F4 Sowing Time x Impact Dressed Fertiliser, H-MRZ (Wagga Wagga), NSW

Aim

To compare early and late sown commercial and advanced varieties of field pea in an eastern cropping environment of southern NSW and to evaluate Impact®In-Furrow fertiliser to assist in disease control.

Treatments

Varieties: Kaspa, PBA Gunyah, PBA Twilight, Yarrum, PBA Oura (OZP703), PBA Percy (OZP901), OZP805, OZP819 (PBA Pearl),

Sowing dates: 30 May & 1 July 2011 – representing the earlier and later phases of the field pea sowing window

Stubble: 2t/ha Barley stubble (30cm high)

Fungicide Treatments: With and without Impact®In-Furrow.

Fertiliser: Grain legume super (0:15:7) @ 115 kg/ha placed separately under the seed.

Results and Interpretation

Variety, TOS and Variety x TOS were the only significant yield differences in this trial, but these differences in reality were only small (P<0.01). Impact fungicide applied on fertiliser at sowing had no benefit yield this season.

Table F4.1. Yield terms and their statistical significance

Fixed term	F prob	
TOS	0.021	*
FUNG	0.222	ns
VARIETY	0.003	**
TOS.FUNG	0.574	ns
TOS.VARIETY	0.002	**
FUNG.VARIETY	0.357	ns
TOS.FUNG.VARIETY	0.026	*

Field pea yields were above average during the 2011 season at Wagga. Yield did decline by around 11% when delaying sowing from 30 May to 1 July, most evident in OZP819, Percy and Yarrum (15-18%) and least in Twilight, Gunyah and OZP805.

The highest yielding treatments in this trial were the early sown PBA Percy and OZP819.

Seed sizes were highly significant across treatments (P<0.001). Later sowing increased seed size; PBA Oura and PBA Percy had the largest seeds.

Key Findings and Comments

- The 2011 season was well suited field pea at Wagga, resulting in high yields and little disease at either sowing.
- Field pea is less sensitive to delays in sowing compared to chickpea, faba bean & lupin.
- Yield declined by only around 11% when sowing was delayed from late May to early July.
- PBA Oura, PBA Percy and OZP819 were consistently in the top ranking group for both yield and seed size.

