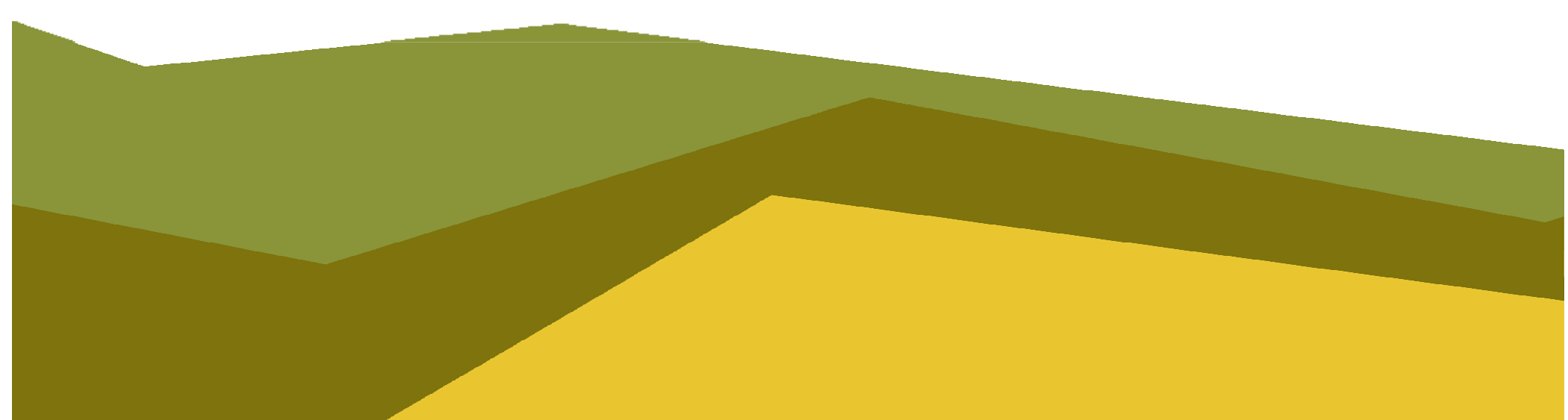
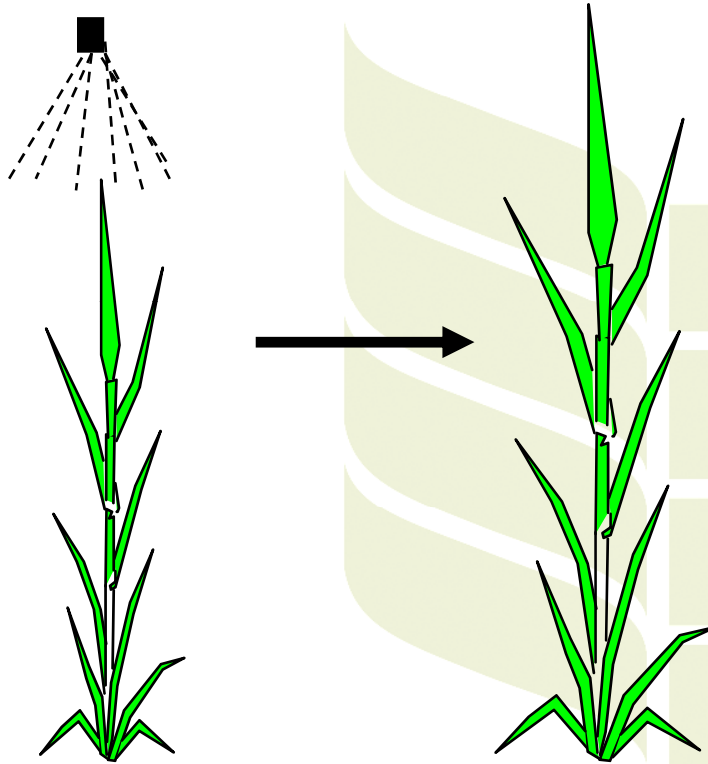

HGCA Fungicide Performance in wheat 2008 - 2009



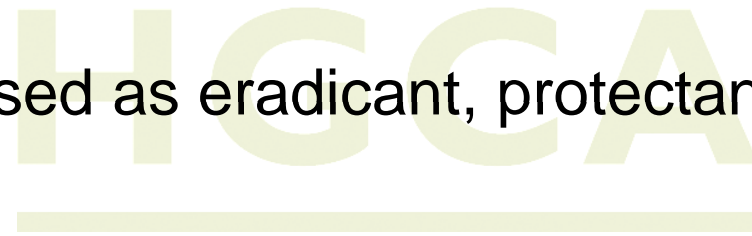
HGCA Fungicide Performance Experiments



Up to 2007, sprays were applied to leaf 2

2008 - Leaf 3 (T1)
and Leaf 1 (T2)

Each leaf categorised as eradicator, protectant or mixed.



Septoria tritici – product / a.i. list 2008



1	epoxiconazole	Opus
2	chlorothalonil	Bravo
3	prothioconazole	Proline
4	HGCA01	
5	HGCA02	
6	HGCA03	
7	epoxiconazole + prochloraz	Ennobe
8	epoxiconazole + metconazole	Brutus



New Product : Ennobe prochloraz + epoxiconazole



New mixture

- Full rate (1.8l/ha) gives:
 - 405g/ai of prochloraz (= 0.9l/ha Poraz)
 - 112.5g/ai of epoxiconazole (=0.9l/ha Opus)

1.9 units of azole in a full dose of Ennobe
(1.0 of Poraz, + 0.9 Opus)

Claimed anti-resistance / formulation benefits
(Prochloraz selects for V136A, and against A379G/I381V)

