



# CHICKPEA APPLICATION SNAPSHOT

Detecting broadleaf and grass weeds in chickpea 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 trained to detect the following weeds as well as any weed with similar characteristics (shape, size and colour):

#### Broadleaf in Chickpea

- Wild radish
- Volunteer canola
- Capeweed
- Double gees
- Lupin
- Beans
- Mallows
- Clover
- Thistle
- + More

#### Grass in Chickpea

- Volunteer cereals
- Brome grass
- Rye grass
- Wild oats
- Digitaria
- Goosegrass
- Cyperus
- Sorghum
- Setaria

#### All Weeds in Chickpea

- All of the listed weeds plus more

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

**20** km/h  
optimal spraying speed

### Best Light Time

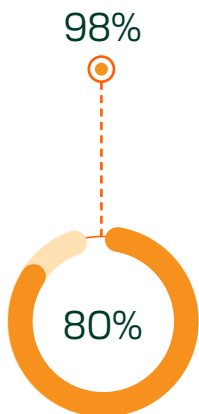
Ideal spraying time starts one hour after sunrise and ends one hour before sunset, when natural light is the strongest.



# 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 lentil applications is when 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

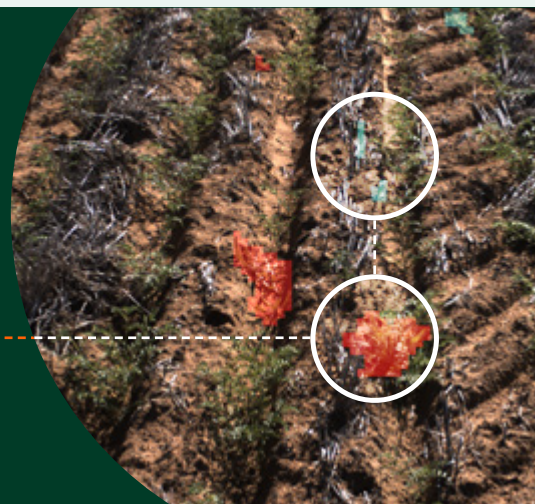
It is recommended that these applications are used on weeds with a diameter of at least 5 cm.

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

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

Get the most out of your Bilberry system  
**Additional reading [here.](#)**

Detected weeds are shown here (broadleaf in red and grass in blue) 



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