

## Postemergence Control of Broadleaf Signalgrass in Corn

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Broadleaf signalgrass is a competitive warm-season annual grass that frustrates a number of Kentucky's corn growers. While there are a number of soil-residual herbicides used to manage this weed, the control they provide tends to be inconsistent, especially in no-tillage. Consequently, postemergence herbicides play an important role in controlling broadleaf signalgrass in corn.

Broadleaf signalgrass looks similar to some species of crabgrass, especially during early growth stages. In order to distinguish between signalgrass and crabgrass, young seedlings need to be developed enough to where the ligule (a tongue-like structure on the inside of the collar) is visible. The ligule of broadleaf signalgrass is a small ring of hairs

compared with a large membrane-like ligule for crabgrass plants.

UK research shows that postemergence applications of Accent can provide approximately 90% control of broadleaf signalgrass. There are a number of other postemergence products capable of providing similar results, yet timing of application and rate of herbicide are important factors affecting control. The following table provides rate of postemergence broadcast herbicides and maximum height of broadleaf signalgrass. Antagonism can occur when these herbicides are tank mixed with other products. Reduced control of broadleaf signalgrass has been reported when Accent is combined with Marksman, Buctril, or 2,4-D.

Herbicide	Rate	Broadleaf Signalgrass Size
Accent	0.67 oz/A	2"
Basis Gold	14 oz/A	2"
Celebrity Plus	4.7 oz/A	2"
Equip	1.5 oz/A	2"
Liberty (LL-corn)	20 oz/A	2"
	34 oz/A	5"
Liberty ATZ (LL-corn)	32 oz/A	2"
	40 oz/A	4"
Lightning (Clearfield corn)	1.28 oz/A	8"
Option	1.5 oz/A	2"
Ready MasterATZ (RR-corn)	2 qt/A	2"
Glyphosate (3lb ae/gal) (RR-corn)	1.5 pt/A	5"
	2 pt/A	7"
Steadfast	0.75 oz/A	2"
Steadfast ATZ	14 oz/A	3"

Although the antagonism has not been consistent in all studies, it may be wise to consult product labels before using tank mix combinations for broadleaf signal grass control.

Post-directed applications of Gramoxone MAX can be an effective and economical method for controlling broadleaf signalgrass in corn. However, very few corn farmers are equipped to do this method of application.

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