



**Irrigation Research &
Extension Committee**



Department of
Primary Industries

**Wine
Australia**

Weeds in Vineyards

**YENDA PRODUCERS
CO-OPERATIVE**
"Your Partners in Farming"®

AG *n* VET®
Services



Riverina
**WINEGRAPE
GROWERS**



**Irrigation Research &
Extension Committee**

**Wine
Australia**

AGnVET- Amanda Fielder & Matt Hockings

NSWDPI- Katie Dunn

Nutrien – Jason Cappello

Riverina Winegrape Growers- Brian Bortolin

Yenda Producers Co-operative- Geoff Bray

**YENDA PRODUCERS
CO-OPERATIVE**
"Your Partners in Farming"®

AG *n* VET®
Services

Nutrien™
Feeding the Future™



- Single vineyard with high pressure fleabane, patches silverleaf nightshade and mixed grass weed species
- Chardonnay on sand and Shiraz on clay blocks
- Treatments Applied from August till Early November
 1. Mid August Glyphosate then nil treatments (control) Approx. \$15 sprayed hectare
 2. Mid August Glufosinate plus Rifle 440 & Chateau then 1 x glufosinate 200 plus hammer 400. Approx. \$240 sprayed hectare
 3. Mid August Glyphosate then 1 x Paraquat plus hammer 400 mostly targeted for sucker and weed control then 1 x Glufosinate 200 plus hammer 400. Approx \$140 sprayed hectare
 4. Mid August Glyphosate then 2 x Glufosinate with hammer 400. Approx. \$120/ha

- Early weed development was limited following July knockdown and clean up
- Spring weed development occurred following rain and irrigation which paraquat on this property did not suppress adequately
- Best results for this property was the use pre-emergant herbicide treatment in August post pruning then follow up with glufosinate plus hammer 400 to control any escape weeds

Chardonnay pre em followed by 1
glufosinate in crop



Chardonnay pre em followed by 1
paraquat in crop



Herbicide Program:

17/08/2020: Pre Em:
Chateau @ 700g/Ha (300L/Ha Water)

12/10/2020: Knockdown:
Glufosinate (Fiestar 200) @ 3.0L/Ha (300L/Ha water)
Glyphosate (Gladiator CT) @ 3.0L/Ha (300L/Ha water)
7.00am: 20.4°C – 62% RH – 10.00am: 27.1°C – 41% RH

6/01/2021: Knockdown:
Sprayseed (Paraquat/Diquat) @ 3.0L/Ha (300L/Ha water)
6.30am: 19.5°C – 64% RH

1st Knockdown

Glufosinate 200 (Dec 2020 – 65 DAA)



Glyphosate 450 (Dec 2020 – 65 DAA)



2nd **Knockdown**

Paraquat/Diquat 200 (Jan 2021 – 12 DAA)



TRIAL SITE DETAILS



YINEYARD LOCATION- Yenda NSW

WINEGRAPE VARIETY- Chardonnay & Sauvignon Blanc

TARGET WEED - Silverleaf Nightshade (*Solanum elaeagnifolium*)

TRIAL OUTLINE

Control –Standard Vineyard Practice -Basta, Hammer & SOA

Treatment 1 –Spray-Seed with BS1000 Adjuvent

Treatment 2 –Double Knock Spray-Seed & Spray-Seed

TRIAL DESIGN

Limited registered herbicide options in vineyards

Silverleaf Nightshade becoming more of a horticultural issue in Griffith & in Leeton in the past couple of years

Double knock idea based on Syngenta trial work in NZ using Paraquat to control Annual Ryegrass

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**5 DAYS
POST
BASTA**







**54 DAYS
POST BASTA**

SITE 2



TRIAL TO BE CONTINUED...

KEY MESSAGES:

“EXHAUST THE ROOTS”

**WEED CONTROL PROGRAM/
PLAN YOUR HERBICIDE SPRAYS/
KEY TIMINGS**

LIMIT SEED SET

LIMIT CULTIVATION

**LIMITED RESOURCES & CHEMICALS AVAILABLE – USE
THEM WISELY!**

8/08/21(8am/4pm). Chateau @ 700gm/Ha & water@ 400Lt/Ha.
Temp @ 9am; 9° & 96% RH. *Photo taken 13/11/21*



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20/10/20 Glufos @ 5L/Ha & Spotlight @ 100mL/Ha & water @ 400Lt/Ha. Temp @ 9am; 15° & 63% RH



Last sprayed on 9/12/20 with Glufos 5L/Ha & water@400Lt/Ha

Temp; @ 9am 18° & 41% RN

Right side last sprayed on 20/10/21. *Photo taken 18/01/21*



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