



COTTON APPLICATION SNAPSHOT

Detecting broadleaf and grass weeds in cotton crops using the Bilberry smart spraying system.

BASIC INFORMATION

Spray What You Can See

When using any Bilberry smart spraying application, the cameras must see the weeds in order to detect and spray them. Keep in mind the effects of high stubble loads, crop shading and the crop canopy when using the system.

Target Weeds

This application is training to detest the following weeds as well as any weed with similar characteristics (shape, size and colour):

Broadleaf in Cotton

- Ashtma Plant
- Sicklepod
- Common Purslane
- Amaranthus
- Horseweed
- Fleabane
- Wild Radish
- White Goosefoot

- Blackjack
- Common Sow Thistle
- Morning Glory
- Rattlebox
- Benghal Dayflower
- + More

Grass in Cotton

- Nut Grass
- Volunteer Cereals and Sorghum
- Ray Grass
- Sour Grass
- Crab Grass

- Rye Grass
- Goose Grass
- Shatter Cane
- Love Grass
- + More

All Weeds in Cotton

All of the above weeds plus more



Best Light Time

Ideal spraying time starts one hour after sunrise and ends one hour before sunset, when natural light is the strongest.



Note: This is not a complete list of detectable weeds. All grass and broadleaf weeds are potentially detectable.

KEY BENEFITS

Significant Savings

Average chemical savings for Bilberry users is about 80% but has been proven to be as high as 98% in some use cases. The fewer weeds there are in a field, the higher the savings will be.



Herbicide Resistance Management

Increasing herbicide resistance in weeds is a big issue for farms today. Utilising the Bilberry smart spraying system allows users to apply robust rates of herbicides to maximise weed control and reduce the risk of further herbicide resistance, all while increasing the profitability of the farming enterprise.

Agronomic Data

Understand your weed pressure levels and overall savings per session using weed maps produced based on in-field detections.

RECOMMENDATIONS

Crop Stage

The most appropriate crop stage for use of the broadleaf in cereal application is whenever the visibility of the target weeds is highest.

Typically this is early, before crop canopy closure, and then again later in the growing cycle once the target weeds have grown up above the crop canopy.

Weed Size

It is recommended that this application is used on weeds with a diameter of at least 5 cm.

If you can stand in the crop and see the weed with your eyes, the camera can see it t

Smaller weeds are also detectable, even at cotyledon stage, but these weeds are often hidden by external elements such as the crop or stubble.

Detected weeds are shown here highlighted • in red and blue.





