COMMON MILKWEED
(Asclepias syriaca)

SEEDLING DESCRIPTION

Common milkweed seedlings are spindly and fragile. The stem below the seed leaves (hypocotyl) is light green and smooth. Seed leaves (cotyledons) are oval, about ½ inch (12 mm) long, dull green, and have rounded tips. True leaves are oblong, dark waxy green, and have pointed tips and a prominent white midvein. All parts of the seedlings exude a milky sap when broken.

Most young milkweed plants have emerged from overwintering rootbuds rather than seed, producing sturdier shoots that have no cotyledons.

BIOLOGY

Common milkweed is an erect perennial that reproduces by seeds, underground stems, and roots. Seedlings and new shoots usually emerge in spring, but seeds may germinate throughout summer. Mature stalks are straight and sturdy, up to ⅜ inch (15 mm) thick, and green, turning deep red in the fall. They are hollow, squarish, and usually smooth, but may be covered with short downy hairs. More than one stalk may arise from a single root crown, but individual stalks are usually simple, only occasionally separating into two or three branches at the top. When any part of the plant is broken, a sticky white sap oozes from the wound.

A thick, curved leaf stalk (petiole) about ⅕ inch (8 mm) long attaches the leaves to the main stalk. Occasionally whorled (three per node), leaves are more often oppositely arranged in pairs, forming four vertical rows. Each pair emerges 4 to 6 inches (10 to 15 cm) apart. Leaves are oblong and have rounded ends, smooth margins, and often a tiny point at the tip. They are deep green and smooth on the upper surface and pale green and downy

1. True seedling showing cotyledons.
2. Shoots from perennial roots are edible.
3. Milkweed is common in corn fields.
4. Unique flowers attract many insects.
5. Fertilized flowers develop into follicles filled with seed.
6. Seeds are dispersed by wind.

below. They measure 3 to 10 inches (7.5 to 25 cm) long and 2 to 5 inches (5 to 12 cm) wide.

Common milkweed blooms in early summer, its flowers arranged in nearly spherical clusters (umbels) at the tip of the stem and in the axils of the upper leaves. Clusters are 2 to 4 inches (5 to 10 cm) in diameter, usually a soft lavender-pink color, but sometimes various shades of yellow or green. Individual flowers are about ½ inch long. Each has a crown of five hooded petals on top and five sepals below that curve back along the flower stalk.

The flowers are perfect (i.e., they have male and female parts), but they must be cross-pollinated by insects for seeds to form. The sweet nectar attracts bees, wasps, and other flying insects, which enter the crown of the flower and walk along the petals toward the source of food. Their feet slip into a narrow opening between the petals where pollen containers called pollinia are hidden.

Each pollinium is shaped like a horseshoe, with a tiny pollen sack attached to each end and a u-shaped handle in between. The insect hooks its leg onto the handle, dislodges the pollinium with a tug, and carries it to another flower. Upon alighting, the insect again slips its feet into the narrow opening, but this time when it pulls its leg free, the pollinium comes loose and sticks onto the stigma of the female flower part. Pollination has occurred.

The pollinia will be deposited only if earlier insect visitors have emptied the receptacle. Otherwise the forager flies away with another pollinium attached to its leg. The patient observer may see a honeybee with several pollinia strung along its legs like horseshoes on a fence rail. When the petals grip the leg too tightly, some milkweed flowers may hold abandoned legs with pollinia still attached, or dead insects that were unable to pull free.

One to five flowers from each umbel become fertilized and produce seed. The seed pod, called a follicle, is at first fleshy and pale green and covered with soft-pointed bumps. The follicles grow to 5 inches long and 1½ inch (4 cm) wide, drying and turning brown when the seeds mature in late summer and fall. Then the pod splits lengthwise, releasing the flat brown seeds. Each seed has a tuft of silky hair (pappus) attached and is easily carried aloft by the wind.

Common milkweed also reproduces by rootstalks, which penetrate the earth to well below plow depth. Often, several stems arise close together from a single crown. Horizontal roots cause new shoots to emerge some distance from the parent plant, so a stand of milkweed may develop from a single plant.

SIMILAR SPECIES

About twenty-five species of milkweed grow in the United States. Since many are toxic to livestock, it is important to recognize other members of this genus. Swamp milkweed, purple milkweed, and butterfly-weed often grow on farmland. They can be identified by their flowers and leaves.

