

ADAM'S NEEDLE

Yucca filamentosa L.

Plant Symbol = YUFI

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Alternate Names

Needle palm, bear grass, bear's thread, Christmas bells, Confederate flax, curly hair, Eve's darning needle, Eve's thread, grass cactus, our-Lord's-candles, silk grass, soap root, soap week, Spanish-dagger, spoon leaf yucca, thread-and-needle

Uses

Ethnobotanic: The Catawba, Cherokee, Nanticoke and other Native American tribes used *Yucca filamentosa* for a variety of purposes including food, medicine, cordage and even soap. The roots, which contain saponin, were prepared by boiling and pounding for use as soap. Roots were beaten into a salve or poultice that would then be used to treat

sprains or applied to sores on the skin. The roots were used to treat gonorrhea and rheumatism. Skin diseases were treated by rubbing the roots on the skin and by taking a decoction of the roots. The plant was used as a sedative to induce sleep. An infusion of the plant was used to treat diabetes. The flowers were eaten both raw and cooked. The pounded roots were thrown into fishing waters to "intoxicate fishers" allowing for easier catch. The green leaves are easily split into long strips that can be plied into cord. The leaves have long, very strong fibers, a type of sisal, which were twisted into strong thread used as cordage for binding and to construct baskets, fishing nets, fishing lines and clothing. The leaves of *Yucca filamentosa* contain the strongest fibers native to North America.

Wildlife: Hummingbirds visit the flowers. Yuccas are pollinated by small, white Yucca moths (*Tegeticula yucasella* and related species) with which they have a special plant-insect mutualism. At night, the fragrant flowers attract the female moth that feeds on the nectar. She then rolls pollen from the flowers into a ball that is three times the size of her head and carries the pollen ball to the next flower. There, she first lays eggs inside the immature ovary and then deposits the pollen on the flower's stigma insuring that seeds will form to feed her progeny. Because the larvae mature before they are able to consume all of the seeds (60 to 80% of the seeds remain viable), the plants are able to reproduce as well.

Other: The flowers are used for corsages.

Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status (e.g. threatened or endangered species, state noxious status, and wetland indicator values).

Description

General: Agave Family (Agavaceae). Adam's needle is a native, evergreen, perennial shrub. The plants have long, thick underground stems and rarely have an above ground stem. The grayish green leaves appear from a rosette at or near the ground. The leaves are stiff and sword-shaped (30 to 76 cm long and 2.5 cm wide) with sharp, pointed tips and long, curly, filamentous threads at the margins. The bell-shaped flowers (5 to 8 cm wide) are a creamy white to pale yellow or green with broadly ovate petals (4-5 cm). The flowers, which appear in late spring and

summer, hang loosely in clusters from a large, central spike (1 to 4 m tall) that emerges from the rosette. The fruits are capsules that contain 120 to 150, small black seeds that are dispersed by wind.

Distribution: Adam's needle is native to the Southeastern United States and Mexico. For current distribution, please consult the Plant Profile page for this species on the PLANTS Web site.

Habitat: Adam's needle is adapted to hot, dry regions in areas that are protected from fire. It occurs in dry, sandy soils along the coast, rocky and sandy places, bluffs, thin woods, oldfields and other open areas.

Establishment

Yucca filamentosa does well in garden plantings as well as in areas of high heat and light, such as parking lots. The plants have striking foliage that adds interest to borders, rock gardens and xeriscapes. The plants are long-lived and very drought resistant. The thick, rhizomous roots are storage organs that allow the plants to thrive in many soils, even in areas of pure sand. The plants can spread through this underground root system to form small clumps (1 to 1.5 m wide) with multiple crowns or offshoots. They can tolerate both cold and moderate wetness, making the species one of the most hardy of the genus. The plants may be propagated by dividing the offshoots from the parent plant. The plants may also be propagated through root cuttings and seeds, which sprout readily. Care should be taken in site selection, as the roots of mature plants can grow large and extend deep into the ground, making removal difficult. For more temporary sites, the plants may be grown in containers. For garden plantings space the plants about 1 meter apart in a sunny, well-drained location of low to medium fertility. Water the plants well for the first year as the roots establish. Because of the sharp, pointed leaves they should not be placed near playgrounds or other areas where children play.

Management

The flower stalk should be removed once the flowers have dropped. Otherwise, these plants are durable and require very little maintenance.

Pests and Potential Problems

In areas of poor drainage, the leaves may be sensitive to leaf spot or blight.

Cultivars, Improved and Selected Materials (and area of origin)

These plant materials are readily available from commercial sources. Contact your local Natural Resources Conservation Service (formerly Soil

Conservation Service) office for more information. Look in the phone book under "United States Government." The Natural Resources Conservation Service will be listed under the subheading "Department of Agriculture."

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Edited: 27sep01 jsp; 060818 jsp

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