UF IFAS Extension UNIVERSITY of FLORIDA

Florida-Friendly Landscaping™ PROGRAM

FPS050
doi.org/10.32473/edis-fp050-1999

Asclepias tuberosa: Butterfly Weed, Indian Paintbrush[1]

Keighly Graves, Wendy Wilber, Tom Wichman, Claire Lewis, Gail Hansen, and Ryan Klein[2]

https://ffl.ifas.ufl.edu/

This document is part of a series originally written by Edward F. Gilman.

Introduction

Butterfly weed is an herbaceous upright perennial, and a member of the milkweed family. It is native to most of the United States (excluding some northwestern states) and is found naturally growing in sandy site conditions. It has a height and spread of 2 to 3 feet (Figure 1). This plant flowers from July to September, once established. The orange, red, or yellow flowers are borne in clusters atop the foliage (Figure 2). Butterfly weed is a deciduous perennial that exhibits dormancy. The plant will die back to the ground in the winter; however, it will resprout from the roots the following year and may also reseed itself. The deciduous leaves have a somewhat hairy texture and spiral the stem (Figure 3). Butterfly weed produces a spindle-shaped seed capsule that starts as a green color and turns brown once mature (Figure 4). This Florida native milkweed is also a larval host plant for the monarch, soldier, and queen butterflies (*Danaus* spp., Figure 5). This plant is well suited for pollinator gardens, as it attracts butterflies, hummingbirds, and other pollinators. In addition, it may be used in containers, mass plantings, for naturalizing landscapes, or utilized as cut flowers in arrangements.



Figure 1. Full form—*Asclepias tuberosa*: butterfly weed.
Credit: Wendy Wilber, UF/IFAS



Figure 2. Flower—*Asclepias tuberosa*: butterfly weed. Credit: © michaelgold, some rights reserved (CC-BY-NC) via iNaturalist



Figure 3. Leaf—*Asclepias tuberosa*: butterfly weed. Credit: © Kevin, some rights reserved (CC-BY-NC) via iNaturalist



Figure 4. Fruit—*Asclepias tuberosa*: butterfly weed. Credit: © Kevin, some rights reserved (CC-BY-NC) via iNaturalist



Figure 5. Flower—*Asclepias tuberosa*: butterfly weed, larval host plant for monarch butterfly and relatives. Credit: MediaMarketing via Adobe Stock

General Information

Scientific name: *Asclepias tuberosa*

Pronunciation: as-KLEE-pee-us too-bur-O-suh

Common name(s): butterfly weed, Indian paintbrush, butterfly milkweed

Family: *Apocynaceae*

Plant type: herbaceous; perennial

USDA hardiness zones: 3B through 10B (Figures 6 and 7)

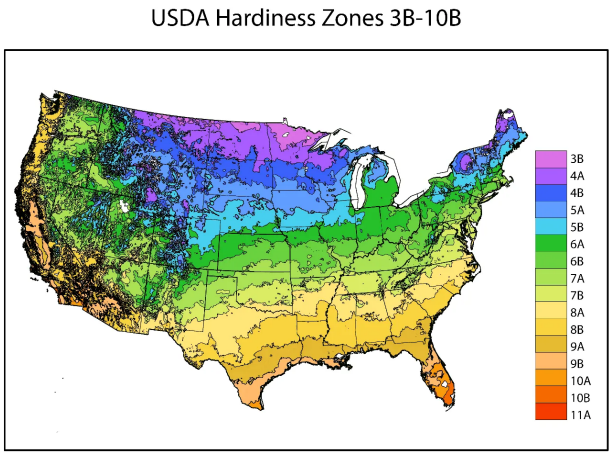


Figure 6. Shaded area represents potential planting zone—USDA Hardiness Zones 3B–10B.
Credit: This map is based on the 2023 USDA Plant Hardiness Zone Map. Visit https://planthardiness.ars.usda.gov/ for specific zone information.

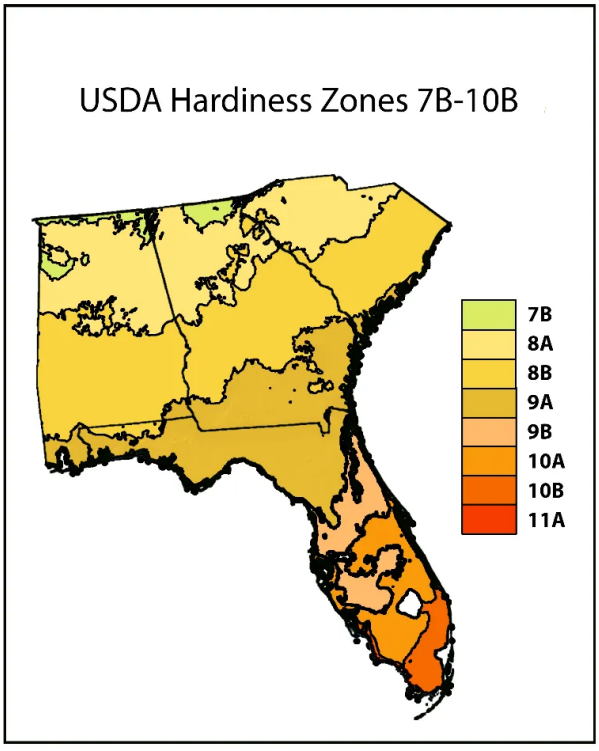


Figure 7. Shaded area represents potential planting zone in the SE Region—USDA Hardiness Zones 7B–10B.
Credit: This map is based on the 2023 USDA Plant Hardiness Zone Map. Visit https://planthardiness.ars.usda.gov/ for specific zone information.

