



**PTx**  
Trimble



**bilberry**

# GREEN ON BROWN DAY APPLICATION BOOKLET





# INTRODUCTION

Green on Brown (GoB) spot spraying technology has been around for many decades with the use of chlorophyll sensors. These sensors detect living plants in bare or stubble fields, spraying only where needed to reduce herbicide usage. Bilberry's solution takes spot spraying to the next level by utilising the advancements in Artificial Intelligence (AI) to identify weeds in bare or stubble fields with high accuracy and efficiency.

Bilberry's **GoB Day** application allows users to spray herbicide in the right place at the right time in the right quantity. Utilising the GoB Day application is a smart move toward reducing the herbicide costs and improving the sustainability of users farms.

This booklet will set out best practice guidelines to ensure users maximise the benefits of the camera system and overall integrated weed management strategies on farm. Included our use cases and testimonials from a range of users, highlighting different approaches to obtain the same goal: sustainably optimising weed control at a whole farm scale.



# APPLICATION GUIDELINES

## Which weeds?

All weeds with a diameter > 5 cm, including:

- **Broadleaf weeds** (melons, roly poly, tar vine, fleabane, skeleton weed, thistle, etc.)
- **Grasses** (windmill, feathertop rhodes, button, etc.)
- **Others:** any weeds or volunteer crops that show green plant matter are detectable.



Detected weeds are shown above by the red outline.

## Best timing?

Our cameras need to be able to see the weeds to spray them, therefore, the lower the stubble height, the better the results will be. Research has shown that 30 cm high stubbles are a suitable size without reduction in hit rate. The GoB day application works in all types of stubble: cereals, canola, corn, legumes etc.



## Application Guidelines

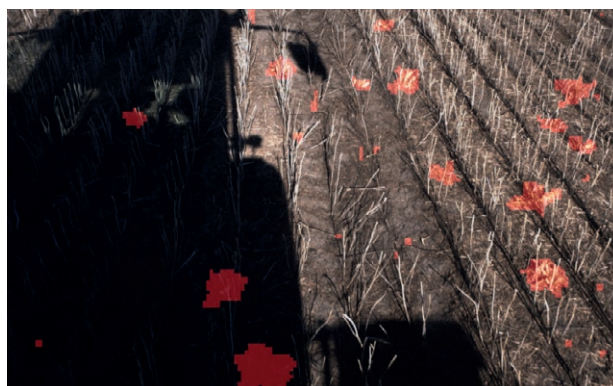


In high stubble situations (> 50 cm), weeds are more likely to be concealed and therefore, not seen by the camera.



After harvest, slight green color of canola stubbles will be considered as a weed by the GoB Day application.

**Areas shaded by the sprayer do not impact the performance of the GoB Day application.**





# SYSTEM BASICS AND BENEFITS

## Spray What You Can See

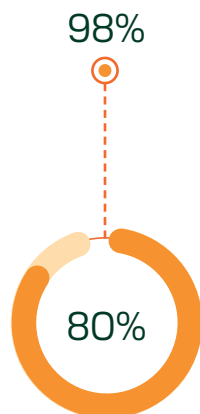
Cameras can be affected by high stubble loads, crop shading, and canopy closure. If they cannot see the weeds in question, they cannot spray them—it's as simple as that.

“If you can see the weed with your eyes, the camera will see it.”

– Broden Holland, Bilberry User

## Get Significant Chemical Savings

Average chemical savings are around 80% and can go up to 98% depending on the weed infestation in your paddock and the section size.



**25** km/h  
maximum spraying speed



## Best Light Time

Ideal spot spraying time begins 30 mins after sunrise and ends 30 mins before sunset. This time frame is when natural light is the strongest.

There are many other benefits for your farm.  
**Check them out [here](#).**

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## APPLICATION IN ACTION





## THANK YOU

Get in contact with us if you have any queries relating to your Bilberry system. We have a dedicated support team available to offer you assistance when you need it.

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#### Disclaimer

The content and data presented in this document is correct at time of writing and contains some anecdotal information which may not align with the results you experience on your farm. If you are experiencing varied performance with your Bilberry system please bring it to the attention of your local sprayer representative or Bilberry support team member.