

Going Nuts Over Nutsedge

Nutsedge, often called nutgrass, is really not a true grass, but instead a member of the sedge family. Its proper name is nutsedge, or for you Latin lovers, *Cyperus esculentus*. It is closer 'kin to Papyrus (used to make the ancient writing paper of Egypt) or the ornamental Umbrella sedges, than to St. Augustine or bermudagrass. This African native plant has thrived and spread throughout the New World. Because of its ability to thrive and persist, most gardeners and farmers would agree that to know it is to hate it.

There is an edible form of *C. esculentus* known in various parts of the world as Chufa, Earth-Almond and Zulu-Nuts. Ancients Egyptians loved Chufas. In fact, archaeologists examining the opened tombs of Pharaohs have often found a small quantity of mummified Chufas in "easy reach" of the corpses! Now, I've heard of being buried with your family pet, but being buried with your "nutgrass" is taking things a bit too far!

I've grown Chufa Nuts in my garden and although they grow quite well, they aren't very impressive to the palate. They have a distinct almond flavor, but are very "woody" in texture. After awhile you give up chewing and remove a bit of sawdust from your mouth!

Our own beloved "nutsedge" has tubers that are smaller and scattered out further from the plant - a trait which improves its survivability (and weediness!).

New plants arise from underground tubers. The tuber's skin contains a chemical substance that inhibits sprouting. Soil moisture "washes" this inhibitor off the tuber allowing it to sprout. This is one reason why the plant thrives in a wet area of the lawn or garden and proliferates during wet spring seasons.

When a nutsedge shoot reaches the surface it forms a basal bulb, from which grow roots and thin, wiry underground stems with new tubers at their ends. In one year, the outward growth from one tuber has the potential to produce 1,900 new plants and 7,000 new tubers. Now you can see why it's so tough to control! If there is any good news it's that individual tubers do not last longer than 3 years (thanks a lot, right?).

The two primary types of nutsedge are described in the table below:

NUTSEGE CHARACTERISTICS		
NUTSEGE TYPE	Purple	Yellow
LEAF COLOR	Dark Green	Pale Green
LEAF TIP	Abruptly Tapers to Sharp Tip	Gradually Tapers to Sharp, Needle-Like Tip
RHIZOMES	Wiry, Scaly	Weak, Thread-Like
TUBERS	Oblong, Coarsely Hairy	Spherical, Smooth
TUBER TASTE	Bitter	Sweet
SEED HEAD COLOR	Reddish to Purplish-Brown	Yellow

Each tuber has up to 7 viable buds and enough energy in reserve to sprout all of them. So, if an attempt at control, such as the ol' garden hoe, kills one shoot, the tuber merely sends up another. In order for control to be effective, mechanical control must outlast the tuber's ability to regenerate, or an herbicide product must translocate down and kill the tuber. In other words... "never let 'em up for a breath of air."

If you can get your first application on before late May you can control sprouted tubers before additional side tubers have had a chance to form. Once formed those tubers may lie dormant until the following spring. When they then emerge it appears the spraying or digging only made the infestation worse, when in fact

it was just too late to prevent the proliferation of more tubers.

Diligent efforts at frequent cultivation for a period of about 12 weeks can outlast a tuber's ability to re-grow. Each time they re-sprout, they are rototilled and exposed to hot summer sun. Control is further complicated, however, by the fact that dormant tubers and seeds are usually around to join in the war.

Now that the beast sounds impossible to defeat, let me say that it is not. Difficult, yes—impossible, no.

TURF AREAS

There are two products available to aid in the war on nutsedge in turf areas. Image (active ingredient is imazaquin) and Manage are labeled for home and commercial turfgrass for use on St. Augustine, bermuda, centipede and zoysia. Neither product will wipe it out in one application. Repeat applications will be required for control, as there are always dormant tubers not affected by the treatment which can sprout later in the season.

FLOWER BEDS AND VEGETABLE GARDENS

Nutsedge in flower beds, gardens and areas "to be gardens" can be controlled with a long drawn out ground war of hoes, hand pulling and summer cultivation. Remember, this weed is tough, but not invincible! If you are not diligent, however, it will be back with a vengeance! In other words, don't start something you're not willing to finish.

Perhaps a better control option, especially for larger areas and heavy infestations, is the use of a contact, translocated herbicide such as glyphosate (Roundup) or glufosinate (Finale). Our experience in the Extension test gardens has been that for nutsedge, glyphosate gives more effective long term control.

Remember these products kill desirable plants too, so for best results apply them at the full label rate with a wiper type applicator. This minimizes the potential for damage to the environment by targeting the

application to the weed itself and requires only a tiny fraction of the product used when a spray application is done. You can make a good temporary wiper applicator by attaching a folded rag or piece of sponge over the end of your pump-up garden sprayer nozzle with a rubber band or twisted wire. I have also used those "grabber" products sold in hardware stores for reaching up to get something off of a high shelf. Remove the suction cups and replace them with cut pieces of sponge. This allow you to carefully grab the weeds among desirable plants and wipe herbicide on the weeds only.

In order to achieve optimum results with glyphosate follow these guidelines:

1. Apply only to actively growing nutsedge. Allow 3-5 leaves to emerge on new sprouts for best results. Mid spring to early summer and fall are best. Fall application should be made 4 or 5 weeks before the first frost to allow ample time for the product to be translocated down into the newly formed tubers.
2. Mix the product at the full label rate.
3. Add surfactant (commercial surfactant products are available or, in a pinch, you can use 1 teaspoon of liquid dish soap per gallon of spray mix) to help it "stick" to the slick leaves of the nutsedge plant.
4. Add 1/2 cup of ammonium sulfate (21-0-0) per gallon of spray. Although this may sound strange, it has been found to significantly increase the uptake and effectiveness of glyphosate on many weed species.

Nutsedge, although a tough, formidable foe, is not invincible. With diligent, determined effort and some help from the right herbicide products it can be controlled effectively in the home garden and landscape.

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