

Weed of Interest: False Green Kyllinga (Pasture Spikesedge)

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False green Kyllinga shoots arising from rhizomes- seedheads visible in turf- closeup of seedhead



Colonies of False green kyllinga visible in late summer. Both the color and texture are very different from the surrounding turfgrass.

There seems to always be a new weed on the block. for the past few years we have been watching *Kyllinga gracillima* (Pasture Spikesedge) become more and more of a weed problem in Long Island landscapes and turf. Although a few species of *Kyllinga* have become weedy in the southern and eastern United States, one species in particular, *Kyllinga gracillima*, (also called: *Cyperus brevifoloides*) has spread rapidly to into New York and southern New England in the last 20 years. This species has several common names: **false green kyllinga**, **pasture spikesedge** and **Asian green-headed sedge**. On Long Island, this weed has become a locally troublesome lawn and landscape weed at several sites in the last few years. It was also observed as a weed infesting a container nursery in Suffolk county. Taxonomically, kyllinga is very closely related to yellow nutsedge. In fact, kyllinga is currently considered a part of the nutsedge (*Cyperus*) genus.

False green kyllinga flowers in mid- to late summer and produces small ball-shaped seed heads atop single triangular stalks. The seed heads are usually surrounded by three leaves (bracts) about 3-4 inches long. The plants can spread easily to new sites by seed - easily shed seed that can be carried on

equipment or wet shoes or animal fur. We have recently seen neighborhoods that are becoming heavily infested with this weed. The infestations can be traced back to one or two properties that were initially infested from which the kyllinga seed was unknowingly spread. The plant itself can survive and spread under frequent mowing. The reason that there is a low awareness of this weed is that it resembles common turfgrass in the spring and early summer. However, in the late summer, when turfgrass often gets discolored by disease or other stresses, the kyllinga patches became very obvious dark green patches in the lawn. Within the lawn, a new infestation mainly spreads by short vigorous rhizomes which give rise to new shoots at or near the soil surface. As the rhizomes (modified shoots) grow, the new shoots allow individual plants to become patchy colonies up to several feet in diameter. In the landscaped beds, the plants will easily move to cultivated and mulched areas and quickly establish. However, because it is a short and narrow leaved plant, it can easily be overlooked or mistaken for turfgrass in this setting.

Management considerations

The first defense against this weed is to scout for it in properties during the fall and late winter. The texture and color of the leaves will allow it stand out from the lawn at that time of year. If the infestations are small, then hand removal of the plant, including the entire root system may be the best way to eradicate it. This should be followed with reseeding or re-sodding as soon as possible. If the weed is well established, then it is important to keep a close eye on it the following spring. Since we know it can be moved to new properties on equipment, then cleaning tires and mower decks between maintenance jobs is one way to slow its spread.

Preliminary research recently conducted at the LI Horticultural Research & Extension Center has evaluated preemergence herbicides commonly used for crabgrass control. We wanted to determine if these materials would also be able minimize new kyllinga infestations by controlling **seedling** development. Our results indicate that conventional herbicides such as Pendulum Aquacap, Tenacity and Ronstar provided greater than 90% control 6 weeks after application. Dimension did not provide the same level of control this period.

Since it can 'fly under the radar' for the early part of the season, postemergence control is probably of greater importance for this weed. Unfortunately, our chemical tools for managing this weed in turf on Long Island are very limited. Halosulfuron (Sedgehammer and other trade names) is labeled as a suppressant, but not a complete control. Spot treating halosulfuron as soon as infestations become evident is probably the best herbicide management that we have available to keep this weed at bay. Research in a neighboring state indicated that three applications spaced 3 weeks apart are needed to make a significant impact on the colony of rhizomes. We will continue to evaluate other management options for this potentially troublesome weed.