New Product: Brutus metconazole + epoxiconazole



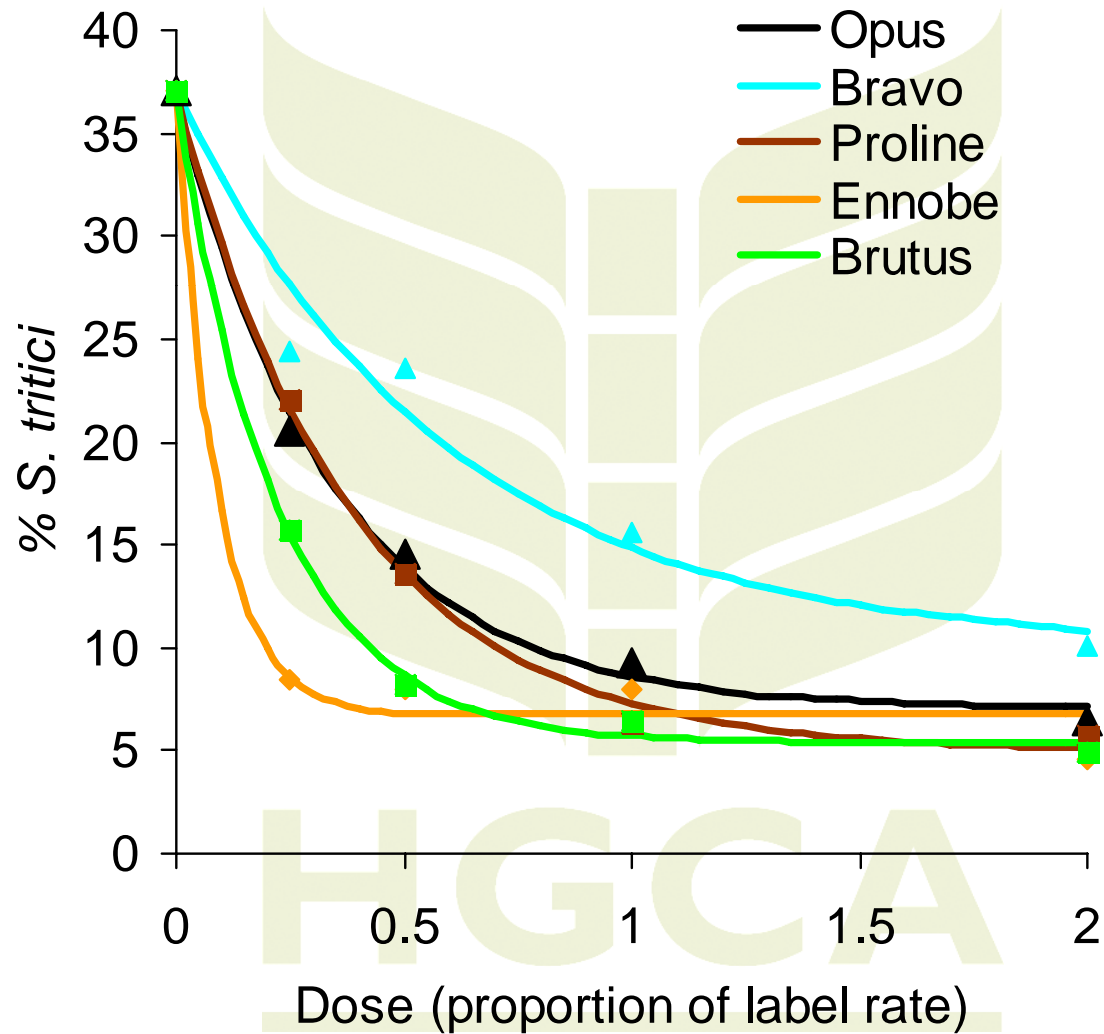
New mixture

- Full rate (3.0l/ha) gives:
 - 82.5 g/ai of metconazole (= 1.38l/ha Caramba)
 - 112.5g/ai of epoxiconazole (=0.9l/ha Opus)

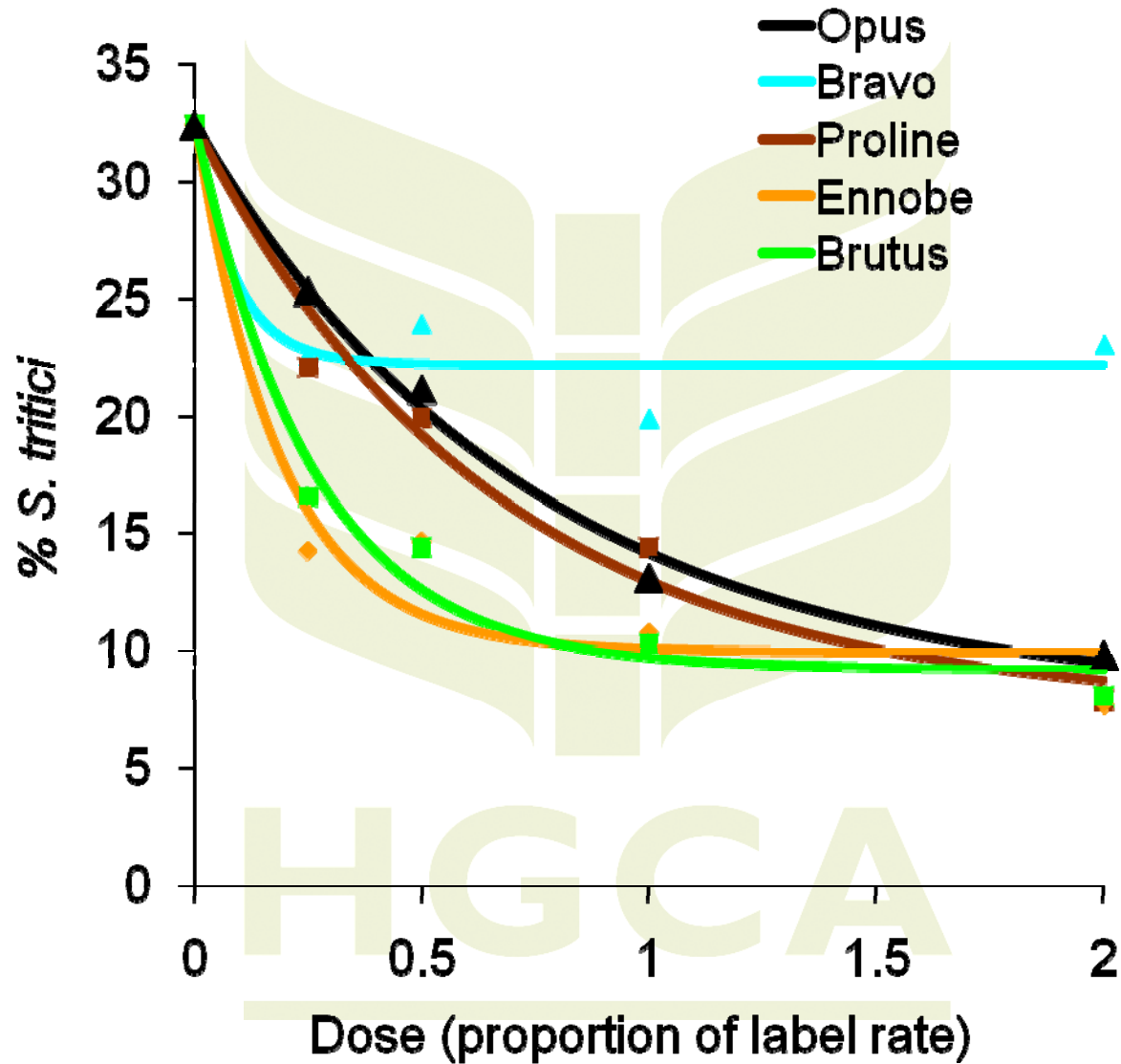
1.82 units of azole in a full dose of Brutus
(0.92 of Caramba, + 0.9 Opus)



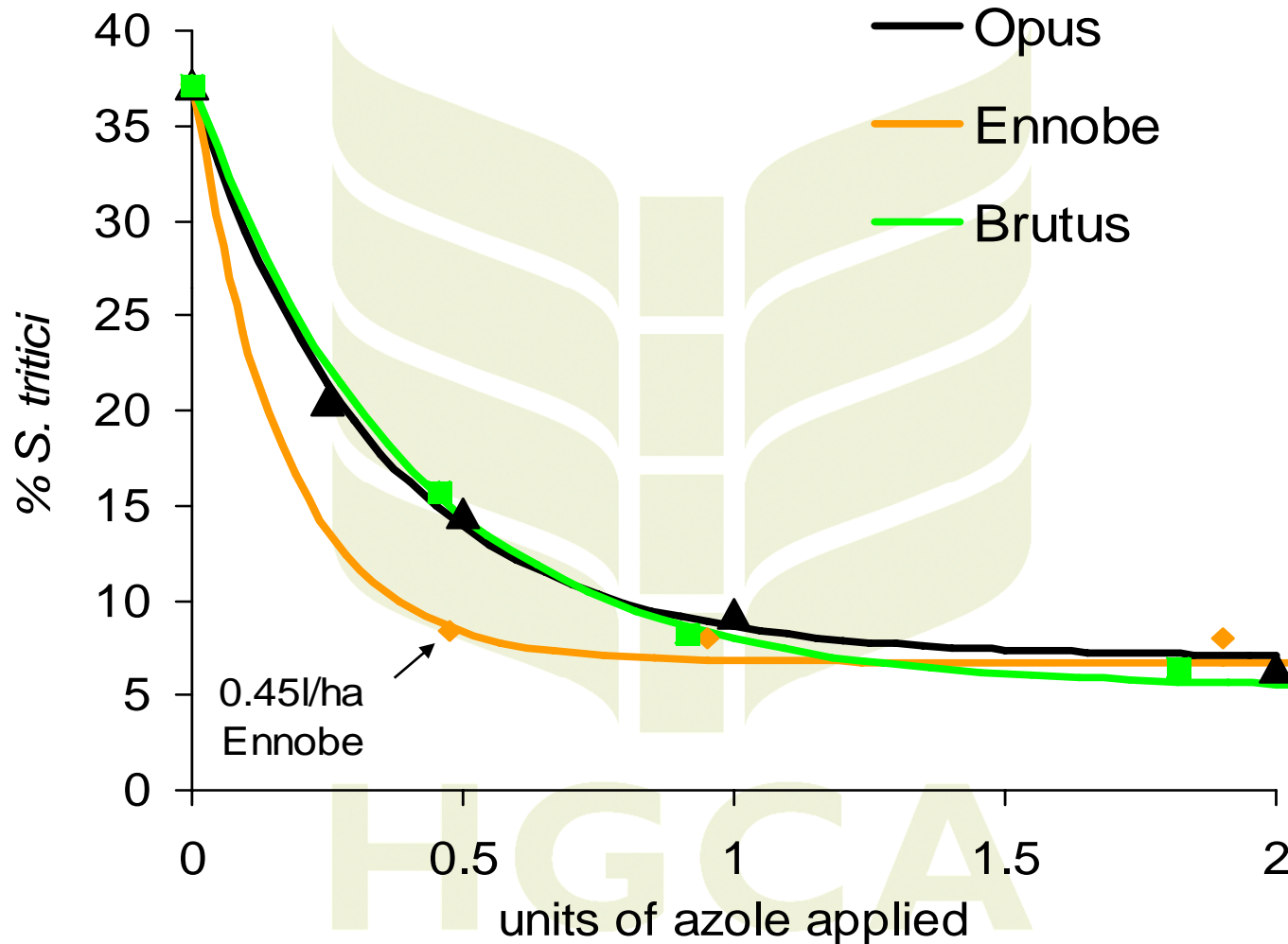
S. tritici - 2008 Protectant (all sites and timings)



