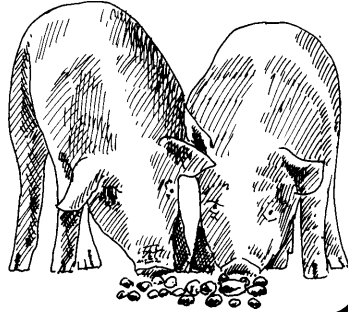


YELLOW NUTSEDE Science Page

DID YOU KNOW?

People think yellow nutsedge is one of the world's worst weeds. Yet in the United States, many poor farmers in Florida and Georgia used to grow yellow nutsedge to feed to hogs and cattle. The tubers also made tasty snacks for farm families during the winter.

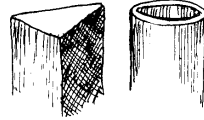


THE YELLOW NUTSEDE PLANT

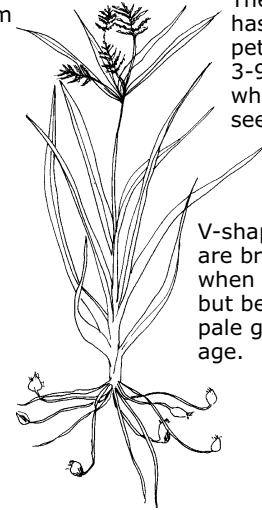
Yellow nutsedge is a perennial. Its tubers over-winter in the ground. When the weather becomes warm, the tubers send up shoots. The plant grows very well where the ground is wet.

The plant is 20 to 90 cm (8 in to 3 ft) tall.

The flower has no petals, but 3-9 spikes, which bear seeds.



The stem of a sedge has three sides while a grass stem is round.



V-shaped leaves are bright green when young, but become pale green with age.

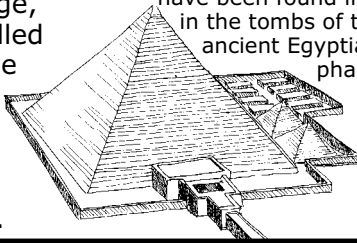


The round tubers are ready to dig up when the seeds appear.

ORIGINS

Yellow nutsedge, sometimes called chufa, is native to the Middle East. It was an important food crop in ancient Egypt.

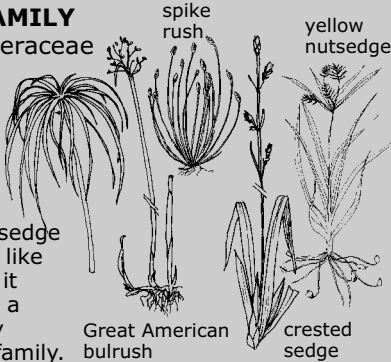
Yellow nutsedge tubers have been found in vases in the tombs of the ancient Egyptian pharaohs.



CLASSIFYING YELLOW NUTSEDE

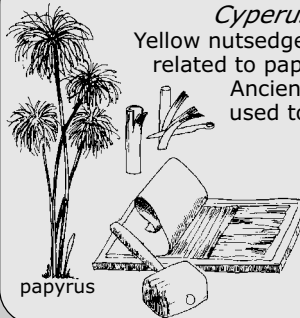
FAMILY Cyperaceae

In Latin, this means sedge.



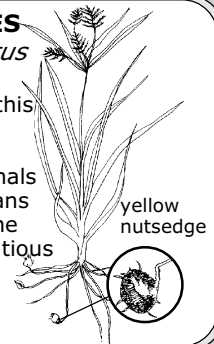
GENUS *Cyperus*

Yellow nutsedge is closely related to papyrus, which Ancient Egyptians used to make paper.



SPECIES *esculentus*

In Latin, this means "edible." Both animals and humans can eat the very nutritious yellow nutsedge tubers.



Today, yellow nutsedge is grown in West Africa, Spain, and China. The tubers can be boiled and then eaten as a vegetable. They can be ground and used to make a drink. They can also be toasted, ground, and used as flour. The tubers are high in fatty acids that can protect against heart disease. They are also high in iron and potassium.

FRIEND . . .

