe past era of Aristotle.

- Secondly , it also separates the families that have close affinities .
- This system is not much utility from the point of view of plant classification.