



---

# Yuccas

There are more than 40 species of yucca and all are new world natives. Several species are native to the southwestern United States. These range in size and shape from the multi-trunked Joshua Tree (*Yucca brevifolia*) with large, tall, branching stems (to 30 feet) and short leaves to the more compact yuccas that form two-foot-tall basal clumps (*Y. arkansana*). There are also several tropical species which have softer leaves and some of these tolerate our winter temperatures.

Yuccas have been (and occasionally, still are) harvested for food (flowers and fruits), fiber (leaves), and soap (roots). Sandals and mats made from yucca leaves by the Sinagua culture can be seen in local archaeological displays. Soap-tree yucca (*Y. elata*) roots and stems have a substance high in saponins, which are soap-like substances, which native peoples used for soap and shampoo.

Yuccas produce showy, creamy white flower spikes between March and May. While closely related to Agaves, most Yuccas flower repeatedly, but a few are monocarpic (flower once, and then die) like most Agaves. All southwestern yucca species are pollinated by various species of small moths of the genus *Tegeticula*. When the yucca is in flower, male and female moths emerge and mate. The female moth collects pollen with her specialized mouthparts. She flies to another flower, lays her eggs in the flower ovary, and then climbs to the stigma and deposits the pollen. Yucca moth larvae hatch and feed on the maturing seeds. The larvae kill some seeds, but not all. Mature larvae drop to the ground, form cocoons, and pupate until the next flowering cycle. This symbiotic relationship facilitates reproductive success for both yucca and the yucca moth.

Yuccas are both interesting and attractive when used in landscapes. They are very drought tolerant, long-lived, and come in several shapes and sizes. In Yavapai County, there are at least three native varieties that are easily distinguished from each other. These are the Banana yucca (*Y. baccata*) with 1 1/2 to 2-inch-wide leaves, Narrowleaf yucca (*Y. angustissima*) with 1/2 to 3/4-inch-wide leaves, and Soaptree yucca (*Y. elata*) with leaves similar to Narrowleaf yucca, but growing into a taller plant. While these species are available from nurseries, several other species are also available and well suited for planting in our area.

Before planting yuccas in landscapes, consider the size of the mature plant and amount of pedestrian traffic that will be in the area. Most yuccas have sharp spines at the ends of the leaves that can easily pierce the skin and cause painful wounds. Of course, this can be used to advantage in landscapes by preventing access to private areas or discouraging illegal entry.

A serious pest of yucca is the Yucca Snout Weevil (*Scyphophorus yuccae*). An adult female enters the base of a plant to lay eggs. The weevils also introduce decay microbes which causes the plant to develop a wilted appearance. Infested plants soon collapse and die. The larvae (grubs) develop in the dying plant, emerge, and may infect other suitable hosts nearby. Weevils can be treated with soil applied insecticides.

Larger yuccas should be used as accent plants and smaller types work well in combination with cactus and succulents. All species listed below are adapted to our local climate, are highly drought tolerant, flower in spring, and prefer sandy, well-drained soil. Yuccas should never be grown in poorly drained, saturated soil.

**Narrowleaf yucca** (*Y. angustissima*) grows 4 feet high by 1 1/2 feet wide and produces 1 1/2 foot flower spikes.

**Banana yucca** (*Y. baccata*) grows 3 feet high by 3 feet wide and produces 2 foot flower spikes.

**Joshua Tree** (*Y. brevifolia*) grows 30 feet high by 20 feet wide and produces 1 1/2 foot flower spikes.

**Soaptree yucca** (*Y. elata*) grows 4 feet high by 1 1/2 feet wide and produces 3 to 4 foot flower spikes.

This is not an exhaustive list, but you may find some of these at local nurseries. Many are being propagated from seed by southwest growers. There are several yucca relatives that add similar interest and texture to residential landscapes. These include the genera: Agave, Hesperaloe, Hesperoyucca, Nolina, and Dasilyrion.



**Narrowleaf yucca** (*Y. angustissima*). Sue Smith, Yavapai County Native & Naturalized Plants, [cals.arizona.edu/yavapaiplants/](http://cals.arizona.edu/yavapaiplants/).



**Soaptree yucca** (*Y. elata*). Max Licher, [swbiodiversity.org](http://swbiodiversity.org).



**Banana yucca** (*Y. baccata*). Marv Mazur, Yavapai County Native & Naturalized Plants, [cals.arizona.edu/yavapaiplants/](http://cals.arizona.edu/yavapaiplants/).

**Additional Resources**

[Cactus, Agave, Yucca, and Ocotillo](#), University of Arizona Cooperative Extension

[Problems and Pests of Agave, Aloe, Cactus and Yucca](#), University of Arizona Cooperative Extension

**March 18, 2023**

Adapted from original Backyard Gardener publications by Jeff Schalau, Agent, Agriculture & Natural Resources, University of Arizona Cooperative Extension, Yavapai County

The University of Arizona is an equal opportunity, affirmative action institution. The University does not discriminate on the basis of race, color, religion, sex, national origin, age, disability, veteran status, sexual orientation, gender identity, or genetic information in its programs and activities.