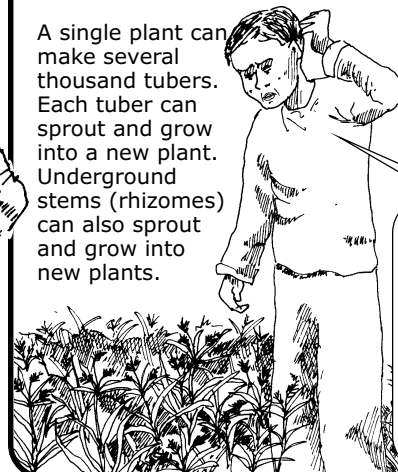
In the United States, yellow nutsedge is an important food source for deer, wild turkey, and waterfowl.



. . . OR FOE?

Yellow nutsedge can invade farm fields and gardens, especially where the soil is wet. It is very difficult to control.

A single plant can make several thousand tubers. Each tuber can sprout and grow into a new plant. Underground stems (rhizomes) can also sprout and grow into new plants.



Yellow nutsedge has really taken over here, because the soil was wet in the spring.



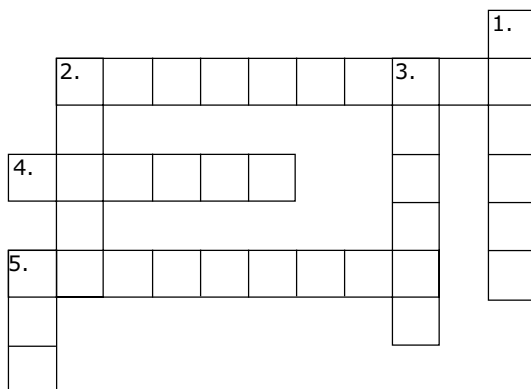
CROSSWORD PUZZLE

Across

- Yellow nutsedge belongs to this family.
- Yellow nutsedge can sprout and grow from _____.
- Yellow nutsedge is an important food for _____.

Down

- The _____ of yellow nutsedge are V-shaped.
- Yellow nutsedge is sometimes called _____.
- The species name *esculentus* means _____.
- The tubers of yellow nutsedge can sprout and grow where the soil is _____.



CAUTION: Never pick weeds to eat unless you are very sure you can identify them. Do not harvest weeds that grow near roadsides or that may have been sprayed with chemicals. These plants may not be safe to eat. If you let yellow nutsedge grow in order to harvest tubers, be very careful not to let the plant invade new areas. Clean your garden tools to prevent the spread of tubers.



SPOTLIGHT ON RESEARCH

How Do You Grow Chufas?

In the summer, people who live in Valencia, Spain, often enjoy a refreshing drink called *horchata de chufas*. Since this drink is becoming more and more popular, farmers are growing more and more chufas—yellow nutsedge tubers. Scientists at the University of Valencia have been trying to find better ways to grow chufas.

In field trials, they found that chufas growing in sandy soils are larger and taste better. In clay soils, the tubers are smaller, get thicker skins, and do not taste as good. They also found that adding nitrogen fertilizer increases the growth of stems and leaves, but decreases the growth of tubers. Adding potassium and phosphorus fertilizer increases the growth of tubers.

SOURCE: Pascual, B., Maroto, J., Lopez-Galarza, S., Sanbautista, A., and Alagarda, J. (2000). An unconventional crop. Studies related to applications and cultivation. *Economic Botany* Vol. 54 (4), 439-448.



JOKE

Knock, knock!
Who's there?
A nut!
A nut who?
A nut sedge you're a nut too! (It takes one to know one!)

Crossword puzzle answers
Across: 2. Cyperaceae; 4. tubers; 5. waterfowl.
Down: 1. leaves; 2. chufa; 3. edible; 5. wet.



HORCHATA DE CHUFA

This refreshing summer drink is popular in Spain and Mexico. The nutsedge tubers can be harvested in the spring or fall.

Yield: 10-12 servings

Ingredients

- * 2.2 lb (1 kg) chufas
- * 2.2 lb (1 kg) sugar
- * 5.3 quarts (5 l) water
- * a cinnamon stick

Instructions

1. Wash the chufas well. Rinse in clean water and remove hairy fibers.
2. Soak in water for at least 14 hours.
3. Rinse the chufas again in clean water, until the water runs clear.
4. Put chufa in a blender and blend until it is a soft paste. Add a little water if necessary.
5. Add water to the paste. Place the cinnamon stick into the mixture, and stir.
6. Store in a cool place for 2 hours. Then add sugar and stir until dissolved.
7. Strain the mixture as many times as required until a fine, milky liquid remains. *Horchata de Chufa* will stay fresh in the fridge for about 4 days.