

Controlling Morningglory in Corn and Soybeans

Morningglories (*Ipomoea spp.*) are difficult-to-control annual weeds commonly found in corn and soybeans. Effective management programs use a combination of preemergence and postemergence herbicide treatments and multiple herbicide modes-of-action.

Biology

Morningglories are low-climbing summer annual, broadleaf vines which can climb up crop plants for support. Depending upon light, nutrient and water availability, morningglories can have a significant impact on crop yields. Morningglories can also reduce crop quality and even small populations can impact harvest efficiency. Morningglories have the capability to grow and reproduce easily on the soil surface. There are numerous species of morningglories, including, tall, pitted, and ivyleaf, that can compete significantly with soybean and corn yields.

Management

Morningglories can be difficult to control in corn and soybeans. Morningglories that emerge prior to corn and soybean planting should be controlled with preplant burndown herbicide treatments or tillage. Herbicide treatments are most effective when morningglory plants are small. Roundup PowerMAX® herbicide at 32 ounces per acre should be used to control morningglory species up to 6 inches in height. Tank mixing with 2,4-D at 0.5 pound per acre at preplant will help to provide more effective control. Yields can be reduced if morningglories are allowed to emerge with the crop.

Preemergence herbicides effective for the control of morningglories should also be used to reduce competition with the crops. This can also help provide more flexibility in the timing of postemergence herbicides if necessary in-crop. Preemergence and postemergence herbicides should be used to provide morningglory control throughout the growing season and to minimize additions to the soil seedbank.

Follow the recommendations provided to effectively manage morningglories in corn and soybeans.



Morningglory plant in early growth stage.

Burndown application rates of Roundup PowerMAX® to use for the control of morningglory species.

Weed Size (inches)	Rate per Acre* (fluid ounces)
3	22
<6	32

Tank mix with 0.5 lb ai/A 2,4-D or 0.25 lb ai/A dicamba for better control .

* water volumes from 15 to 40 GPA.

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Roundup Ready® Corn 2*

- ⇒ Start clean with a burndown herbicide or tillage. Tank mixing Roundup PowerMAX® with 2,4-D or dicamba can help provide more effective burndown control.
- ⇒ Apply a preemergence residual herbicide containing atrazine such as Harness® Xtra, Degree Xtra®, or other residual herbicide at the recommended rate.
- ⇒ Or apply a preemergence residual herbicide containing atrazine at the recommended rate tank mixed with Roundup WeatherMAX® at a minimum of 22 oz/A in-crop before morningglory exceeds 4 inches in height and before corn exceeds 11 inches in height.
- ⇒ If needed, follow with a postemergence in-crop application of Roundup WeatherMAX at a minimum of 22 oz/A to control additional flushes of morningglory species before they exceed 3 inches in height.
- ⇒ Tank mix other herbicides such as 2,4-D, dicamba-based products to improve control of morningglory species.

* Includes corn with Roundup Ready® 2 Technology

Roundup Ready® and Genuity® Roundup Ready 2 Yield® Soybeans

- ⇒ Start clean with a burndown herbicide or tillage. Tank mix Roundup PowerMAX® with 2,4-D to help control morningglory species prior to planting.
- ⇒ Apply a residual herbicide such as Valor®, Gangster®, FirstRate®, Authority®, or Boundary® to provide preemergence control of morningglory species.
- ⇒ In-crop, apply Roundup WeatherMAX® at a minimum of 22 oz/A before morningglory species are more than 3 inches tall.
- ⇒ Roundup WeatherMAX can be tank mixed with other herbicides such as Flexstar® or Cobra®

Minimize the Risk of Weed Resistance

- ⇒ Start clean and control weeds early.
- ⇒ Use Roundup Ready® technology as your foundation.
- ⇒ Add other herbicides and cultural practices where appropriate as part of the Roundup Ready System.
- ⇒ Use the right rate at the right time.
- ⇒ Control weeds throughout the season and reduce the weed seed bank.

Recommendations for managing morningglory species in corn and soybeans. Always consult the product label for information on rates, additive recommendations, crop precautions, and appropriate tank mix partners.

Source: Webster, T.M. 2001. *Weed Survey - Southern States Broadleaf Crops Subsection. Proceedings Southern Weed Science Society. 54:244-260.*

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Individual results may vary, and performance may vary from location to location and from year to year. This result may not be an indicator of results you may obtain as local growing, soil and weather conditions may vary. Growers should evaluate data from multiple locations and years whenever possible.

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