

Green Kyllinga

Sedge Weed of Turf and Ornamentals

By David W. Cudney, Clyde L. Elmore, David A. Shaw and Cheryl Wilen

Green kyllinga (*Kyllinga brevifolia*) is a weedy sedge that is becoming a major problem in turf and ornamental plantings in California. The genus, *Kyllinga*, consists of about 40 species, which are distributed worldwide in subtropical and warm temperature regions. Green kyllinga has been reported as a weedy problem from Florida across the southeastern U.S. into Arizona, California and Hawaii. In California, it has been reported from San Diego to the Sacramento Valley.

Green kyllinga is thought to have originated in Asia and was reported as a weed in California more than 50 years ago. But, it has only been in the last few years that green kyllinga has developed into a major problem for turf and ornamental managers.

It is often confused with yellow or purple nutsedge due to its

similarity in size and growth pattern. However, the flower and absence of underground tubers make it easily distinguishable from these species.

Life Cycle

Green kyllinga is a perennial that grows best in moist areas with full sun. However, it can withstand shade and drying once established. It grows well during the warm weather from April through October. When left unmowed, it can reach a height

of 15 inches. It is a prostrate plant producing a network of underground stems and rhizomes. It roots and sends out leaves at each stem node. If green kyllinga rhizomes are removed and chopped into pieces, new plants can be produced from each node or stem section.

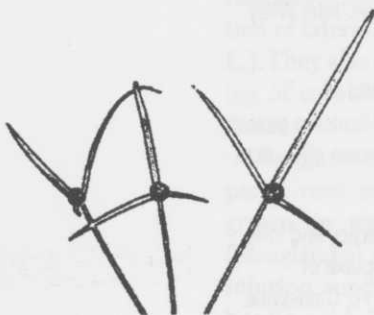
Leaves are long and narrow, ranging from one to more than five inches in length. The flowering stalks terminate in a globular inflorescence that is subtended by a group of three leaves immediately below.

Impact

In turf, green kyllinga forms a weak sod that gives poor footing for athletic fields and golf courses. Although primarily a problem in bermudagrass swards, it has been found in cool-season turf as well. Because it grows faster than most turf cultivars, it gives infested turf an undulating surface in as little as two days after mowing. Green kyllinga forms a dense mat that can expand at a rate of one inch per day. These mats can crowd out desirable species and reduce the vigor of those plants that survive.

Management

Hand pulling is usually futile because of the weed's extensive rhizome system. Prevention is the primary method of control. Mowers and cultivation equipment should be thoroughly cleaned before moving from an infested area to other areas. Individual plants should be spot sprayed with a nonselective herbicide, such as glyphosate. Open areas should be seeded shortly after treatment. Preemergence herbicides (pendimethalin, prodiamine, bensulide and benefin) have been successful in limiting germination in late spring and early summer.



Postemergence herbicides can limit growth of green kyllinga. Best control has been obtained when halosulfuron has been applied in two applications, spaced about two weeks apart. Multiple applications of MSMA will reduce infestations (at least three applications at 7- to 10-day intervals). Bentazon has reduced green kyllinga growth when two applications were made about two weeks apart.

Control of green kyllinga in ornamentals by hand hoeing is not effective in the long run. Spot spray solitary plants. Preemergence herbicides such as oryzalin and pendimethalin can be used to limit seedling germination. Application should be made in April prior to soil temperatures reaching 65°F. Few postemergence herbicides are registered for use in established ornamental plantings. Spot treatment with glyphosate can reduce green kyllinga growth but be careful to not spray or drift glyphosate onto desirable plants as injury will result.

Mulching with landscape fabrics can be effective if it is overlapped and no light is allowed to penetrate the soil. Use polypropylene or polyester fabric or black polypropylene tarp to block all plant growth. Organic mulches might not be effective since green kyllinga will probably grow through the mulch.

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