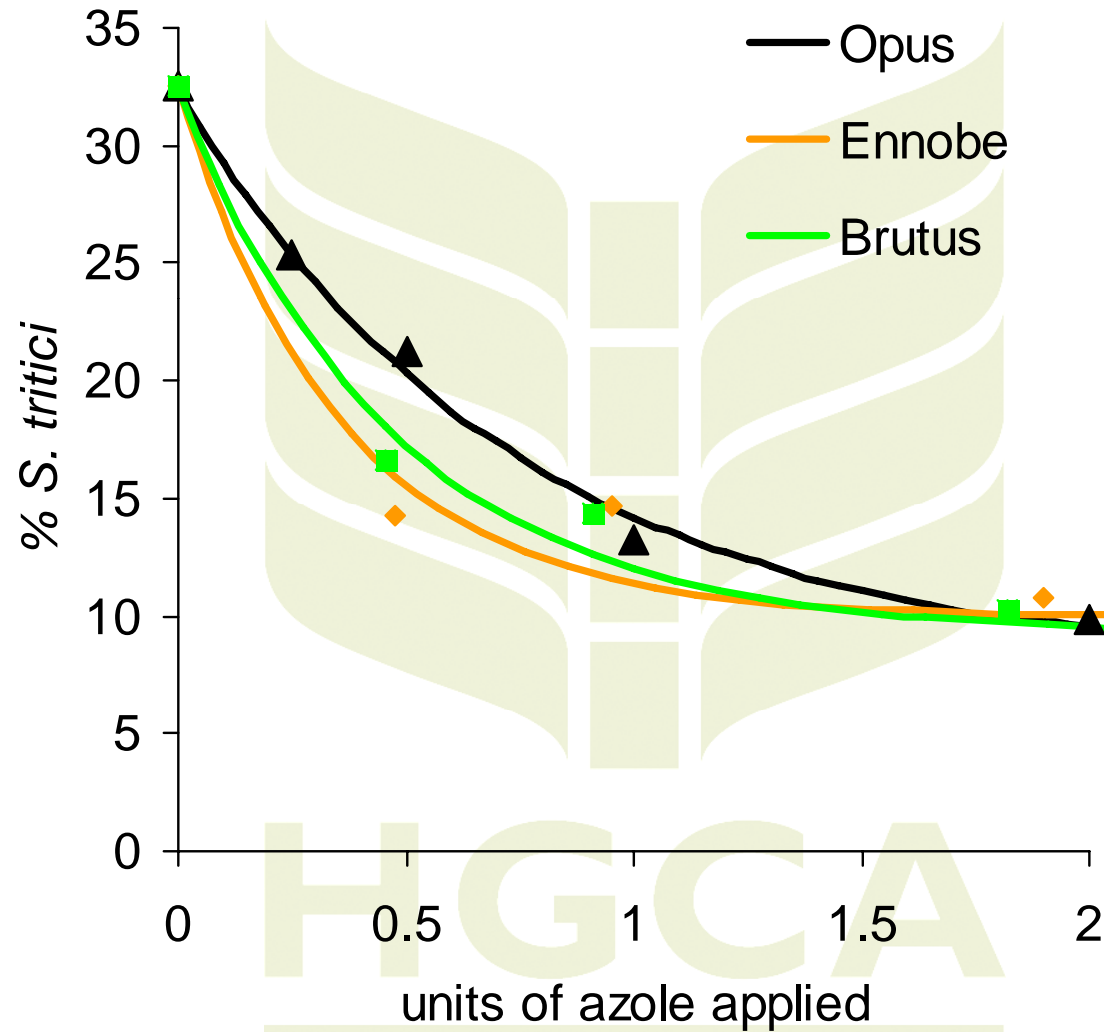
S. tritici - Eradicant 2008 (All sites and timings)



