

Trial 8. Fungicide Products, rates and timing interaction trial**Kerrang, Victoria****Sown:** 3 November 2020**Harvested:** 20 May 2021**Soil Type:** Neutral self-mulching grey clay**Previous crop:** Grass dominant pasture (3 years)**Hybrid:** Pioneer Hybrid P1756**FAR code:** ICC M20-04-2**Irrigation Type:** Border check irrigation**Key Messages:**

- Application of different DMI (triazoles) and QoI (strobilurins) fungicides at either 8 leaf (V8) or tasselling (VT) resulted in no yield response over the untreated crop.
- There was no observed effects of a fungicide application on green leaf retention post application.

Table 1. Grain yield (t/ha @ 14% moisture) in response to fungicide and timing of application.

Treatment (g/ha active ingredient)		Timing	
Fungicide	V8 Application	VT Application	
Nil (Control)		15.73	
DMI – Prothioconazole (Proline) (100g/ha)	16.14	15.93	
DMI – Propiconazole (Tilt) (125g/ha)	15.90	15.95	
QoI – Pyraclostrobin (Cabrio) (200g/ha)	15.96	15.16	
DMI/QoI – Prothioconazole + Pyraclostrobin	16.06	16.25	
LSD Timing p=0.05	ns	P val	0.611
LSD Fungicide p=0.05	ns	P val	0.736
LSD Timing x Fungicide P=0.05	ns	P val	0.851
CV	6		

Yield figures followed by different letters are considered to be statistically different (p=0.05)

There was no statistically significant yield response as a result of fungicide product or timing of application.

The trial was assessed for any effects or leaf damage 21 after fungicide application. No damage or leaf discolouration was noted from either fungicide timing.

Green leaf retention was assessed at 40, 60 and 75 days after tasselling (VT). To assess the greenness of the plants, the following scoring system was used:

Table 2: Green leaf assessment scoring (1 -10 scale).

Score	Plant description/appearance
10	All green
9	Yellowing lowest leaves
8	Yellow lower leaves
7	Green leaves below cob
6	Partial green leaves to cob

5	Partial green leaves above cob
4	Little green remaining, stem green below cob
3	Leaves dry, stems green to cob
2	Leaves dry, stems green above cob
1	Dry

Table 3a. Influence of fungicide product and timing on leaf greenness, 40 days after tasselling (VT).

Treatment (g/ha active ingredient)		Timing	
Fungicide		V8 Application	VT Application
Nil (Control)			9.75
DMI – Prothioconazole (Proline) (100g/ha)		9.75	9.75
DMI – Propiconazole (Tilt) (125g/ha)		9.75	10.0
QoI – Pyraclostrobin (Cabrio) (200g/ha)		9.75	10.0
DMI/QoI – Prothioconazole + Pyraclostrobin		9.75	9.75
LSD Timing p=0.05	ns	P val	0.486
LSD Fungicide p=0.05	ns	P val	0.943
LSD Timing x Fungicide P=0.05	ns	P val	0.943
CV	4.6		

Table 3b. Influence of fungicide product and timing on leaf greenness, 60 days after tasselling (VT).

Treatment (g/ha active ingredient)		Timing	
Fungicide	V8 Application	VT Application	
Nil (Control)		8.00	
DMI – Prothioconazole (Proline) (100g/ha)	7.00	7.50	
DMI – Propiconazole (Tilt) (125g/ha)	7.75	8.00	
QoI – Pyraclostrobin (Cabrio) (200g/ha)	7.00	7.00	
DMI/QoI – Prothioconazole + Pyraclostrobin	7.25	7.00	
LSD Timing p=0.05	ns	P val	0.713
LSD Fungicide p=0.05	ns	P val	0.086
LSD Timing x Fungicide P=0.05	ns	P val	0.923
CV	11.4		

Table 3c. Influence of fungicide product and timing on leaf greenness, 75 days after tasselling (VT).

Treatment (g/ha active ingredient)		Timing	
Fungicide	V8 Application	VT Application	
Nil (Control)		3.25	
DMI – Prothioconazole (Proline) (100g/ha)	3.00	2.75	
DMI – Propiconazole (Tilt) (125g/ha)	3.00	3.00	
QoI – Pyraclostrobin (Cabrio) (200g/ha)	3.75	2.50	
DMI/QoI – Prothioconazole + Pyraclostrobin	2.75	3.50	
LSD Timing	p=0.05	ns	P val
			0.501

LSD Fungicide p=0.05	ns	P val	0.852
LSD Timing x Fungicide P=0.05	ns	P val	0.103
CV	22.6		

The fungicide application timing and products appear to have little influence on retaining green leaf during grain fill.