

by kind permission of Easton College

Drilled: 18th August 2009
Previous crop: Winter Barley (straw baled & removed)

Establishment methods:

Ploughed then drilled with Vaderstad Rapid
 Simba DTX followed by Vaderstad Rapid
 Simba DTX + Turbojet Wizard
 Vaderstad Topdown + Biodrill

Varieties:

DK Cabernet, PR45D05, PR46W21
 DK Cabernet, PR45D05, PR46W21
 DK Cabernet, PR45D05, PR46W21
 DK Cabernet, PR45D05, PR46W21

ALL PLOTS WERE ROLLED ON 18TH AUGUST

Photographs of plots taken on 27th November

Simba DTX
+ Turbojet
Wizard



Vaderstad
Topdown +
Biodrill



Simba DTX /
Vaderstad
Rapid drill



Ploughed &
pressed /
Vaderstad
Rapid drill



Establishment method

DK Cabernet

PR45D05

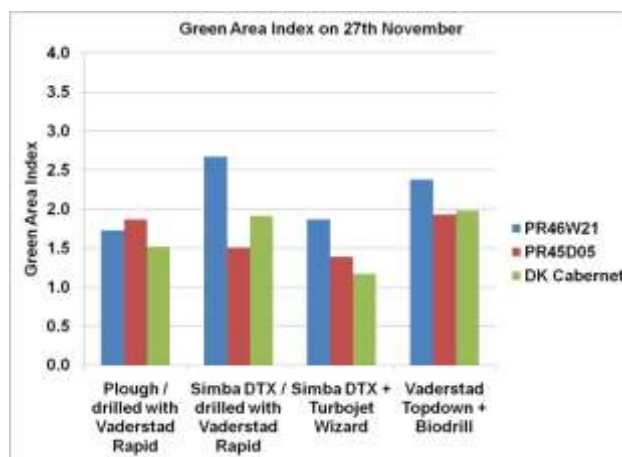
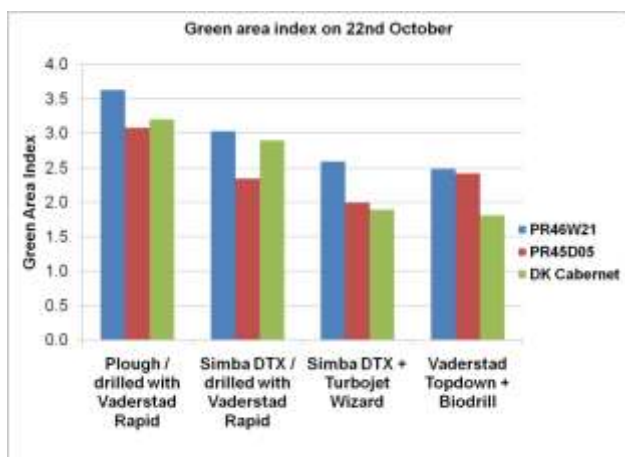
PR46W21

Additional work includes:

- Seed rate comparisons
- Seed placement with Simba DTX + Turbojet
- Variety demonstration strips
- Other trials (overlaid across establishment methods and varieties) are also being undertaken at the site

Green Area Index at Easton

Green area index has been recorded at various intervals over the autumn.



Leaf tissue results (27th November)

Analysis	Guideline	Plough / Combination drill		Simba DTX / Vaderstad Rapid		Simba DTX + Turbojet		Vaderstad Topdown + Biodrill	
		Value	Rating	Value	Rating	Value	Rating	Value	Rating
Nitrogen (%)	4.00	5.18	High	4.13	Normal	4.75	Normal	4.49	Normal
Phosphorous (%)	0.35	0.78	Normal	0.59	Normal	0.70	Normal	0.64	Normal
Potassium (%)	2.80	2.83	Normal	2.73	Slightly low	3.15	Normal	2.55	Slightly low
Calcium (%)	1.00	1.03	Normal	1.05	Normal	1.32	Normal	0.94	Slightly low
Magnesium (%)	0.25	0.15	Low	0.14	Low	0.17	Low	0.15	Low
Manganese (ppm)	30.0	39.10	Normal	32.60	Normal	37.00	Normal	30.30	Normal
Boron (ppm)	30.0	40.20	Normal	33.20	Normal	37.40	Normal	32.10	Normal
Zinc (ppm)	25.0	31.80	Normal	25.50	Normal	33.90	Normal	31.40	Normal
Iron (ppm)	30.0	202.00	Normal	141.00	Normal	177.00	Normal	174.00	Normal
Copper (ppm)	5.00	7.10	Normal	5.40	Normal	6.20	Normal	6.30	Normal
Molybdenum (ppm)	2.00	4.27	Normal	2.68	Normal	3.95	Normal	2.65	Normal
Sulphur (%)	0.40	0.38	Slightly low	0.42	Normal	0.54	Normal	0.42	Normal

Establishment costs

Typical Contractor charges have been used to compile costs for the various methods of establishment that have been used at each site.

	Cultivation	£/Ha	Total £/Ha	Hectares Established Per Hour
Plough / Combination drill	Plough & Press	47	£94	0.58
	Vaderstad Rapid drill	37		
	Roll	10		
Farm Standard	Simba DTX	44	£91	0.94
	Vaderstad Rapid drill	37		
	Roll	10		
Simba	Simba DTX + Turbojet	50	£60	1.46
	Roll	10		
Vaderstad Topdown + Biodrill	Vaderstad Topdown + Biodrill	50	£60	1.46
	Roll	10		

DK Cabernet : Conventional variety with high seed yield of 109% and very high oil content at 45.3%.

Good disease scores and stiff stemmed for good lodging resistance.

PR45D05: Semi-dwarf hybrid with seed yield of 99% and oil content of 44.1% in CEL trials.

Unrivalled stem stiffness and lodging scores. Very good harvestability

PR46W21: Fully restored hybrid high seed yield of 107% and very high oil content at 46.2%.

Moderate disease scores but very stiff stemmed for good lodging resistance