S. tritici 2008 - Matched for units of azole Protectant

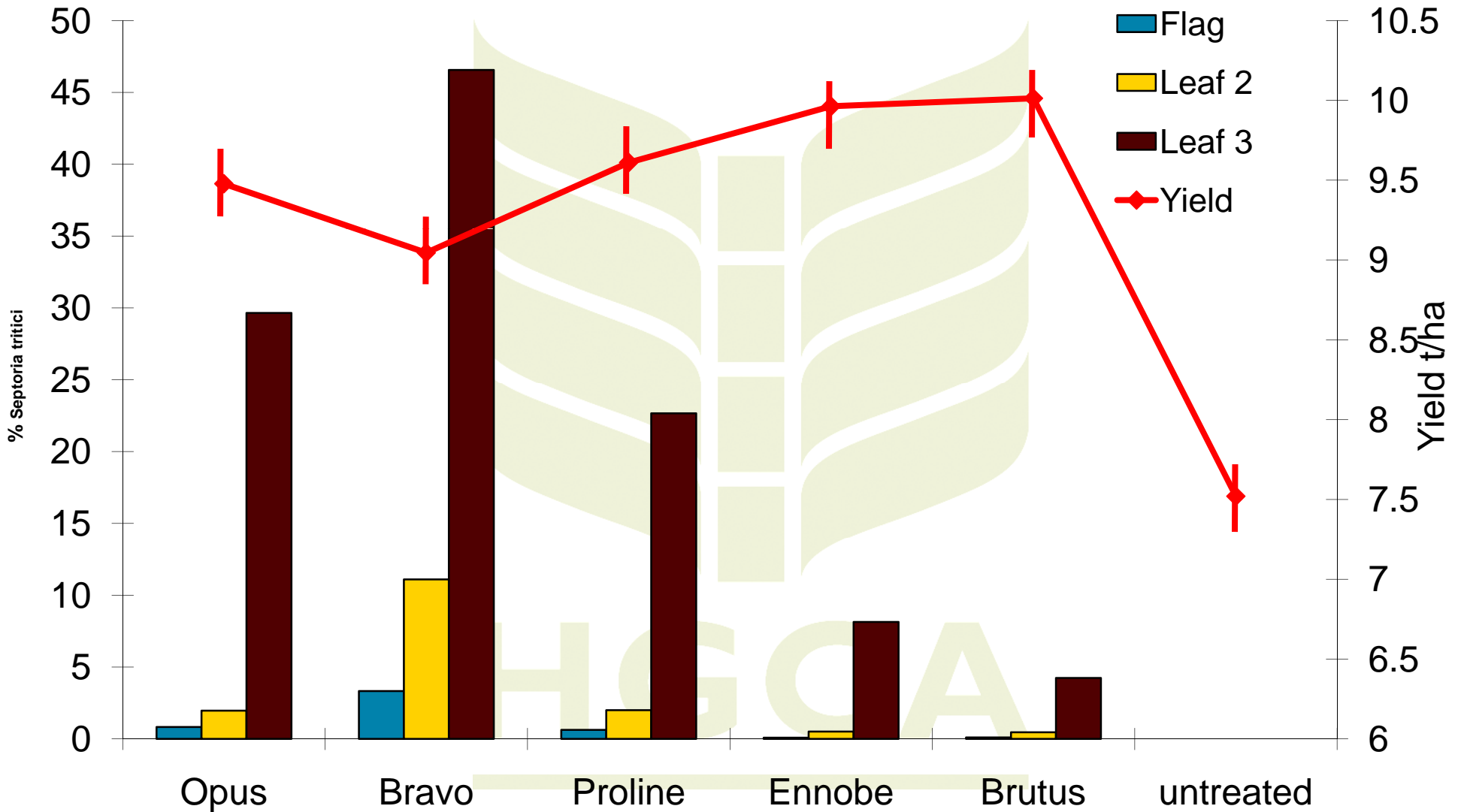


S. tritici - 2008 - Matched for units of azole Eradicant



Yield and disease - *S. tritici* sites

Half rates T1 and T2

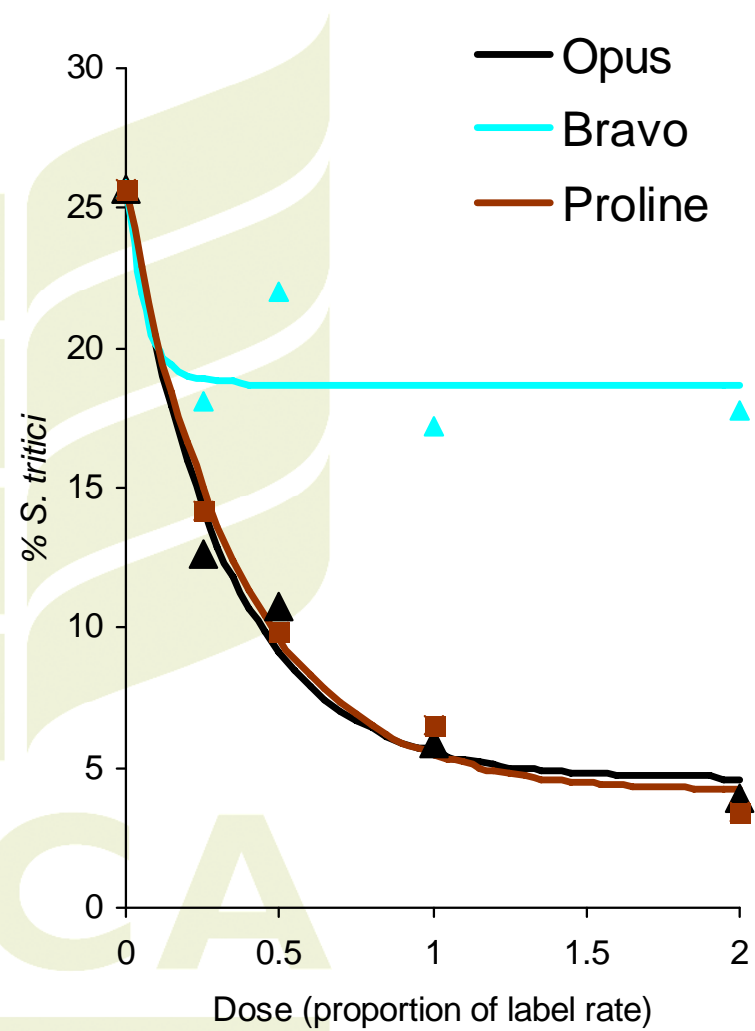
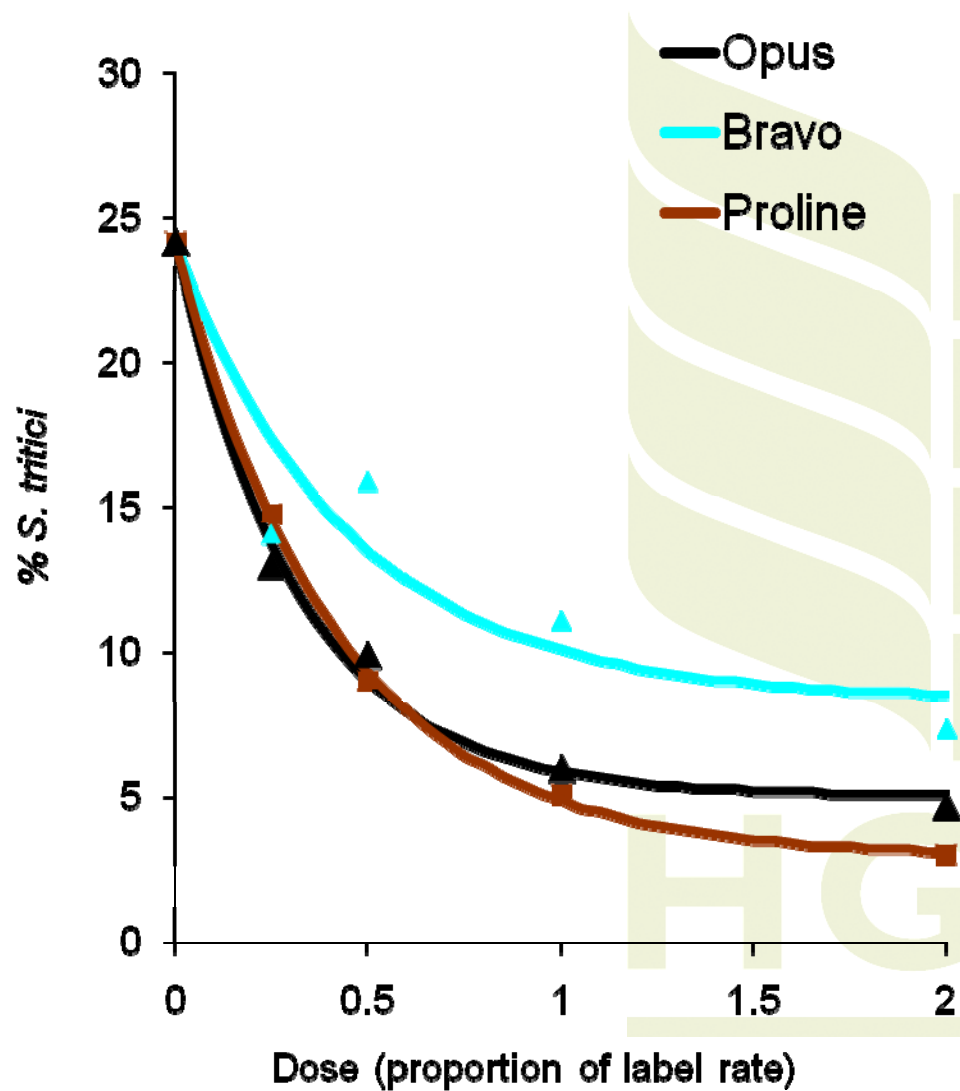


