

# NEW OPTIONS FOR MANAGING SFNB IN BARLEY

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**GRDC**  
GRAINS RESEARCH  
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# BACKGROUND SPOT FORM NET BLOTCH



- Confirmed resistance to DMI's confirmed in key barley diseases – spot & net form net blotch powdery mildew
- 2016 & 2017 – populations in Esperance & South Stirlings
- Significant yield loss impacts

Driven by;

- Overuse of single MOA fungicides
- Stubble retention & susceptible varieties
- Green bridge
- Tight rotations

# FUNGICIDE TREATMENTS

- Five fungicide products applied at two timings across two sites -

TRT	Application Timing – GS32	Application timing – GS39
1	UNTREATED	UNTREATED
2	BUMPER 625 150ml	
3	BUMPER 625 150ml	RADIAL 420ml
4		RADIAL 420ml
5		PROSARO 250ml
6	BUMPER 625 150mL + BIOPEST 2000mL	
7	BUMPER 625 150mL + BIOPEST 2000mL	RADIAL 420mL + BIOPEST 2000mL
8		RADIAL 420mL + BIOPEST 2000mL
9		PROSARO 250mL + BIOPEST 2000mL
10	RADIAL 420mL	BUMPER 625 150mL
11	RADIAL 420mL + BIOPEST 2000mL	BUMPER 625 150mL + BIOPEST 2000mL
12	TOPNOTCH 300mL	
13	TOPNOTCH 300mL + BIOPEST 2000mL	
14		TOPNOTCH 300mL



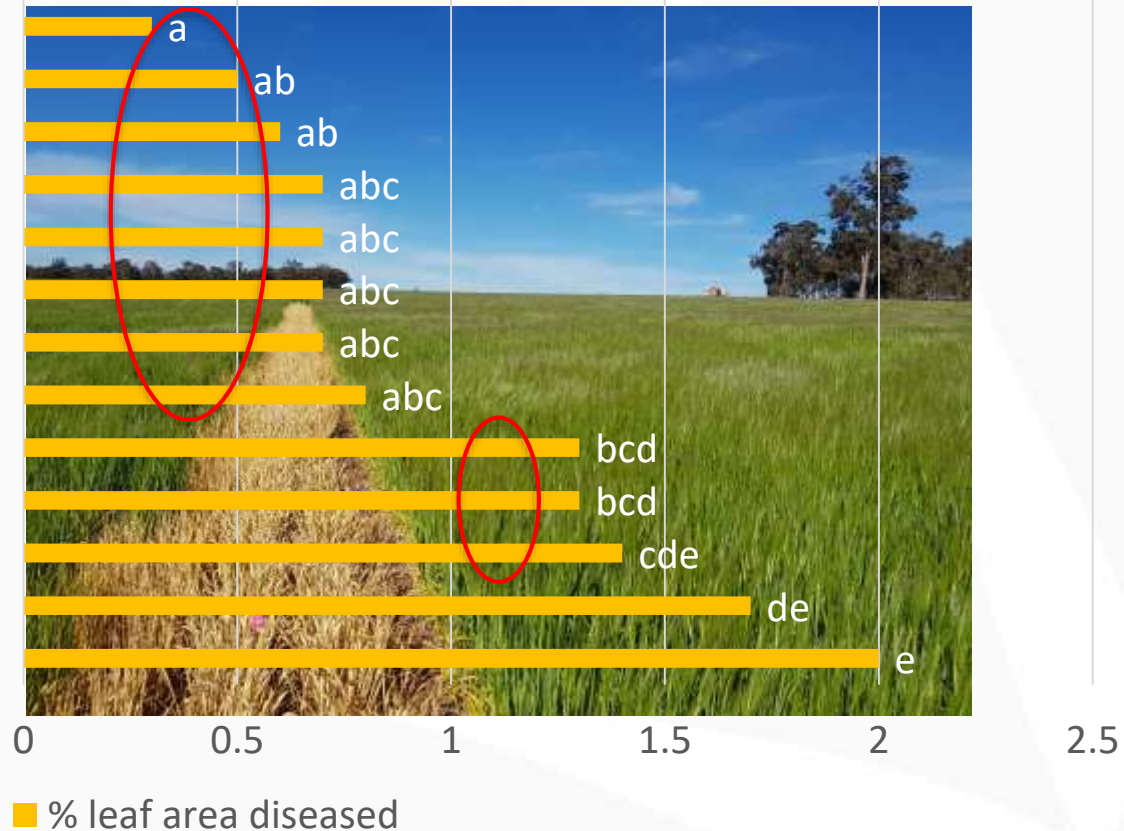
Fig 1: disease incidence at application  
Sparticus barley Kellerberrin 24.7.18



