



Milkweeds for Monarch Butterflies

Milkweed (*Asclepias* spp.) are the required host plants for caterpillars of the monarch butterfly, playing a critical role in the monarch's life cycle. The loss of milkweed plants in the monarch's breeding areas and travel paths is believed to be a significant contribution to the decline of monarch populations across North America. Milkweed is a perennial plant. Add milkweed to your butterfly garden.

Asclepias species produce some of the most complex flowers in the plant kingdom. Five petals reflex backwards revealing a gynostegium (fused stamen filaments and styles) surrounded by a five-member corona in a paired hood and horn structure with the hood acting as a sheath for the inner horn. Glands holding pollinia are found between the hoods. The size, shape and color of the horns and hoods are often important identifying characteristics for species in the genus *Asclepias*. Leaf shapes and spacing also help in identifying specific milkweeds. Texas has several varieties:

1. **Antelope Horn** - *Asclepias asperula*. Has fuzzy leaves and an odd greenish-white bloom. Is a clump-forming, 1-2 ft. tall, with an upright or sprawling habit. Stems are densely covered with minute hairs. Leaves are 4-8 inches long, narrow, irregularly grouped, thick and often folded lengthwise. As the green seed follicles grow in length and begin to curve, they resemble antelope horns with curving and pointed shape of the seedpods. Prefers to grow in well drained soil in full sun. Appropriate for wildscapes and large plantings. High cardenolides.



Asclepias asperula
Antelope horn

2. **Zizotes** - *Asclepias oenotheroides*. Flower is unique with long, slender hoods extending with flare at the top. Leaves are 1-4" long and $\frac{1}{2}$ - $2\frac{1}{2}$ " wide with wavy edges. Purple tinge comes to upper leaves in full sun. Is 1-3 ft. Leaves out and flowers if rains follow a dry period. Survives periodic droughts and occasional mowing even though it has shallow roots. Prefers sandy, dry soil or gravelly ground, prairies, ditches and fields. Full sun. High cardenolides.



Asclepias oenotheroides
Zizotes



Asclepias oenotheroides
Zizotes

3. **Green Antelope Horn** - *Asclepias viridis*. Showy whiteish green globes of flowers. Typically has wider leaves than *Asclepias asperula*, which makes feeding voracious caterpillars a bit easier. Is 1-3 ft. in height. Alternate leaves, often with wavy leaf margins. Some rose or purple color is evident in the center of each individual flower. Blooms from late spring to middle summer. Generally avoided by cattle and horses. Found in dry areas and prairies, along roadsides, ditches, open areas, and other areas with little vegetative competition. Appears to prefer loamy, moist soils, but is found on virtually all soil types, except for deep sands and very wet soils. Seed Collection: June-July. Seed Treatment: Soak seed overnight in water. Cold moist stratification for 14-30 days enhances germination to greater than 60 percent. High cardenolides.



Asclepias viridis
Green Antelope Horn

4. **Swamp Milkweed** - *Asclepias incarnata*. Swamp (also rose) milkweed has soft pink, lightly scented, large and showy flowers. Bright pink, white and purple clusters of flowers appear in summer at the tops of the stems. Long, narrow, lance-shaped leaves progress in pairs up the stem. Grows to 3'-4' height. Forms small colonies in good conditions. Prefers full sun; is one of the more shade tolerant milkweeds and can take partial sun. Often found in wet areas, at the edge of river-banks or low spots in meadows, it tolerates a surprisingly wide range of soil types. May need supplemental watering in drier areas. Monarchs seem to prefer the leaves of swamp milkweed over those of butterfly weed when both are present. In the fall, blooms give way to distinctive tear-shaped five-inch seed pods that are green when unripe, but harden to brown. Individual seeds are attached to fluffy hairs that allow the seeds to drift on the wind. Also spreads through rhizomes (roots that grow horizontally from the original plant). Has deep taproots and are best left undisturbed once established. Foliage is slow to emerge in spring. Is one of the easiest to grow milkweeds.



Asclepias incarnata
Swamp Milkweed

5. **Butterfly weed** - *Asclepias tuberosa*. Vibrant 2 to 5" orange flowers. Grows to a manageable height and spread of only 1' to 2'. Delightful cut flower. Leaves are mostly alternate, 1.5 to 2.25" long, stiff, pointed, and smooth on edges. Full sun, dry well-drained soils (sand, loam, clay, or limestone), grows in prairies, open woods, canyons, and hillsides. Tolerates drought. Does not perform well in heavy clay, richly amended gardens or wet areas where taproot will be prone to rot (thus not be reliably perennial.) Taproot makes it difficult to transplant, so pick a spot where you'll want to enjoy the garden friendly plant for years to come. Propagate with root cuttings (easiest) and seeds. In fall, cut taproot into 2-inch sections and plant each vertically, keeping the area moist. Transplanted carefully. Takes 2 - 3 years before vibrant flowers. Lasts for years and is thicker each year. Has no milky sap. 2017 Perennial Plant of the Year.



Asclepias tuberosa
Butterfly weed/Orange

6. **Tropical Milkweed** - *Asclepias curassavica*. Showy flowers with five sepals and five lobes appear in rounded axillary clusters. Grows 2-3' tall, upright stems with pointed, opposite, lanceolate leaves (to 6" long.) Leaves are medium green sometimes with white midribs. Grows best in light, rich, evenly moist, well-drained soil in full sun. Tolerates some light shade. Tolerates some soil dryness. Medium water. Consider cutting back tropical plants to the ground in fall to cut down the spread of OE and to encourage the monarchs to finish their fall migration. Stagger your cuttings (cut back half in Sept., other half a few weeks later), so some milkweed is available.



Asclepias curassavica
Tropical Milkweed

References

<http://gardenclub.org/resources/projects/ngc-inviting-butterflies-into-your-garden.pdf>
<http://www.monarchgateway.org/> for Monarch Gateway - Barbara Keller-Willy, Fort Bend
http://www.wildflower.org/plants/search.php?search_field=milkweed&newsearch=true&family=Acanthaceae
http://www.wildflower.org/plants/result.php?id_plant=ASVI2
<http://plants.usda.gov/core/profile?symbol=ASVI2>
http://www.wildflower.org/gallery/result.php?id_image=13733
<http://www.xerces.org/milkweed/>
<http://pollinator.org/PDFs/PrairieParklandSubtrp.rx3.pdf>
<http://monarchjointventure.org>



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