S. tritici (2006-08 mean)



protectant

eradicator

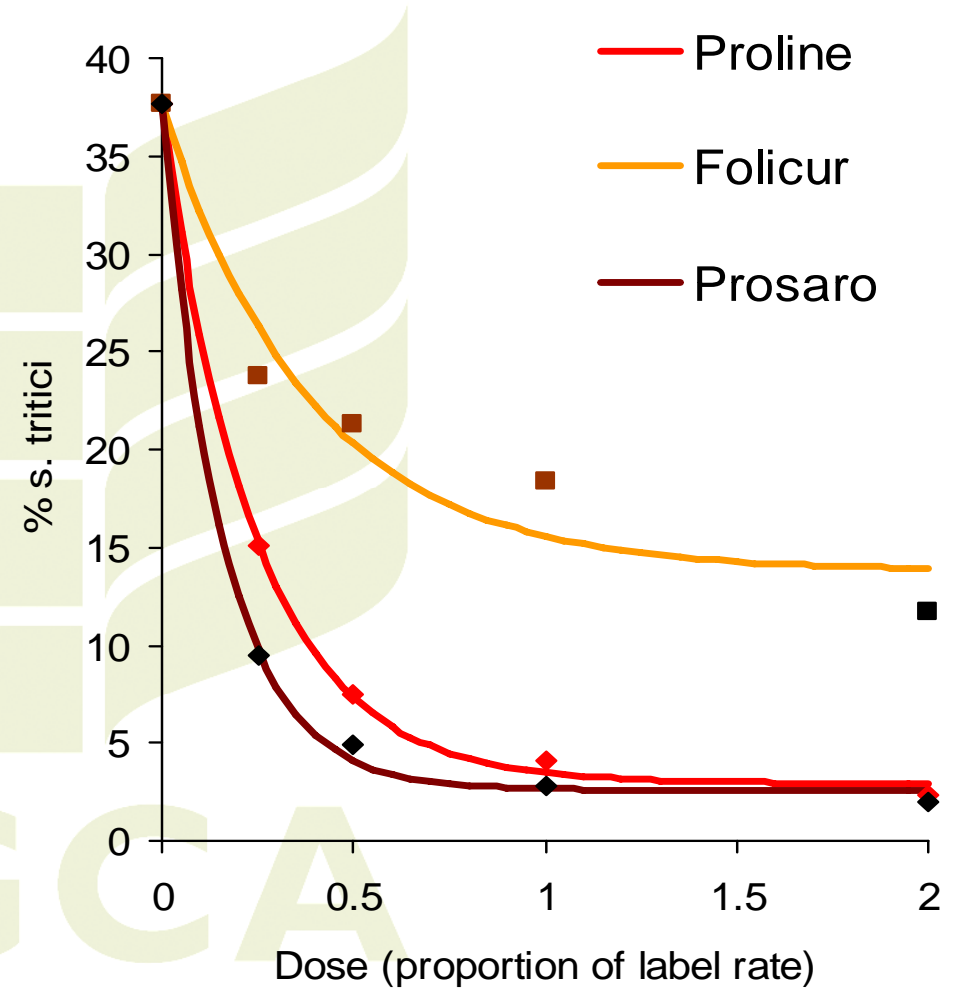
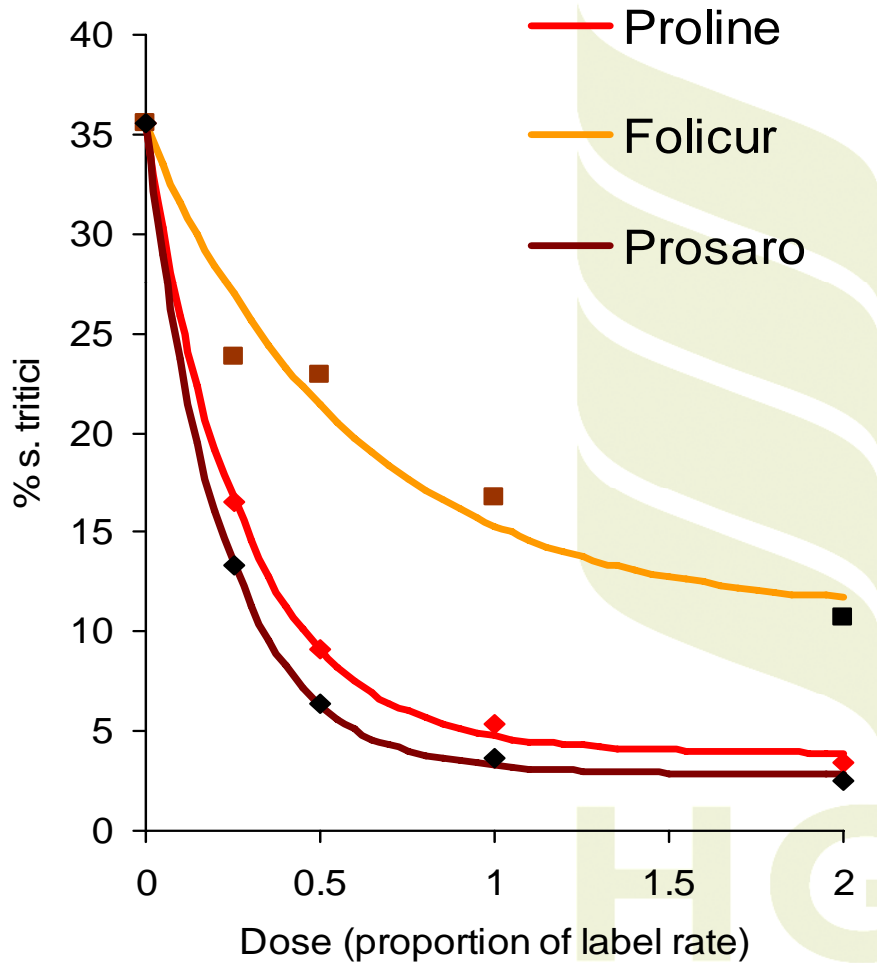