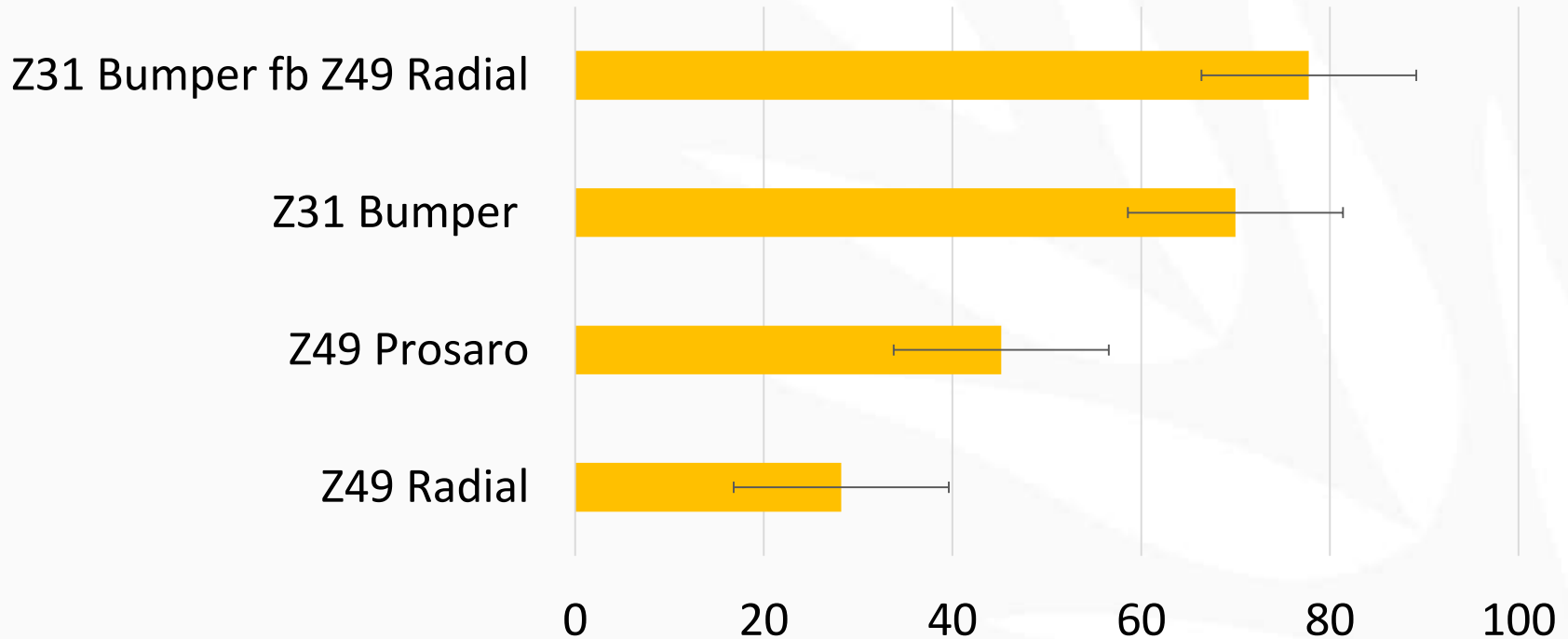
Fig 2: disease incidence at disease  
assess 1 Planet barley Frankland 21.9.18

