

with owing to the absence of any definite method of classification similar to that relied upon when the flower is available for identification purposes. While this fact necessitated the use of a large reference collection of correctly named seeds taken from authentic samples, yet many families of plants were found to produce seeds of a certain type common to the family to which they belong and which were therefore easily placed in the proper family. As instances of this, the characteristics of the seeds of the following families were submitted:—

RANUNCULACEAE. (Crowfoot Family).

Genera having achenes. Achenes flat, irregularly oval in shape with pointed base. Persistent style of varying length, attached.

PAPAVERACEAE. (Poppy Family).

Seeds kidney shaped with raised reticulated surfaces. Seeds of several genera crested.

CRUCIFERAE. (Mustard Family).

Seeds generally with depression along each side of the radicle causing it to project prominently. Hilum white. Acrid taste. Pericarp often finely pitted.

CARYOPHYLLACEAE. (Pink Family).

Seeds kidney shaped with characteristic tubercles or warts generally arranged in parallel rows or concentric rings.

MALVACEAE. (Mallow Family).

Seeds kidney shaped, resting sides flattened or compressed.

LEGUMINOSAE. (Pulse Family).

Seeds with hard pericarp. In many genera the radicle projects prominently; others are globular with a long characteristic hilum.

UMBELLIFERAE. (Parsley Family).

Carpels usually with five prominent ribs, ventral surface flattened. Many produce aromatic odour from essential oil.

COMPOSITAE. (Composite Family).

Achenes oblong and stick-like, often having ribs running longitudinally. When the pappus is detached a conspicuous crown or impression remains.

LABIATAE. (Mint Family).

Achenes mostly attached at the base, leaving characteristic depressions. Many genera show two flattened sides through pressure in ovary. Somewhat resemble small insects.

PLANTAGINACEAE. (Plantain Family).

Seeds boat-shaped with rounded ends. Dorsal surface convex, ventral showing a deep groove with an oblong spot resembling an eye.

POLYGONACEAE. (Buckwheat Family).

Achenes usually sharply triangular, an occasional genus