Swamp milkweed *(A. incarnata)* has narrow tapered leaves that grow to 7 inches (18 cm) long and about 1½ inch wide. Common milkweed leaves are twice as wide and oval rather than tapered. Swamp milkweed flowers are similar to those of common milkweed, but are only half as large. As its name implies, swamp milkweed grows in wet and swampy land. Common milkweed prefers drier soils.

Purple milkweed *(A. purpurascens)* grows only 3 feet (90 cm) tall, whereas common milkweed grows 3 to 5 feet (90 to 150 cm) high. Purple milkweed has a sparse leaf arrangement rather than the full, heavy arrangement of common milkweed leaves.

Butterfly-weed *(A. tuberosa)*, also called butterfly milkweed, has brilliant orange-red flowers arranged in a slightly elongated cluster instead of the lavender umbel of common milkweed. Butterfly-weed does not have the milky sap typical of most milkweeds.

The young leaves of hemp dogbane *(Apocynum cannabinum)* look much like those of common milkweed, and both plants exude a milky juice when broken. But the main stem of hemp dogbane is branched, forming a bushy plant, while milkweed stems are simple or branch only at the top. Hemp dogbane does not belong to the milkweed family. Its flowers are small and pale green — quite different from the showy purple clusters of milkweed — and its paired seedpods look like long curved thorns. Seedpods are up to 6 inches long and only half the diameter of a pencil. Common milkweed seedpods may be this long, but are soft and plump.

NATURAL HISTORY

Native to North America, common milkweed prefers dry open land and is often seen along unmowed roadsides and in waste areas, meadows, and corn fields. It grows abundantly throughout the temperate eastern part of the continent, except for the Gulf Coast, and infrequently grows on western prairies.

Some milkweed species are poisonous to livestock, and others are suspect, so they are not desirable in pastures and cropland. All parts, either fresh or dried, are potentially toxic, and an animal that eats only 2 percent of its weight may become ill. Thus, a 500-pound steer could be poisoned by eating 10 pounds of milkweed. Milkweed is a sticky forage at best. Animals prefer better fare, but they may eat it if confined to pastures where they have little choice.

Symptoms of milkweed poisoning include staggering, violent spasms, difficulty in breathing, and a rapid weak pulse. The best treatment is to administer a cathartic and provide plenty of water and food.

The danger apparently lies in eating the plant raw. American Indians used cooked milkweed for food and medicine. Unopened flowers, immature seed pods, and young shoots may be boiled in several changes of salted water. When served with butter, they resemble asparagus.

Old names for common milkweed include wild cotton, Virginia silk, and silkweed. These names refer to the uses people have found for the fluffy contents of the seed pods. The early settlers stuffed mattresses and pillows with it, and during World Wars I and II the downy filling went into life preservers and flight jackets.

The sticky "milk" that oozes from the plant may be irritating to the skin.

The genus name for all milkweeds, *Asclepias,* derives from the name of the ancient Greek physician Aesculapius and refers to the medicinal properties of the roots. *Asclepias* extract is an ingredient in medicines used to treat asthma, dyspepsia, and coughs.

CONTROL

Mowing weedy areas before seeds ripen prevents milkweed from spreading into crops. Cultivation destroys seedlings, but most of the roots are well below plow depth and can send up new plants from buds.

Rotating into crops that provide an early shade canopy helps suppress weed growth. If common milkweed becomes an established problem in field crops, it can be controlled by applying a systemic herbicide while the weed is actively growing. If these chemicals are applied in spring, the milkweed must be at least 12 to 18 inches (30 to 45 cm) tall for effective control.

A good time to use systemic herbicides on milkweed is early to midsummer when milkweed is in bud. At this stage the plant has used most of its stored energy to produce flowers. Its depleted root system is ready to be fed, and both nutrients and herbicide will be quickly translocated from the top growth into the underground parts.

For specific recommendations, consult your county extension agent or the most recent *Weed Control Manual and Herbicide Guide,* available through Meister Publishing Company, 37841 Euclid Avenue, Willoughby, Ohio 44094. Follow label instructions for all herbicides and observe restrictions on grazing and harvesting procedures.

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