# DISEASE RESPONSE

BUMPER + BIOPEST fb RADIAL + BIOPEST  
RADIAL fb BUMPER  
RADIAL + BIOPEST fb BUMPER + BIOPEST  
RADIAL + BIOPEST GS39  
PROSARO + BIOPEST GS39  
TOPNOTCH GS39  
TOPNOTCH GS32  
TOPNOTCH + BIOPEST GS32  
PROSARO GS39  
RADIAL GS39  
BUMPER GS32  
BUMPER + BIOPEST GS32  
UNTREATED

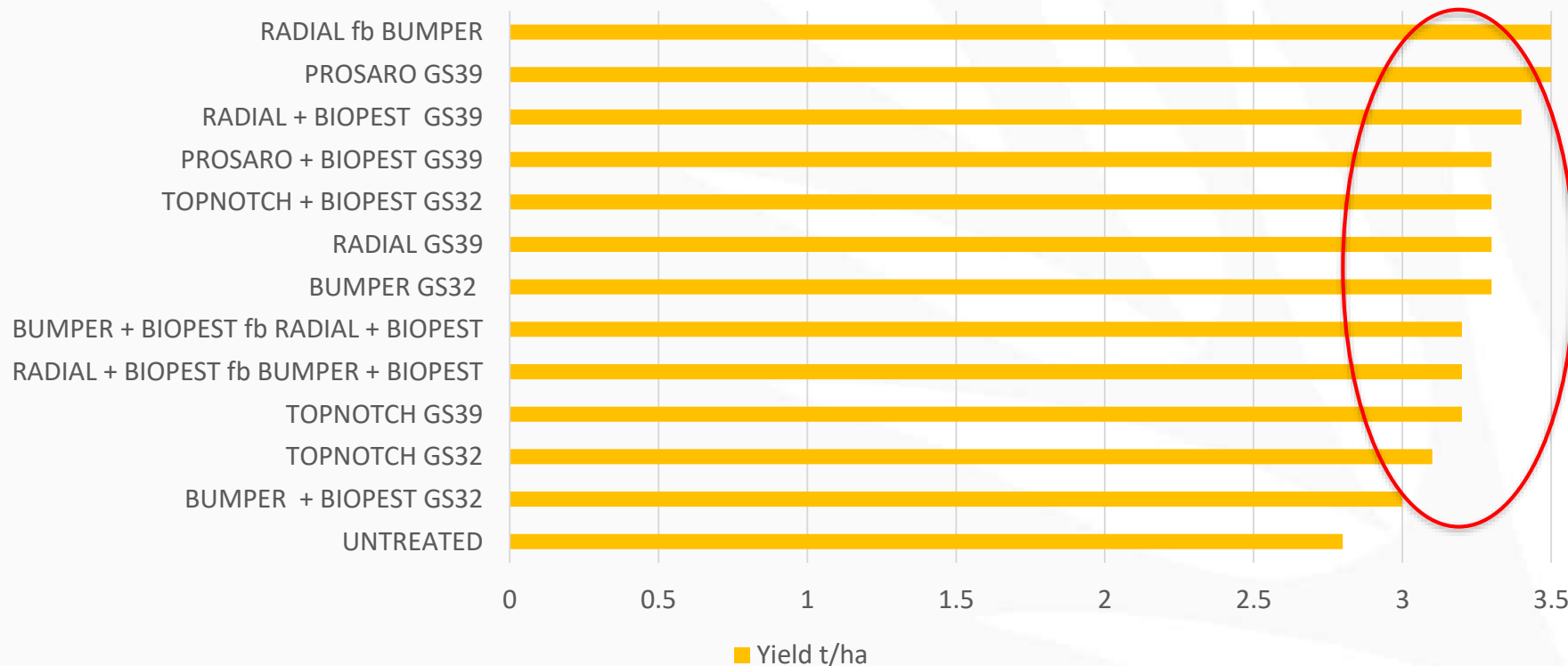


# BIOPEST GREEN LEAF AREA INCREASE



- The addition of 2.0L/Ha BIOPEST to a range of fungicides resulted in a reduction in disease incidence
- Using a two spray strategy alternating MOA groups provided the most effective disease control

# YIELD RESPONSE



Isd 0.33 t/ha – All fungicide treatments yielded significantly more than the UNTREATED, no difference between fungicides

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