Planting months for zone 8: May; June; July; August

Planting months for zone 9: March; April; May; June; July; August; September

Planting months for zones 10 and 11: February; March; April; May; June; July; August; September; October; November; December

Origin: native to Florida; three highly integrated subspecies exist, but further genetic study is needed in this area

Invasive potential: may self-seed each year

Uses: naturalizing; container or above-ground planter; cut flowers; mass planting; attracts butterflies, hummingbirds, and other pollinators

Availability: somewhat available; may have to go out of the region to find the plant; available at certain native plant nurseries

Description

Height: 2 to 3 feet

Spread: 2 to 3 feet

Plant habit: round; upright; sprawling

Plant density: moderate

Growth rate: moderate to fast

Texture: medium

Foliage

Leaf arrangement: alternate; whorled

Leaf type: simple

Leaf margin: entire

Leaf shape: oblong

Leaf venation: brochidodromous

Leaf type and persistence: deciduous; hairy

Leaf blade length: 4 to 8 inches

Leaf color: green

Fall color: not applicable

Fall characteristic: not applicable

Flower

Flower color: red; yellow; orange

Flower characteristic: spring-flowering; summer-flowering

Fruit

Fruit shape: elongated

Fruit length: 4 to 6 inches

Fruit cover: dry or hard

Fruit color: brown

Fruit characteristic: inconspicuous and not showy

Trunk and Branches

Trunk/bark/branches: not applicable

Current year stem/twig color: green

Current year stem/twig thickness: thick

Culture

Light requirement: plant grows in full sun; plant grows in partial shade

Soil tolerances: acidic; sand; loam; clay

Drought tolerance: moderate

Soil salt tolerance: poor

Plant spacing: 18 to 24 inches

Other

Roots: not applicable

Winter interest: no special winter interest; displays winter dormancy

Pest resistance: aphids may affect plant health or aesthetics

Toxicity: this plant exhibits low toxic characteristics; all parts of this plant contain cardiac glycosides and resinoids; ingestion causes vomiting and gastrointestinal issues; sap may cause contact dermatitis

Use and Management

Butterfly weed thrives in full sun but also tolerates partial shade. It is moderately drought tolerant and may be planted in a wide range of soil conditions, excluding heavy soil. As this is a larval host plant, it will attract monarch butterflies, along with other pollinators to the landscape. Utilizing multiples of these plants in the landscape is more attractive to butterflies than a single specimen planting. This plant may reseed itself and spread beyond the intended cultivated area.

This deciduous plant exhibits dormancy and will die back to the ground in winter. As it is also slow to start its growth in the spring, mark its location to prevent damage to the easily injured dormant crowns. A taproot makes transplanting difficult. Once established, do not disturb butterfly weed unnecessarily. This plant will grow back the following spring.

Butterfly weed may be utilized for pollinator gardens in the landscape when planted in mass, in container or above-ground planters, or mixed into landscaping beds. As this plant is a larval host plant, it will have varying aesthetic appeal in the landscape as caterpillars utilize its foliage to complete their life cycle into butterflies.

Propagation is by seed or division in the spring. The seed germinates in 3 to 4 weeks at 70°F to 75°F. Plants may be planted in a cold frame in spring or fall. Fresh seed may need chilling.

Design Considerations

The thin stems and widely spaced leaves of the butterfly weed give a slightly weedy appearance (hence the name) so most gardeners mix them with shorter plants where the bright red, orange, and yellow flowers can be easily seen above the ground cover. The leaves can be stripped by caterpillars, and the plant often looks stick-like at certain times of the year, so using ground cover also helps hide the bare stems until they can be cut back. Pair with plants with large foliage and mounding or loose spreading forms to help the butterfly weed poke through the plants. White or purple flowers are complementary colors to yellow and red, which will contrast nicely.

Pest and Diseases

Pest issues include aphids. This plant is a larval host plant for the monarch caterpillar, which may defoliate, but not kill the plant. Disease issues include minor leaf spot diseases, rusts (reddish-colored spots), and cucumber mosaic virus (leaf mottling, no treatment available).

[1] This document is FPS050, one of a series of the Department of Environmental Horticulture, UF/IFAS Extension. Original publication date October 1999. Revised August 2018 and December 2025. Visit the Ask IFAS website at https://ask.ifas.ufl.edu/ for the currently supported version of this publication. *To learn more about creating and maintaining attractive landscapes that protect Florida's water and natural resources, visit ffl.ifas.ufl.edu/*.

[2] Keighly Graves, horticultural science specialist, Florida-Friendly Landscaping™ Program; Wendy Wilber, statewide Master Gardener Program coordinator and Extension agent IV; Tom Wichman, Extension program manager, Florida-Friendly Landscaping™ Program, UF/IFAS Center for Land Use Efficiency; Claire Lewis, state specialized agent II and director Florida-Friendly Landscaping™ Program, UF/IFAS Center for Land Use Efficiency; Gail Hansen, professor, sustainable landscape design, Department of Horticultural Sciences; Ryan Klein, assistant professor, arboriculture, School of Forest, Fisheries, and Geomatics Sciences; UF/IFAS Extension, Gainesville, FL 32611.

The Institute of Food and Agricultural Sciences (IFAS) is an Equal Opportunity Institution authorized to provide research, educational information and other services only to individuals and institutions that function with non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, marital status, national origin, political opinions or affiliations. For more information on obtaining other UF/IFAS Extension publications, contact your county's UF/IFAS Extension office. U.S. Department of Agriculture, UF/IFAS Extension Service, University of Florida, IFAS, Florida A & M University Cooperative Extension Program, and Boards of County Commissioners Cooperating. Andra Johnson, dean for UF/IFAS Extension.