

Stinkgrass (*Eragrostis cilianensis*) – 2019 Weed of the Year

Stinkgrass, also called lovegrass, has been found for many years in North Dakota with little consequence. It is a warm season annual that is observed to emerge in late June and into July. Stinkgrass does well in dry conditions and can establish in the crushed gravel of roadsides and field approaches. This has allowed the increase of seed at field borders and a conduit for geographic distribution. In recent years, stinkgrass has been observed more often in cultivated fields and areas with more competitive plant environments. Since it's now more prevalent in fields, questions about stinkgrass and control options have been increasing.

The stinkgrass name is because of the pungent odor emitted when the leaves are brushed or crushed. The leaf blade margins and stem have tiny wart-like glands. The plant seldom grows taller than 18 inches. Leaves are flat and the ligule is a short fringe of hairs, similar in general appearance to foxtails. A unique characteristic is a tuft of stiff hairs, 1/8 to 1/4 inch in length, at the leaf collar that give it a whisker-like appearance. The underside of each leaf has a row of long, sparse hairs. Stinkgrass has a round stem, no auricles, and no hair on the upper leaf surface. Inflorescence is a densely bunched panicle. Each spikelet has several florets, 7 to 40, stacked so each spikelet has appearance of a lance shape.



Figure 1. Stinkgrass seedling with four tillers after 3 weeks of growth in the greenhouse.

The root system is often quite shallow that leaves the plant susceptible to tillage. However, the plant is an early successor in the resulting open space if soil temperatures are warm. In cropland, stinkgrass seldom emerges early enough for tillage to be a viable option, so control with herbicides are necessary. Some pre-emergence herbicides such as Prowl or Treflan claim control of stinkgrass; however, inconsistent field populations limit investigations. Canadian research has shown good control with Dual, Prowl, Outlook, and Accent. Information below was generated in the greenhouse by undergraduate student Kyle Ferebee. Treatments were applied to three-leaf plants.

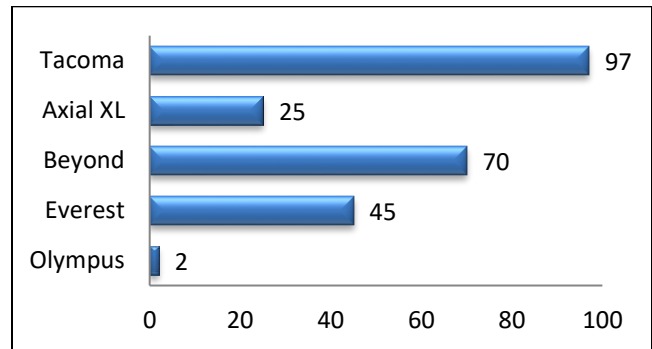


Figure 2. Control (%) of stinkgrass with selected herbicides used in wheat. Application of Beyond requires seeding a Clearfield wheat cultivar.

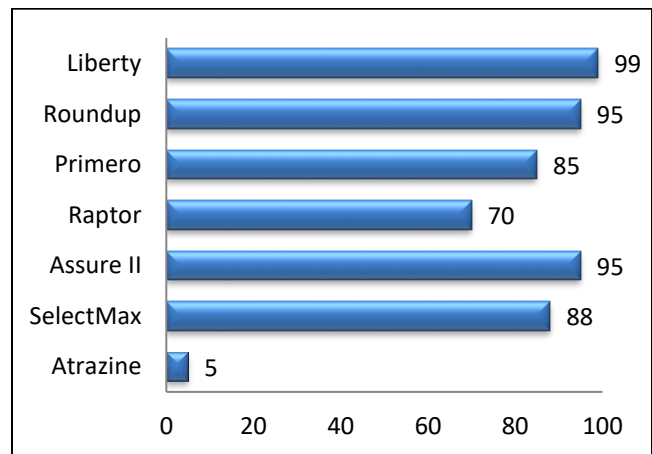


Figure 3. Control (%) of stinkgrass with selected herbicides used in corn and/or soybean.

