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Controlling Nutsedge

Yellow nutsedge is not a grass, it's a sedge, and it shows up in May and June each year. Nutsedge is also commonly called nutgrass. Sedges can be annuals or perennials, have three sided leaves and stems and are often found in WET habitats. Once again, **watch that irrigation!!!!** Nutsedge will often appear suddenly in an area due to a break in a sprinkler system line.

Nutsedge particularly likes light, sandy soils with high moisture. Fumigation reduces but does not eradicate yellow nutsedge.

In turf the nutsedge grows more rapidly than desirable grasses and is readily apparent 2-3 days after mowing. The nutsedge lowers sod strength and provides poorer footing and durability for athletics. Hand removal is laborious, expensive and usually unsuccessful due to buried tubers unless soil is removed to a depth of **three feet** and replaced with tuberless soil.

No one herbicide provides complete control but you need to use a combination of chemical and cultural methods to keep it under control.

Tubers are hard, round and brown in color varying from 0.5 to 0.75" long. Any topsoil that you bring into a site should be screened for their presence. The plant itself can vary from 6-30" tall. Tubers can remain dormant for several years until conditions are right. Buds on the tubers sprout in early spring, producing shoots and rhizomes which will make more tubers about 4-6 weeks after new shoot emergence and generally in about the upper 6" of soil. Without interference yellow nutsedge can produce 4-12 million tubers per acre. This works out to about 1000 tubers from 1 plant.

Since most reproduction is by means of tubers rather than seeds, control should be directed at tuber management. Early emergence and rapid growth gives the nutsedge its advantage over other plants including infestation of ornamental beds where heavy nutsedge can result in poor growth and inferior ornamental plants.

Yellow nutsedge also thrives at high temperatures when other cool season grasses encounter difficulty. Short days or dry weather induce tubering over vegetative growth.

Sources of nutsedge contamination are often introduced from extraneous soil including riverbeds, agricultural land, unfinished compost, or soil on the base of sod. If the supplier of soil or other amendments cannot guarantee that the supply is clean, don't use that source.

Landscape fabrics (spunbound nonwoven) can reduce emergence of nutsedge to some extent but combining techniques such as improving drainage plus fabric are a better bet.

Since tuber production is correlated to light, increasing shade by as little as 30% can promote a corresponding drop in tuber production although it never stops it completely. Planting evergreens and/or dense groundcovers can help to reduce the problem, although control during establishment can be very labor intensive. Remove nutsedge on a weekly basis during spring and summer of the first couple of years of establishment.

If you want to dig out the nutsedge, there's a protocol for that as well. Early spring is the best time, before more tubers are produced. Start about ten inches away from the perimeter of the problem and go 10 inches deep. Refill area with clean soil. You can also solarize an area by covering moist ground with 1-2 pieces of clear plastic for 4-6 weeks during hot weather—hot enough to raise the temperature of the top 2 inches of soil to 100-103°F and 90-97°F at a depth of 18". Although last summers remarkable frying pan might have had some effect on shallow tubers, temperatures around here might never reach a sustained level for long enough to fry the little buggers.

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Screening soil or compost is no guarantee of ridding yourself of tubers completely since even those less than 1/8" can still be viable.

Yellow nutsedge may be a particular problem around emitters due to extra water. This plant is also a good host of nematodes and so can become a significant source of nematodes affecting tree and vine health. Glyphosate provides spot control, but does not do any thing to the tuber itself. A second or third vegetative regrowth must also be spot treated because any vegetative ability will eventually result in tuber production when they reach the 5-7 leaf stage. For this reason, postemergent control ought to be timed to a five leaf or less stage in the life cycle.

To stamp out yellow nutsedge you need 3-6" of traditional mulching materials. For the areas around emitters, weed fabric may be more practical.

Cultivation can help to control nutsedge outbreaks in areas where it is practical, and before the plants have reached the 5-7 leaf stage. Shallow cultivation permits desiccation but is not a sure cure. Cultivation should **not** be done when soils are wet because moving wet soils contributes to the spread of yellow nutsedge.

Tubers rarely last more than 2 years in the soil, but even only 1% of tubers from a previous infestation are sufficient to bring back an overwhelming population once unloosed onto an unsuspecting yard.

Some plants that have natural herbicidal effects on yellow nutsedge are sweet potatoes. There is one type of sweet potato that is highly ornamental and may be a good choice for ornamental beds that are overrun.

Integrated Pest Management (IPM) Considerations

IPM is a common sense approach to pest control and plant care. It employs a number of measures to prevent, control or reduce plant problems. These include using resistant plant varieties, proper plant selection and placement, good aftercare and biological and/or mechanical controls. As a last resort, after all other remedies have been explored, a pesticide* that is least toxic to people and natural predators, can be considered. Prior to using any pesticides, plants should always be monitored for the degree of infestation and a sensible control measure considered.

** A pesticide is a substance that kills, or attempts to kill, a particular pest, e.g. **insect**icide, **fung**icide, **herb**icide, etc.*

Chemical pesticides may be available. If you choose to use a chemical pesticide, contact your local Cooperative Extension office for specific recommendations.

WHENEVER YOU USE A PESTICIDE, ALWAYS READ THE LABEL AND FOLLOW THE MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.