

Dr. Rachana Shalini

Dept. of Botany

Class : Deg. II (Hons)

Paper : III (Group: B)

Topic : Family - Ranunculaceae (Continued)

Lecture No. - 10

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Family Ranunculaceae (Continued) :

Floral characters :

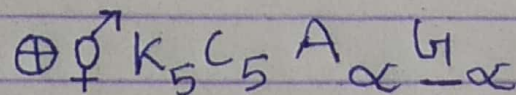
Androecium: Stamens indefinite, all free and arranged spirally, anthers are adnate.

Gynoecium: Carpels indefinite (poly carpellary), all free (apocarpous) rarely united (Syncarpous), ovary superior, one celled, ovule one or more on ventral suture, marginal placentation.

Fruit: Usually an etaxio of achenes or follicle rarely berry.

Seed: Endospermic and small.

Floral Formula:



Economic importance of the family :

or Five economically important plant :

(i) Ranunculus sceleratus (cow foot): Ornamental, cultivated in the gardens. It is highly poisonous.

- (ii) Aconitum heterophyllum (Aconite): Its tuberous root is highly poisonous. It is cultivated for the production of Aconite.
- (iii) Delphinium ajacis (Lark-spur): It is also an ornamental, grown in gardens.
- (iv) Clematis gowriana (Traveller's Joy): It is a wild plant.
- (v) Nigella sativa (Cumin): It is used as condiment.

### Diagnostic features of the Family:

Plants are mostly annual or perennial herbs with linear exstipulate leaves; flowers are bisexual, hypogynous; sepals 5, polysepalous, corolla 5, polypetalous; stamens indefinite, all free; carpels many, poly carpellary, apocarpous, ovary superior ovary, marginal placentation.

### Floral Diagram:

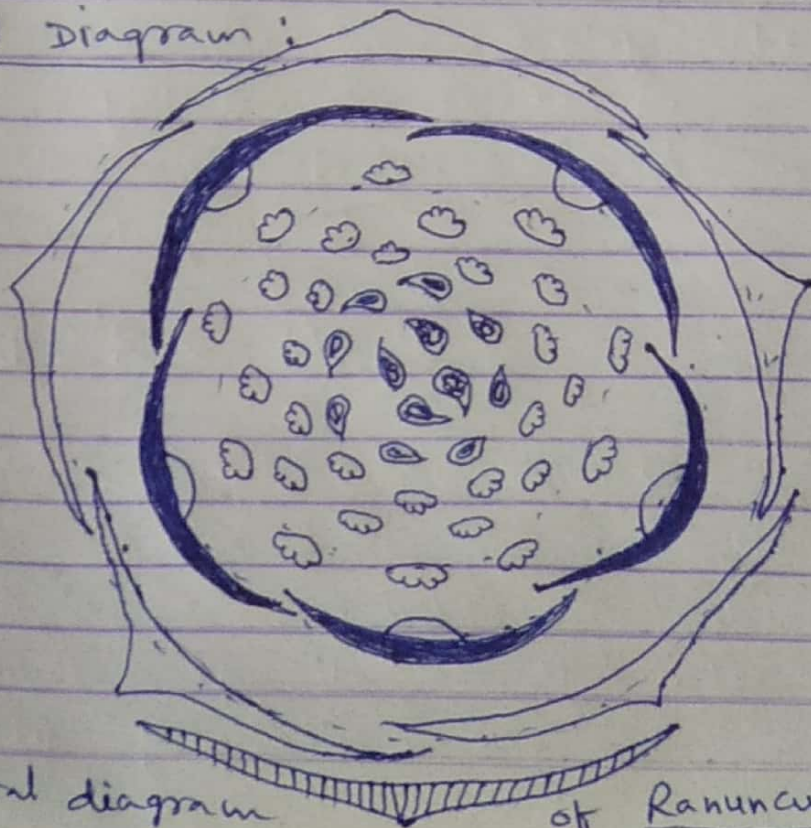


Fig: Floral diagram of Ranunculus sceleratus

### Affinity or Relationship:

- In its floral characters, it is closely allied to the family Magnoliaceae but differs from latter in habit and exstipulate leaves. It differs from Nymphaeaceae and Papaveraceae in its apocarpous pistils.
- It resembles with family Alismaceae, a monocotyledonous family.
- Bentham and Hooker, however, place it among early dicots.
- On the above ground, Ranunculaceae is considered as a primitive dicot family.

