

Weed of the Week - Yellow Nutsedge

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Although nutsedge prefers moist environments, it is found in all our cropping systems – row crops, pasture, and hay fields. It looks like a grass, long slender leaves with parallel venation, arising from the soil. The leaves however, are glossy, fairly thick, and pointed. When you cut across the base of the shoot, you can see the triangular arrangement of the leaves and feel the triangular shape of the lower shoot as you roll it between your fingers. The yellowish flowers are arranged into groups of three-sided spikelets. The seeds contribute little to new plants. They only develop best in very moist environments at very warm temperatures (above 75°F). Mostly yellow nutsedge spreads by new plants that arise from its rhizomes and nutlets (tubers) that develop at root tips. Tuber formations begins in the summer around late July as days get shorter than 14 hours. Newly formed tubers will remain dormant until spring, when they will begin growth once the soil temperature reach 54°F and more. When they sprout (mostly from the 4” – 8” depth) in mid-spring, they send up a shoot which then forms a basal bud at the soil surface. Shoots grow from the basal bud. Long days (during spring) promote basal bud formation and vegetative growth (new plants from rhizomes). As days shorten in late July, bulb formation is favored. Tubers remain viable mostly up to three years. Spreading tubers with soil on equipment, in flood waters, or other means are the main dispersal mechanisms for nutsedge.



Triangular stem cross-section of yellow nutsedge. Photo by Bruce Ackley of Ohio State University, via Bugwood.org.



Yellow nutsedge roots, rhizomes, and tubers which develop at the root tips. Photo by Steve Dewey of Utah State University, via Bugwood.org.



Nutsedge tillers arising from growing points along its rhizomes. Leaves are glossy and pointed. (Antonio DiTommaso, Cornell University)

Purple nutsedge differs from yellow nutsedge in that the flowers are purple, the leaves are shorter and blunt. Also, purple nutsedge tubers form along the rhizomes and not just at the tips.

Yellow nutsedge can be controlled by disturbing it at the proper time, which is late-spring and early summer (June), before new tubers and daughter plants have formed. A crop rotation where tillage can be done at this time is effective. Tillage again after a summer crop (August & September) when tubers are forming will also reduce the population. In my experience, with

nutsedge in hay fields, mowing at the proper time and often reduced yellow nutsedge dramatically. Competition by the crop should also be employed since yellow nutsedge is not shade tolerant and tuber formation is reduced when shaded. With a well-planned rotation to introduce disturbances at the right time, nutsedge can be controlled.

Herbicides are most effective on nutsedge when they are applied closely following herbicide labels. For example, halosulfuron is most effective against yellow nutsedge when mixed with a no-ionic surfactant and applied post-emergent when it has three to five leaves and is actively growing. Pre-emergent herbicides labelled for yellow nutsedge (ie. metalachlor) work best when they are pre-plant incorporated, since the tubers emerge mostly from up to 8 inches.

There are not effective natural enemies of yellow nutsedge. Pigs do relish the tubers. Employing pigs to clean out dense infestations can be a practical method for control.

Ironic as it is, yellow nutsedge tubers (typically the size of garbanzo beans) are a healthy food for humans and sold under the names of tiger nuts, chufa, and ground almonds. Some health information can be found at https://www.healthline.com/nutrition/tiger-nuts#TOC_TITLE_HDR_2

Reference:

<https://cals.cornell.edu/weed-science/weed-profiles>

Manage Weeds on Your Farm: A Guide to Ecological Strategies, by Charles L. Mohler, John R. Teasdale, Antonio DiTommaso. Available as a download or print for Northeast Sustainable Agriculture Research Education, <https://www.sare.org/resources/manage-weeds-on-your-farm/>