

# Application Booklet Green on Green



## Blue Lupin in Lupins

April 2023

Version 1

<https://bilberry.io>

Any questions? [hello@bilberry.io](mailto:hello@bilberry.io)

# Introduction

*Blue lupin is a widely known weed species in the Northern Wheatbelt, WA. Herbicide options are very limited to non-existent for use in narrow-leaf lupin, which is a major leading factor in the reduction of the area cropped to narrow-leaf lupins in recent years.*

*Bilberry's **Blue Lupin in Lupin** application is the first real tool for blue lupin control, whether it is in the short term with avoiding grain contamination, or in the long term by reducing the weed seed bank as part of an integrated weed management plan.*

*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 are 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.*





# Table of Contents

1. Application Guidelines
2. System Basics and Benefits
3. Use Case: Andrew & Rod Messina
4. Application in Action

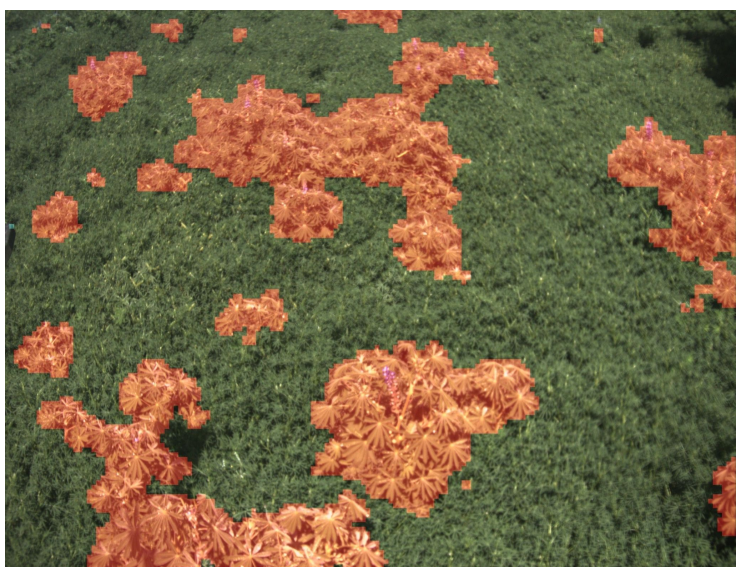




# 1. Application Guidelines

## Which weeds does it detect?

The application is able to pick up the blue lupins when the leaves are visually different from the crop. For best results, we recommend to target the weeds from 4-5 leaf stage onwards when their oldest leaves are wide, open and visual. To maximize the detection, the application is also able to detect the blue lupin flowers in addition of the leaves.

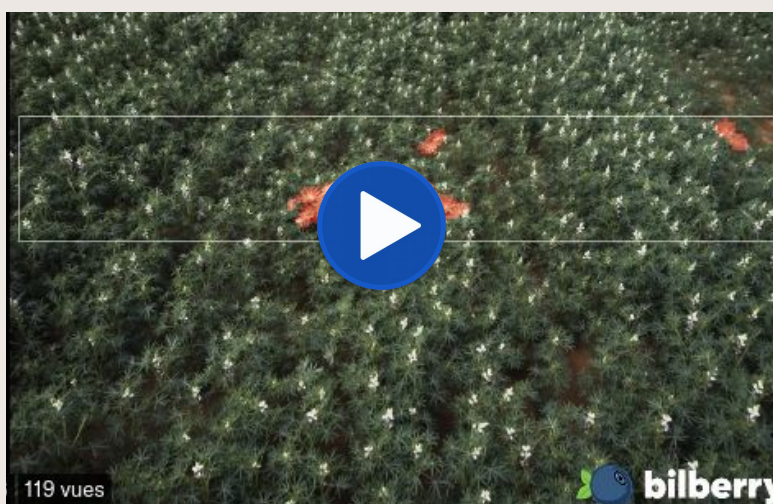


## What is the best timing?

For best results, we recommend a late spray timing, once crop flowering has ended (growth stage 3.8).

At this stage, blue lupins are large, positioned above the canopy and majority in full bloom. This combination offers the best chance for optimal blue lupin control.

## What Does Our Application See?



## 2. System Basics and Benefits

### Spray What You Can See

*"If you can see the weed with your eyes, the camera will see it." - Broden Holland*

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.



**20**km/h  
recommended  
spraying speed

### 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.

### Best Light Time

Ideal spraying timing starts 2h after sunrise and stops 2h before sunset, when the natural light is the strongest.

➔ **and many other benefits for your farm**  
check them out [here](#)



### 3. Use Case - Andrew and Rod Messina



#### Farming Snapshot:

- **Location:** Mullewa, Western Australia
- **Area:** Over 12,000 hectares of dryland cropping
- **Crops:** Wheat, Canola and Lupins
- **Soil:** sandplain soil type
- **Rainfall:** 250-350mm annual rainfall
- **Machine:** Agrifac Condor Endurance 2

In 2022, the application was used on over 240 hectares in a narrow-leaf lupin, with a weed infestation of blue lupins that was graded medium or average.

Spot Spraying Efficiency Tests (SSET) showed results of blue lupin control at 91% after that late application.



## 4. Application in Action



### Want to see more?

Follow us on social media



### 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.