

Green Kyllinga — Another New Lawn Weed

By Gil Medeiros, Fairfax Master Gardener

In 1978 I started maintaining my lawn here in Fairfax County. Controlling weeds in the lawn was relatively simple back then. Wild violets, ground ivy, clover, an occasional plantain, and a lonely dandelion were about all I ever saw. I didn't have much sun back then, so crabgrass was never a problem. I still have these weeds, by the way. I can control them but never get rid of them.

Then in the 1980s (before Google facilitated plant identification for the masses) a parade of new weeds began its march through my yard. First came Japanese stiltgrass, which I controlled by trial and error with chemicals that are no longer available. Then came something that took a long time for me to identify; its name is green kyllinga. Then came yellow nutsedge followed by nimblewill, and most recently Indian mock strawberry. All of these require perseverance on the part of the gardener to control.

Origin

Green kyllinga (*Kyllinga brevifolia*) is yet another export from Asia, where many useful products originate and many of our most despised weeds got their start. A member of the sedge family, it has been well established in the deep South USA for over 50 years and, abetted by warm weather, has been spreading inexorably northward for years. Green kyllinga is now a problem in coastal regions from Rhode Island to Florida, west to Texas, and along the Pacific in California. A close relative, false green kyllinga (*Kyllinga gracillima*), is more prevalent inland. These kyllingas are practically indistinguishable by people who are not botanists equipped with microscopes. One or the other or both have settled into Northern Virginia to stay.



Green kyllinga

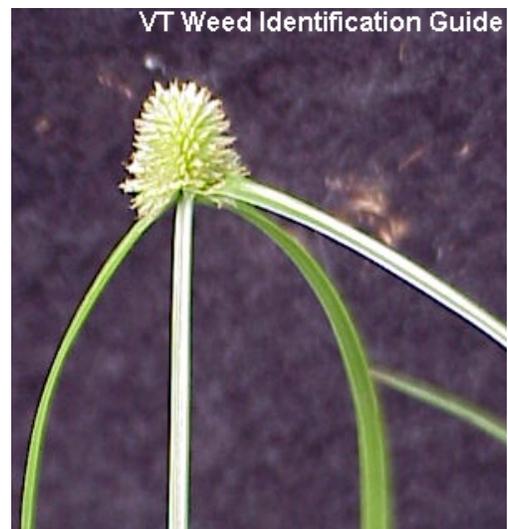
photo: North Carolina State University TurFiles

I first noticed green kyllinga in my vegetable garden beds in the late 1980s. I suspect it came in with tomato or pepper transplants from local garden stands before I began to start my own seedlings. I have hand-pulled these weeds from the vegetable garden beds for years. Kyllinga was more annoyance than nuisance until about three years ago, when I started to see it in the front lawn near the street. Clearly, this spread from nearby lawns along the edge of the street (notorious weed beds), not from my garden. Nevertheless, I now have to deal with it in the lawn. So far I have been able to keep it from spreading but not eliminate it.

Two years ago, while vacationing in Bethany Beach, I found entire lawns composed of green kyllinga. Not terrible-looking when it is tightly mowed in summer, but not very attractive from the first frost until June the following year. Good thing no one goes there in winter.

Identification

At first green kyllinga and false green kyllinga masquerade as a grass with fine, glossy, light-green blades. The color is similar to that of their cousin, yellow nutsedge. However, there is a clear difference between these relatives. Yellow nutsedge grows so erect that you can



Green kyllinga flower tuft

photo: Virginia Tech Weed Identification Guide

see it from two houses away. Cousin *kyllinga* crouches; it grows in low clumps that expand slowly via rhizomes to become mats. If it is in your lawn, you may not even notice & until it produces flowers. Then you can † miss it.

The flowers have a distinctive appearance. The little flower tuft is about 1 inch in diameter. The tuft is composed of about 50 tiny flowers, each of which can produce a seed. The flower tuft is surrounded by three long, narrow leaves that radiate from beneath the flower tuft. The symmetry of these leaves makes *kyllinga* so easy to identify.

Control

The toughest lawn weeds to control have three characteristics in common:

1. They are perennials. This generally dictates a control strategy of mechanical removal or application of a post-emergent herbicide. The correct post-emergent herbicide must be selected in order to reduce the damage to the turfgrass. Green *kyllinga* is a perennial.
2. They have an extensive system of rhizomes under the ground. This usually complicates mechanical control. If you do not get all of the rhizomes, the plant will grow back. Also, it generally means that multiple treatments with post-emergent herbicides will be required to kill all the rhizomes. Green *kyllinga* has rhizomes.
3. They are prolific seed producers. Wind, water, foot traffic and small animals are accessories to the petty crime of spreading the seeds. This dictates a strategy of carefully timed pre-emergent herbicide treatment in addition to the mechanical or post-emergent control efforts. Green *kyllinga* produces an abundance of seeds.

Like other nuisance sedges, green *kyllinga* prefers moist soil and thrives in lawns that are overwatered.

Aside from some general control recommendations regarding sedges, the 2016 Virginia Pest Management Guide does not address green *kyllinga*. So we consulted Virginia Tech weed expert Dr. Shawn Askew. The chemicals he cites below are readily available from online vendors. Some may be a bit expensive for the average homeowner, who may choose to contact a professional lawn service.

“This fall, apply Celero Herbicide (imazosulfuron) at 0.33 oz per gallon of water per 1000 sq ft, Dismiss Turf (sulfentrazone) at 8 oz/acre or Sedgehammer (halosulfuron-methyl) at 1.3 oz/acre. Seed the area 4 weeks later. The *kyllinga* will require additional treatments next year. Start when the *kyllinga* sprouts are first visible (June) and reapply at 4 to 6 week intervals. If you use Dismiss, no surfactant is needed. If you use Celero or Sedgehammer, add nonionic surfactant at 0.25% of the spray solution volume or 1/3 oz per gallon.

“A nonchemical option would include cutting out the *kyllinga* sod and replacing with tall fescue. Follow-up hand weeding will be needed. Unfortunately, the seed will germinate and establish new patches. Sod replacement also helps to reduce the amount of chemical needed if using herbicides.

“Definitely reduce watering. Only water if turf wilt symptoms start to appear. Consider zone irrigation. Some areas of the lawn may get just what is needed at a frequency of once or twice per week while others may get way too much. On good soil, Virginia lawns would typically only ‘need’ irrigation about 4 or 5 times per year. Each situation is different but reducing irrigation will favor the fescue over the *kyllinga*.

“Adding dimethenamid (Tower Herbicide) at 21 oz/acre to the preemergence program would help manage new seedling emergence.”

My preference so far is digging out the clumps and replacing them with sod or seed. If you are inclined to use glyphosate (Roundup), not mentioned by Dr. Askew, it works, and of course it kills the surrounding grass. Be ready to treat more than once.

References

Green Kyllinga, University of California Agriculture and Natural Resources

Kyllinga, Green and False Green, North Carolina State University TurFiles

Kyllinga, False Green, Auburn University, College of Agriculture