

## Nutsedge Management in Landscaped Areas

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Nutsedge management in turf and landscaped areas require different strategies than those used for field crops. While field crops are often grown as monoculture, landscaped areas usually have a number of different species planted at the site and crop/weed selectivity becomes an issue when selecting a herbicide. Additionally, since most landscaped sites are planted with mixture of annual and perennial crops cultivation is not usually an option for control. Alternatively, since the sites may be small areas, hand weeding or fabric mulches can be employed. In turf, which is a monoculture, selective herbicides may be applied for successful control of nutsedge but care must be taken regarding the tolerance to the turf species to the herbicide.

While there are cultural and chemical controls for nutsedge, the most important part of a control strategy is prevention. In many cases, nutsedge is introduced into turf and landscaped areas from soil that is contaminated by nutsedge tubers. Since nutsedge prefers wetter areas, it is often found in sandy stream banks. When that sand is used as a soil amendment or as filler for holes in an area, there is a good chance that the nutsedge will establish in those sites. Choose clean and screened sand for those uses. Soil from contaminated fields also has the same risks so it is imperative that the distributor supplies only clean soil.

Non-chemical control of nutsedge in landscapes is obtained by using a combination of shading out the nutsedge plants, use of heavyweight fabric mulch, and diligent hand removal of sprouts. Since tubers will generally only survive two to three years in the soil, removal of plants before they produce new tubers (the five-leaf stage) will effectively control the population in two to three years. Fabric mulches have been shown to suppress the growth of nutsedge but care must be taken that the fabric is not torn or otherwise have holes in it or else the nutsedge can grow through the holes. The most common source of holes in fabric mulches is from pulling out plants that have rooted into the mulch from the top, such as groundcovers or weeds that have blown in by seeds and grown into the mulch. Covering the fabric mulch with bark will make it easier to remove those blown in weeds and will also protect the fabric from degrading in sunlight.

Non-chemical control in turf areas is somewhat more difficult. In turf, nutsedge is less likely to be found in small clumps and therefore is harder to remove by digging or hand removal. Also, since nutsedge tends to grow faster than most turf species it is difficult to control by shading. Reducing irrigation to minimal levels and irrigating deeply may help but once nutsedge is established it can tolerate low soil moisture.

There are few *effective* herbicides registered for use in California. Although some postemergence herbicides list nutsedge on their label, they will not be successful for long-term control unless they translocate to the basal bulb at the base of the stem or move into the rhizomes. Products that kill only the aboveground portion of the plant are not effective unless applied repeatedly to deplete reserves in the plant. Postemergence herbicides that have been shown to be effective in controlling nutsedge include:

Common name	Commercial name	Comments
2,4-D		
2,4-DP		
bentazon	Basagran	
dicamba		
glyphosate	Roundup	
halosulfuron	Manage	Add non-ionic surfactant
MCPP		
MSMA		

Regardless of the choice of product, control of nutsedge is maximized when the product is applied prior to the 5-leaf stage. The site should be monitored for later sprouting plants and a second application made if the label allows. One should also be aware that these products can injure nearby desirable plants if the spray contacts them so extreme care should be used if using the herbicide in landscape beds. Using a nozzle that sprays larger droplets can reduce drift.

Use of preemergence herbicides for control of nutsedge is best done prior to planting any desirable plants. Preemergent herbicides used of nutsedge control must be moved to the soil depth where the tubers are found. Consequently, they are usually incorporated mechanically or by irrigation. These products are highly soluble and may cause injury to nearby plants via root uptake. Therefore, these herbicides should only be used in an area under renovation and the area should not be planted until there has been sufficient time for the herbicide to degrade. Preemergence herbicides that have been shown to be effective in controlling nutsedge include:

Common name	Commercial name	Comments
dazomet	Basamid	Fumigant-like. Incorporate mechanically 8" deep. Works best in sandy soils.
dichlobenil	Casoron	Use with caution, very soluble, may cause injury to nearby by plants by root uptake.
EPTC	Eptam	Use with caution, very soluble, may cause injury to nearby by plants by root uptake.
metolachlor	Pennant Magnum	Use with caution, very soluble, may cause injury to nearby by plants by root uptake. Yellow nutsedge control only.