S. tritici 2004-07



eradicator

protectant



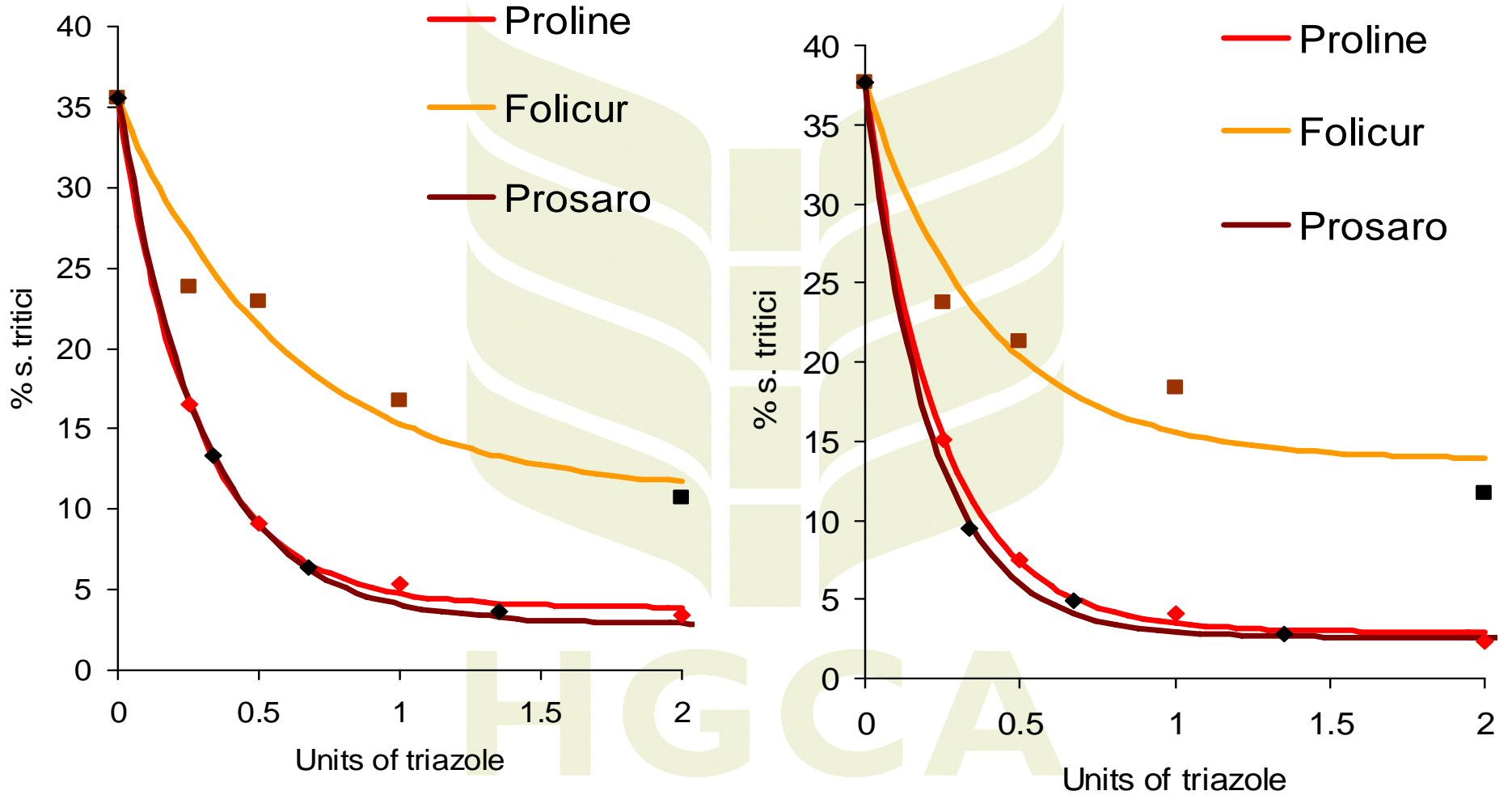
S. tritici 2004-07 – Balanced azole loading

(Prosaro 135% azole)



eradicant

protectant



Key Messages for *S. tritici*



Product efficacy similar at T1 and T2 timings.

Proline and Opus still providing good levels of eradicator and protectant activity.

Ennobe and Brutus had the highest level of control, - appears to be not just due to a.i. loading.

Bravo – still very effective as a *S. tritici* protectant.

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2008 Fungicide performance trials



Disease	Location	Variety	Fungicide Evaluation
Brown Rust	TAG Bedfordshire	Alchemy	Dose response at T2 (flag leaf emerged, GS37-39) Half dose at T1 (leaf 3, GS32) Half dose T1 – T2 sequence
Yellow Rust	ADAS Norfolk	Robigus	
Mildew	SAC Fife	Claire	

