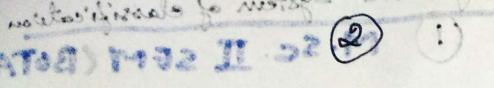
HUTCHINSON SYSTEM OF CLASSIFICATION - This system of classification was proposed by John Hutchinson which is based on Phylogenetic system. He developed each system based on Bentham and Hooker and also on Bessey.

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 monocotyledonsin 1934. Hutchinson gave some ruls to determine the primitive of plants . These ruls are also known as principle of phylogenetics. Thease 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.
- 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.
- Hermaphrodite are primitive than unisexual. 10.
- Simple leaf is primitive than compound leaf. 11.
- Solitary flower are more primitive than flowering inflorescence. 12.
- 13. Spiral arrangement spirally imbricate floral part are more primitive than whorl and valvet.
- Polymerous condition is primitive than definite number. 14.
- Epipetalous flower are drive from petalous form. 15.
- Polypetalous is primitive than gamopetalous. 16.
- Actinomorphic is primitive than zygomorphic. 17.



- 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.

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 21orders 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.



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 in the 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.