

Best Management Practices: Annual Bluegrass

Description

Annual bluegrass (*Poa annua*) is considered one of the world's most troublesome turf weeds. Commonly referred to by its genus name "Poa", this weed can infest both warm and cool-season turfgrass. In sports fields or home lawns in cool-season climates, annual bluegrass disrupts the color and uniformity of darker green turf types. On golf course putting greens annual bluegrass can drastically impact the playability of the surface. In warm-season turf, this weed can create voids in the turf canopy during spring green up, which can allow other weeds to establish as annual bluegrass naturally senesces, or dies. It doesn't matter if you are a golf course superintendent, sports field manager or lawn care company, odds are you are likely dealing with this weed.



Habitat

Annual bluegrass has a shallow root system so it thrives in compacted areas that receive frequent irrigation or stay wet for prolonged periods of time. It is capable of growing both in full sun or shaded areas where it out-competes the desirable turf. *Poa* has an ability to produce viable seeds at multiple mowing heights; it does well in soils high in phosphorus, so balanced fertility can be an important factor in cultural management.

Identification

Annual bluegrass is a winter annual weed with a keeled or boat-shaped leaf tip. There have been biotypes that have characteristics of a perennial. The annual biotype (*Poa annua* var. *annua*) is a bunch type weed with a pale green color and is a prolific seed producer. Research has found that annual biotypes can produce 70 - 110 viable seeds/in² depending on mowing height; these can remain viable for several years. The majority of annual bluegrass germination occurs in fall and early winter once soil temperatures drop below 70° F. Perennial biotypes (var. *reptans*) can be dark green, do not produce as many seedheads as the annual variety, and produce short stolons. The ligule is tall and membranous. On the back side of the leaf near the



base, small wrinkles may be observed. Each leaf has a distinct midrib almost like the leaf has been folded in half. During spring, annual bluegrass produces several seedheads giving a white cast over the turf.

Management

Cultural:

Reducing shade and improving drainage favors turfgrass competitiveness that can out-compete annual bluegrass. Irrigating as needed with deep, infrequent irrigation cycles will assist in reducing annual bluegrass. Applying fertilizers low in phosphorus and nitrogen in fall will maintain turfgrass growth and not encourage excessive *Poa* growth. As this weed thrives in compacted soils, aerification can aid in discouraging *Poa* growth and development.

Chemical:

Several strategies are available for chemical control of annual bluegrass. On golf greens, the most common approach is using plant growth regulators. In higher cut turf, effective control can be achieved with properly timed preemergence herbicides applied in fall, from late August to October. Due to increased levels of resistance to multiple modes of action, sound rotational practices should be implemented to reduce the risk of selecting resistant

populations. Echelon Herbicide applied at 36 fl oz/A is an excellent option for both preemergence annual bluegrass control and resistance management. It is important to incorporate Echelon with light irrigation to achieve the most effective control. Echelon will also help clean up and prevent any remaining sedge or kyllinga plants and provide effective winter annual broadleaf weed control on select weeds.

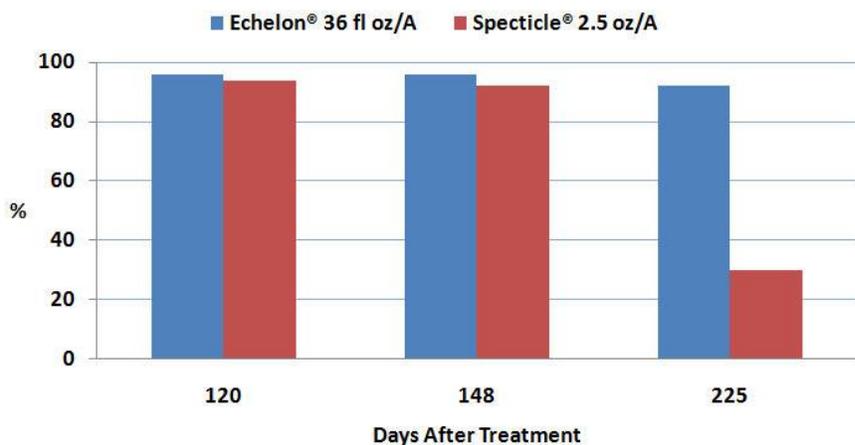
References

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Preemergence Annual Bluegrass Control



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Treatments applied on 9/24/12