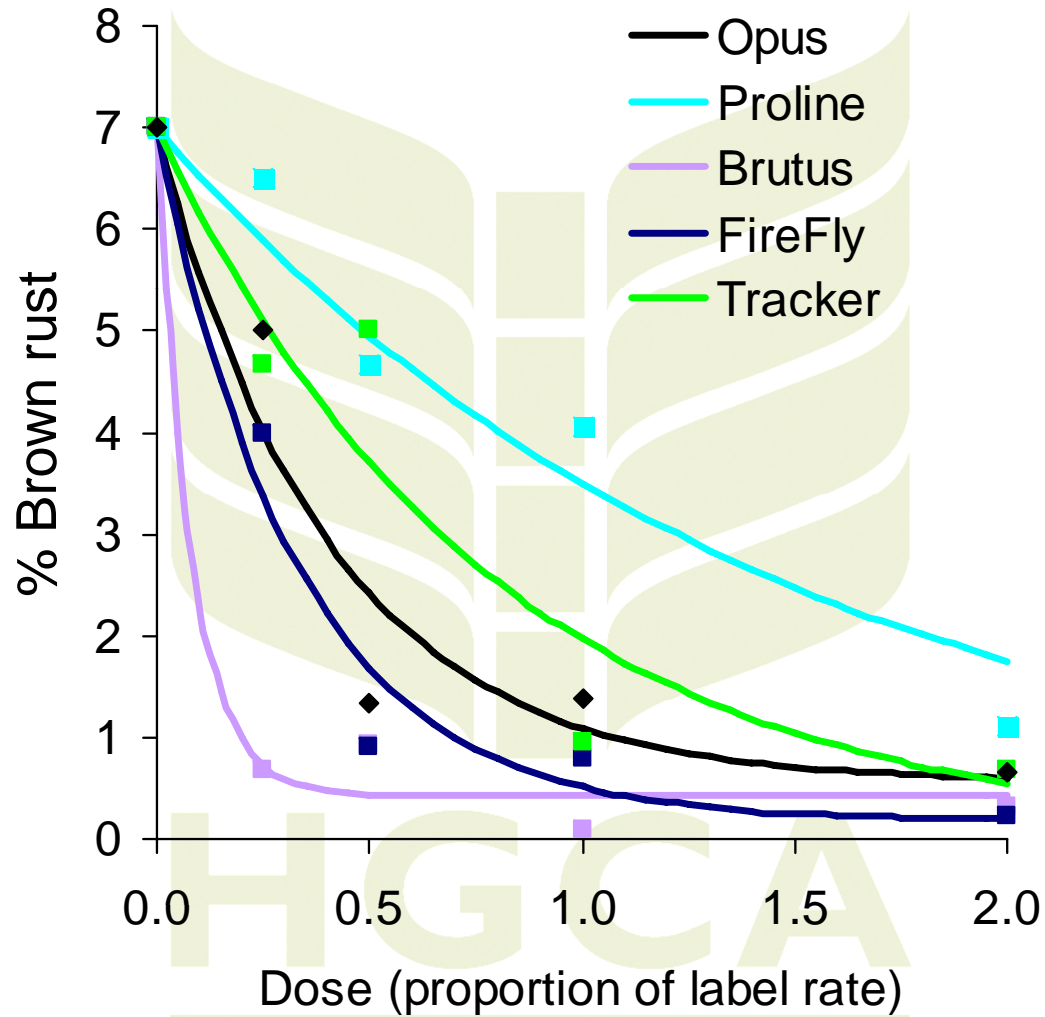


Fungicides included in brown or yellow rust trials



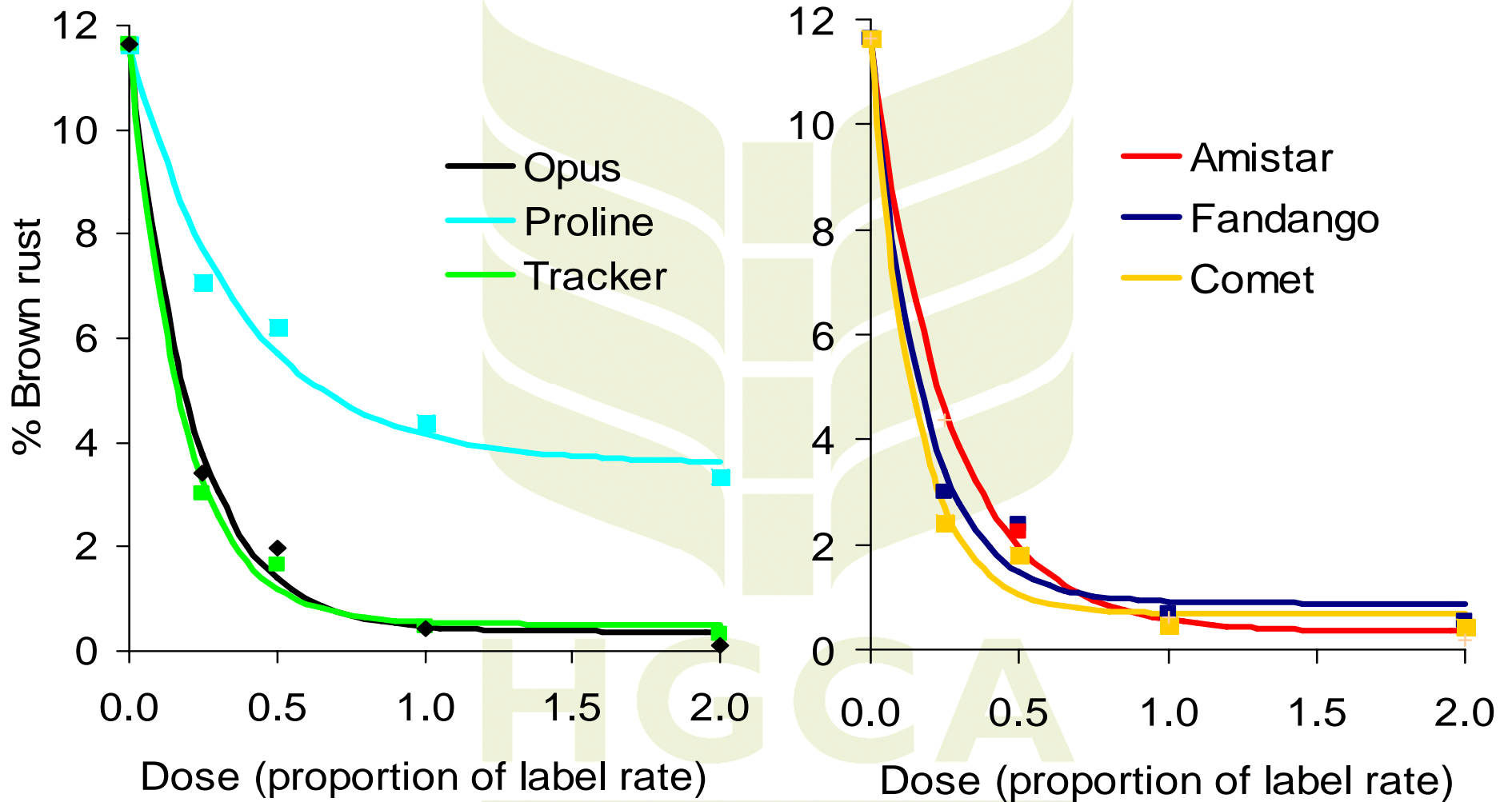
Brutus	epoxiconazole + metconazole
Comet200	pyraclostrobin
Firefly	prothioconazole + fluoxastrobin
Opus	epoxiconazole
Proline	prothioconazole
Tracker	epoxiconazole + boscalid
<i>Previous Years</i>	
<i>Amistar</i>	<i>azoxystrobin</i>
<i>Fandango</i>	<i>prothioconazole + fluoxastrobin</i>
<i>Folicur</i>	<i>tebuconazole</i>