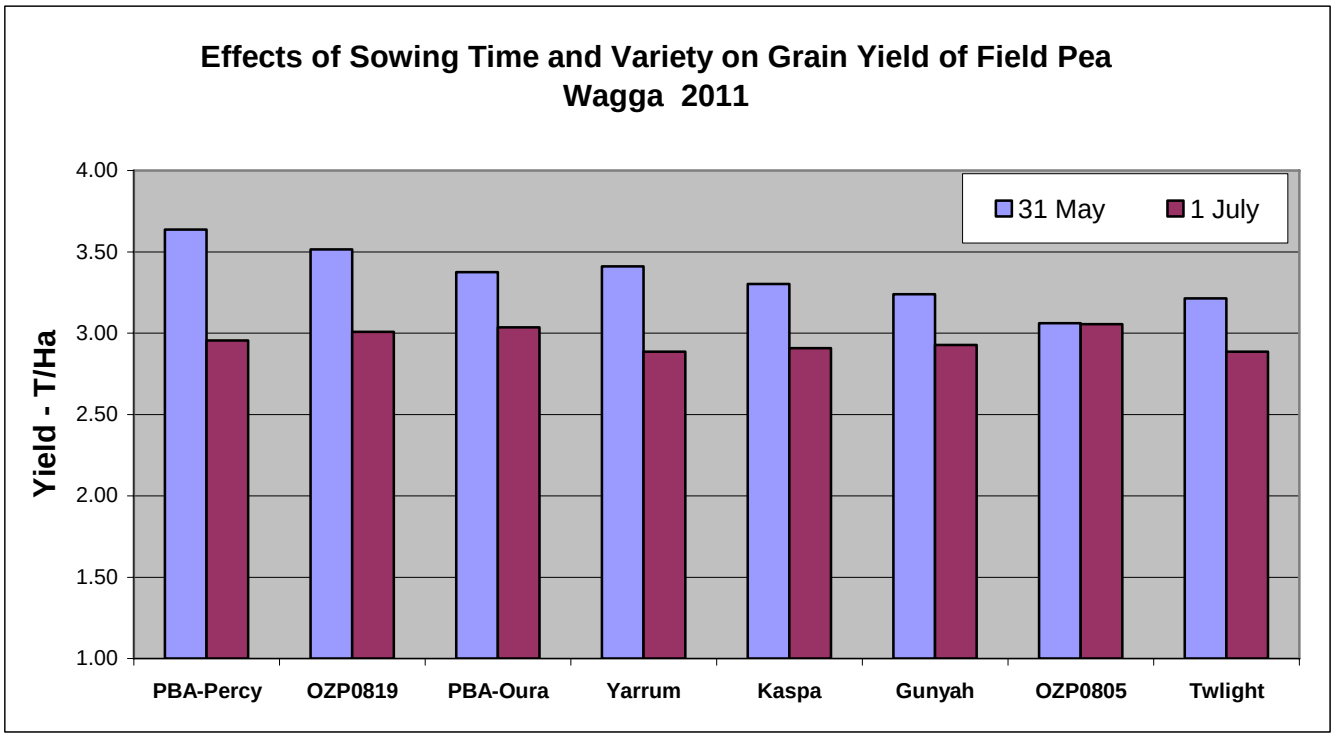

Figure F4.2. The effects of sowing time on grain yield (t/ha) of eight varieties of field pea at Wagga in 2011.

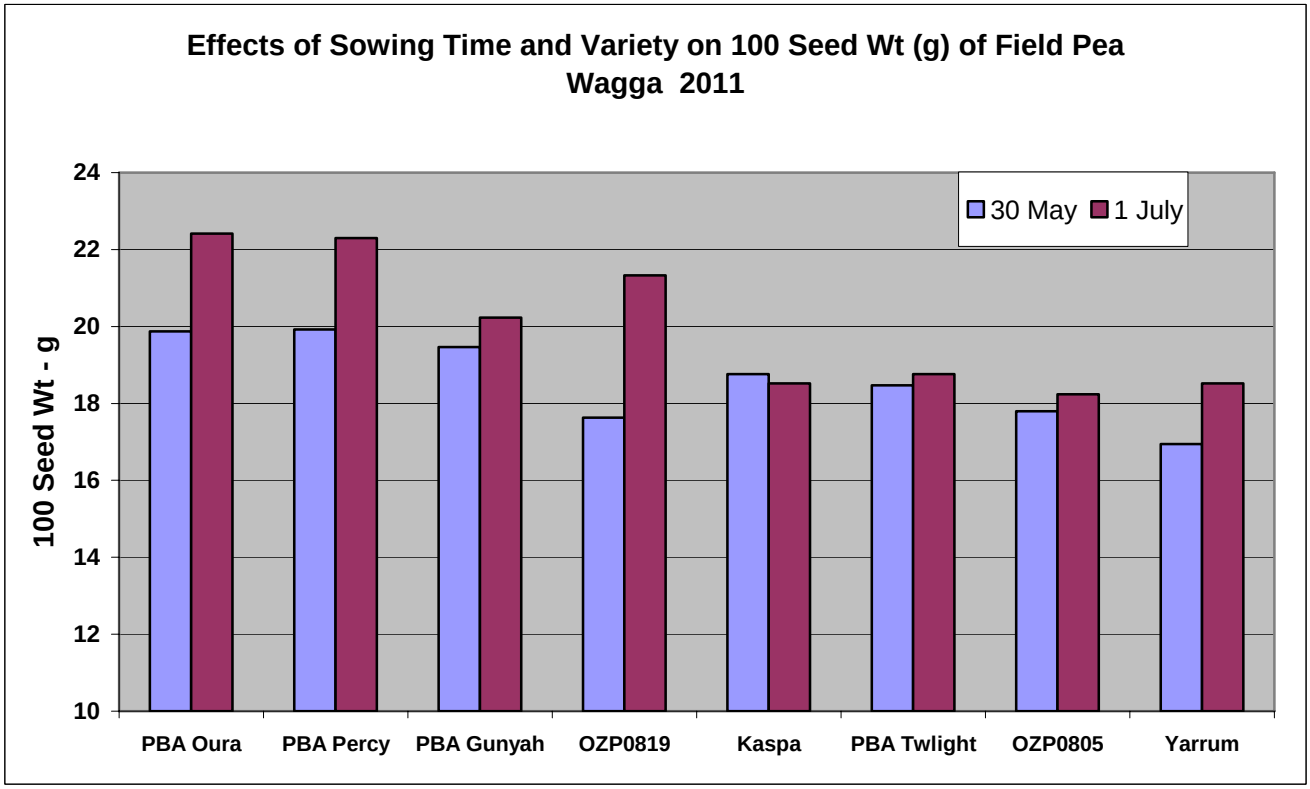

Figure F4.3. The effects of sowing time on seed size (100 Sd Wt) of eight varieties of field pea at Wagga in 2011.