MALVACEAE, MALLOW FAMILY

LEAVES ALTERNATE. Flowers with 5 petals and numerous stamens fused by their filaments into a column about the style. Fruit a several-chambered capsule, or breaking up into wedge-shaped segments. Seeds usually large with a hard, thick seed coat; embryo much folded or rolled within the seed; endosperm present.

Cotton (Gossypium spp.), one of the world's major economic plants, is a member of the mallow family. The group also contains okra and various ornamentals such as Althaea, Hollyhock, and Rose of Sharon.

Abutilon. Abutilon theophrasti, Butterprint, Velvet-leaf, Buttonweed. Erect annual plants with velvety-hairy, cordate leaves. Flowers yellow-orange. Fruit a capsule which splits from the top when mature. Seeds large (3-4 mm. long), somewhat wedge-shaped, notched at narrow end, dull gray-brown in color. Abundant, cultivated and waste ground. One of the major annual weeds of corn and soybeans. Summer. Seeds common in soybean seed.

Hibiscus. Hibiscus trionum, Shoofly, Flower-of-an-hour, Venice mallow. Annual. Leaves irregularly palmately dissected or almost compound. Petals yellowish-white with a purple center. Fruit a capsule enclosed by the persistent membranous calyx. Seeds similar to those of butterprint, but smaller, the surface covered with white scurfy markings. Locally abundant, gardens and cultivated fields. Summer.

Malva. Malva neglecta, Round-leaved mallow, Cheeses. Annual or winter annual. Plants prostrate or spreading. Leaves long-petioled, circular in outline, with a deep notch at the base. Flowers axillary, white or pinkish. Fruit wheel-shaped, radially splitting into wedge-shaped, indehiscent, one-seeded segments. Seeds 1.4-1.6 mm. in diameter, wedge-shaped, subcircular in face view, symmetrically notched at narrow end. Often abundant, moist soil, cultivated or more frequently uncultivated areas, around houses and farm lots.

Sida. Sida spinosa, Prickly sida. Annual. Leaves narrowly ovate, serrate. Flowers small, yellow, axillary. Fruit splitting into 5 pieces (like sections of an orange), each 1-seeded, and tipped with a pair of spines. Exclusively southern, a variety of habitats. Summer.
**LINACEAE, FLAX FAMILY**

*Linum usitatissimum*, Flax. Plants annual, erect, closely leafy with linear-lanceolate blades. Flowers showy, blue. Fruit a capsule. Seeds about 5 mm. in length, flattened, irregularly ovate in face view, brown, the surface smooth and oily in appearance. A crop, occasionally escaped.

**ONAGRACEAE, EVENING-PRIMROSE FAMILY**

Sepals and petals produced at the apex of a tube which extends well above the ovary (ovary inferior). Sepals 4, petals 4, stamens 8. In addition to the following, a number of other members of this family occur as weeds in the North Central States and elsewhere in the country.

*Oenothera*. *Oenothera biennis*, Evening-primrose. Plants biennial. Stems erect, mostly unbranched, hairy, closely leafy. Leaves sessile, lanceolate, irregularly toothed. Flowers terminally spiked, yellow, the sepals and petals raised above the ovary on a long tube. Fruit a 4-angled, 4-chambered capsule. Seeds small (slightly over 1 mm. in length), polyhedral or brick-like in shape, dusty-red in color. Fields, pastures, roadsides. Summer. Seeds occasional in clover seed.

**UMBELLIFERAE, CARROT FAMILY**

Leaves compound. Flowers in compound umbels, usually small, white or yellow. Fruit at maturity splitting longitudinally into two seed-like one-seeded segments (mericarps). "Seeds" (the mericarps) commonly plano-convex, usually possessing longitudinal ribs on the curved surface.


PLATE 65

*Abutilon theophrasti* 1. Fruit x2/3. 2. Flowering branch x2/3. 3. Stamen cluster x2.

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PLATE 66

Hibiscus trionum Habit x2/3.
PLATE 67

Malva neglecta 1. Habit x2/3. 2. Fruit, semi-diagrammatic x2 1/2.
PLATE 68

*Sida spinosa* 1. Habit x2/3.
*Linum usitatissimum* 2. Habit x2/3.
PLATE 69

Oenothera biennis  1. Habit x2/3.  2. Flower, semi-diagrammatic x2 1/2.
PLATE 70

*Daucus carota* 1. Leaf x1/3. 2. Mericarp halves of fruit x4. Inflorescence x1/2.

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PLATE 71

*Cicuta maculata* 1. Inflorescence and leaf x1/2. 2. Root cluster x2/3. 3. Mericarp pair x5.
PLATE 72

*Pastinaca sativa* 1. Flower x4. 2. Inflorescence and leaf x2/3.