Brown rust 2008

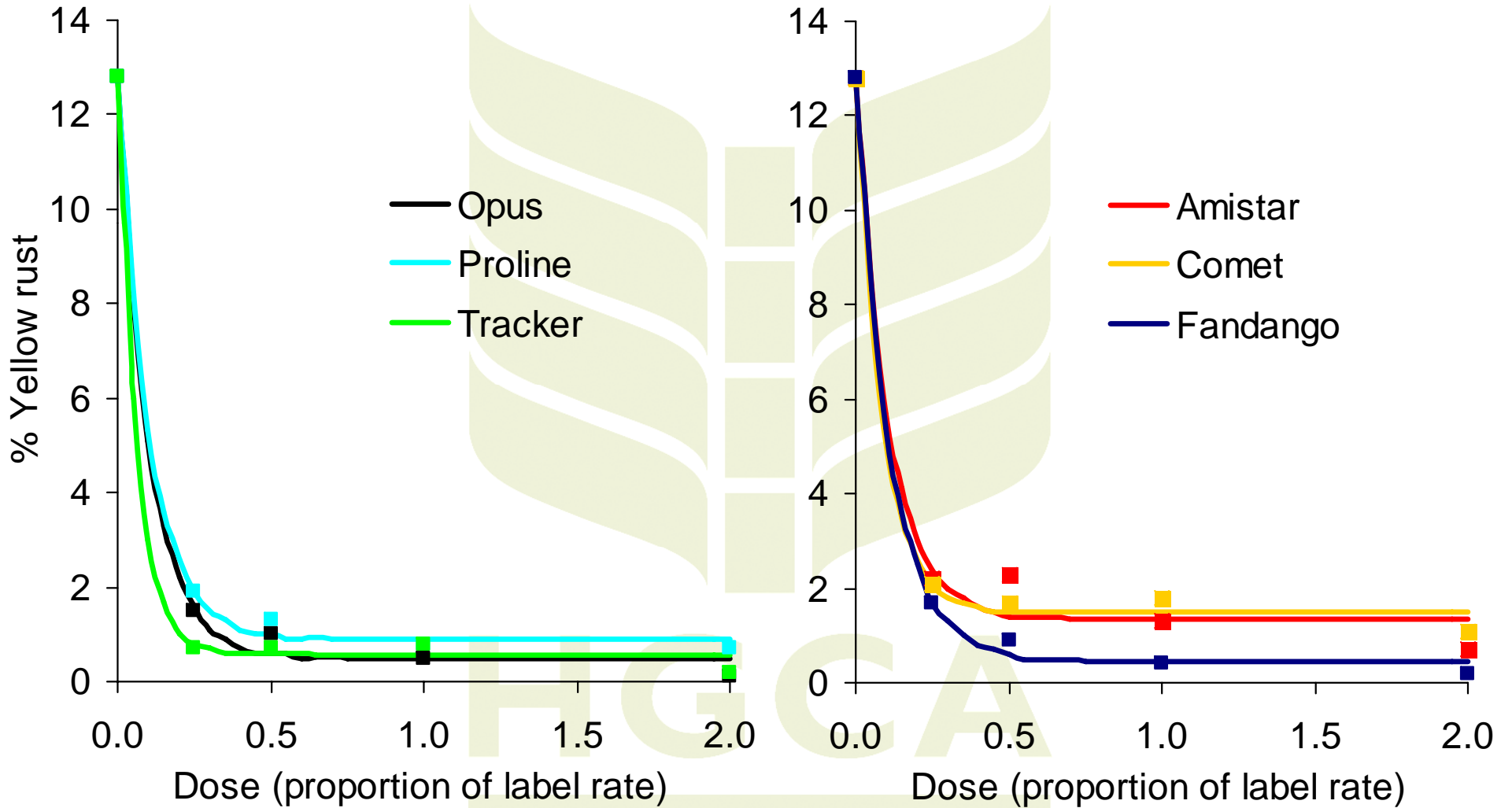


Mean of leaves
2 & 3, on 1 July

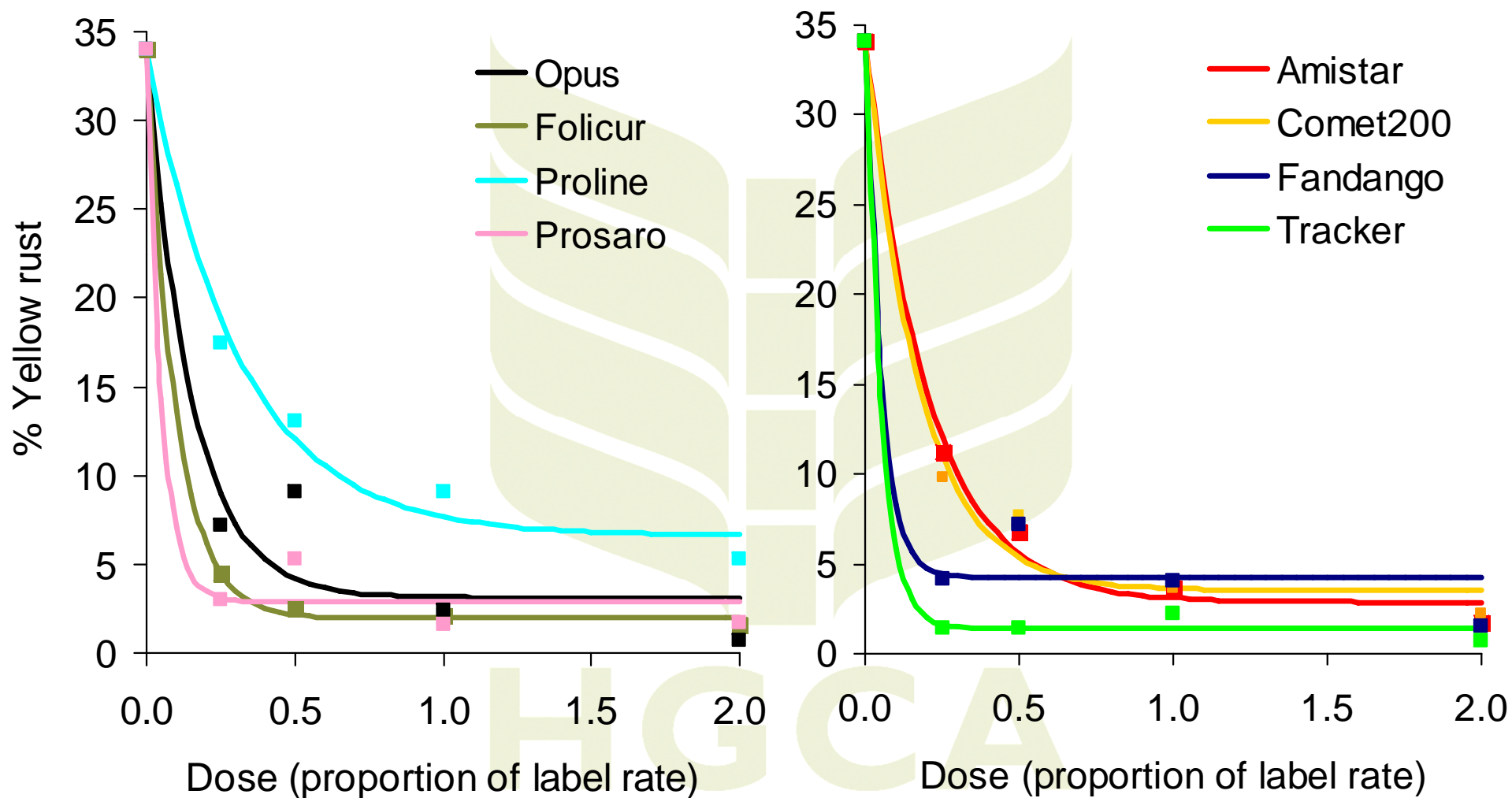
Brown rust 2004-2006



Yellow rust 2004-2008



Yellow rust 2007

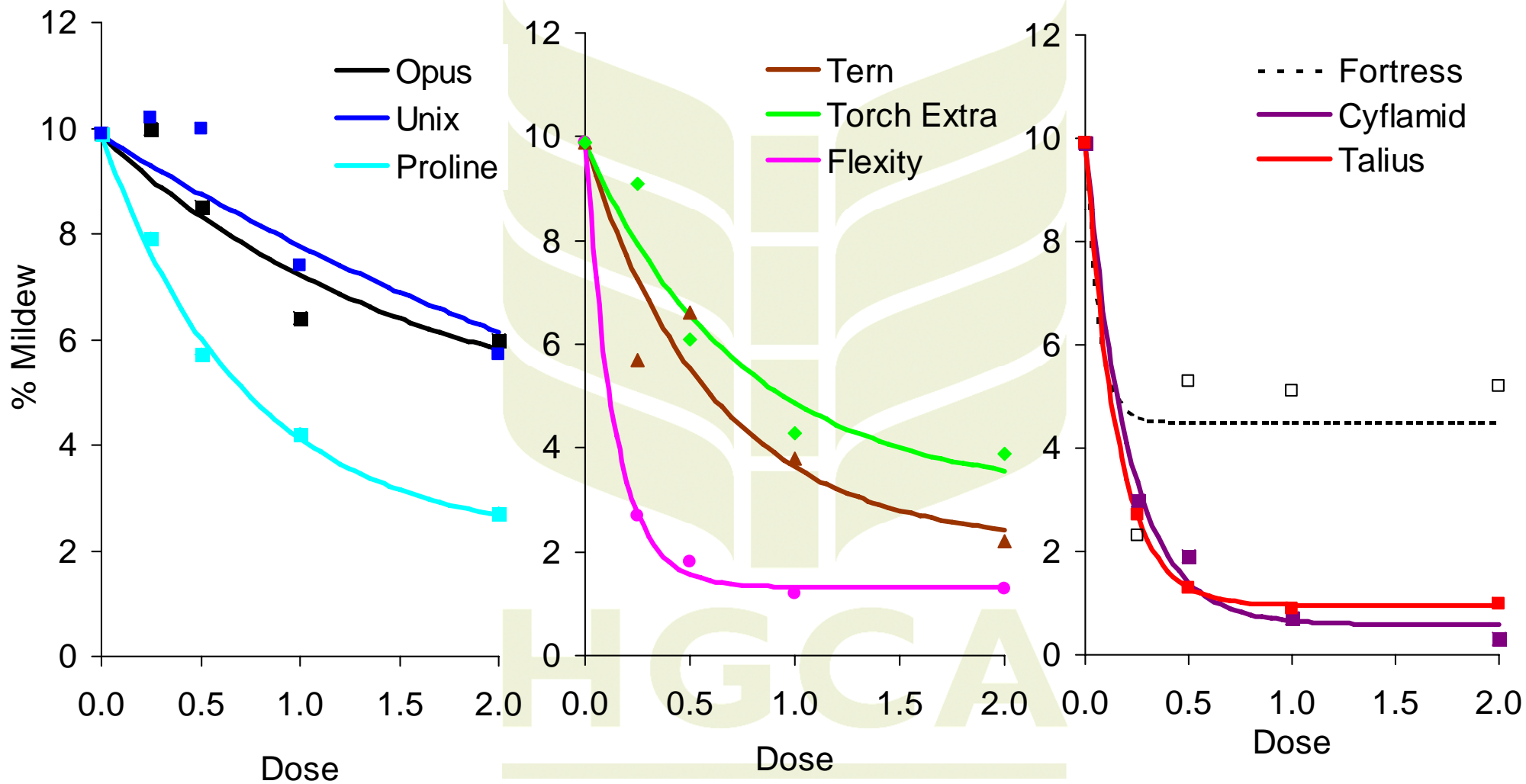


Fungicides included in mildew trials



Cyflamid	cyflufenamid
Flexity	metrafenone
Proline	prothioconazole
Talius	proquinazid
Tern	fenpropidin
<i>Previous Years</i>	
<i>Fortress</i>	<i>quinoxifen</i>
<i>Opus</i>	<i>epoxiconazole</i>
<i>Torch Extra</i>	<i>spiroxamine</i>
<i>Unix</i>	<i>cyprodinil</i>

Powdery mildew 2004-2008



Key messages for rusts & mildew



Opus giving better brown rust control than Proline, but mixture with fluoxastrobin (as Firefly or Fandango) highly effective

Yellow rust protection often similar for both triazoles, but control differences can be significant where the disease is very active

Boscalid (in Tracker) and fluoxastrobin (in Fandango or Firefly) improving yellow rust control compared to the triazole alone

Flexity, Talius and Cyflamid more reliable and effective than Fortress now for wheat mildew

Proline still showing useful mildew activity (Opus less effective)

HGCA

Acknowledgements

