

F5. Sowing Time x Impact Dressed Fertiliser, LRZ (Yenda), 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 investigate potential of Impact impregnated fertiliser to assist in disease control.

Treatments

Varieties: Kaspia, PBA Gunyah, PBA Oura, PBA Percy, PBA Pearl, OZP805,

Sowing dates: 17 May, 19 June 2012 – representing the earlier and later phases of the field pea sowing window

Stubble:

Treatments: Six varieties at two sowing dates with and without Impact-dressed fertiliser.

Fertiliser: Grain legume super (0:15:7) @ 80 kg/ha placed separately under the seed.

Results and Interpretation

The 2012 season was ideal for pulse production at “Hillview”. Heavy rain in March resulted in a full profile of moisture. Rain was well below average for the remainder of the season resulting in little or no disease. Crops largely survived and grew well to maturity on this stored moisture. Under these dry finishing conditions, plants ripened a golden brown and most semi-dwarf semi-leafless types remained erect through to maturity.

Table 1. Statistically significant terms and Probabilities for yield at Yenda TOS peas 2012

Fixed term	F pr
TOS	0.004
VAR	<0.001
TOS.VAR	0.002

Impact fungicide applied on fertiliser had little or no affect on growth and grain yield under these conditions.

Differences in grain yield between varieties were small. PBA Pearl, PBA Gunyah and PBA 805 were the highest yielding varieties, but only at the early sowing date. Yields declined by about 20 % ($P < 0.05$) as sowing was delayed from 17 May to 19 June.

Key Findings and Comments

- This was a very dry but favourable field pea season at “Hillview”, resulting in erect growth, very little disease, blemish-free golden brown foliage, high DMs and grain yield.
- Varieties were only different at the earliest sowing date, where Pearl was the top yielder
- Yield dropped by around 20% as sowing was delayed from 20 May to 22 June
- Seed size increased by around 10% as sowing was delayed from 20 May to 22 June
- Seed size was greatest in Percy & Oura

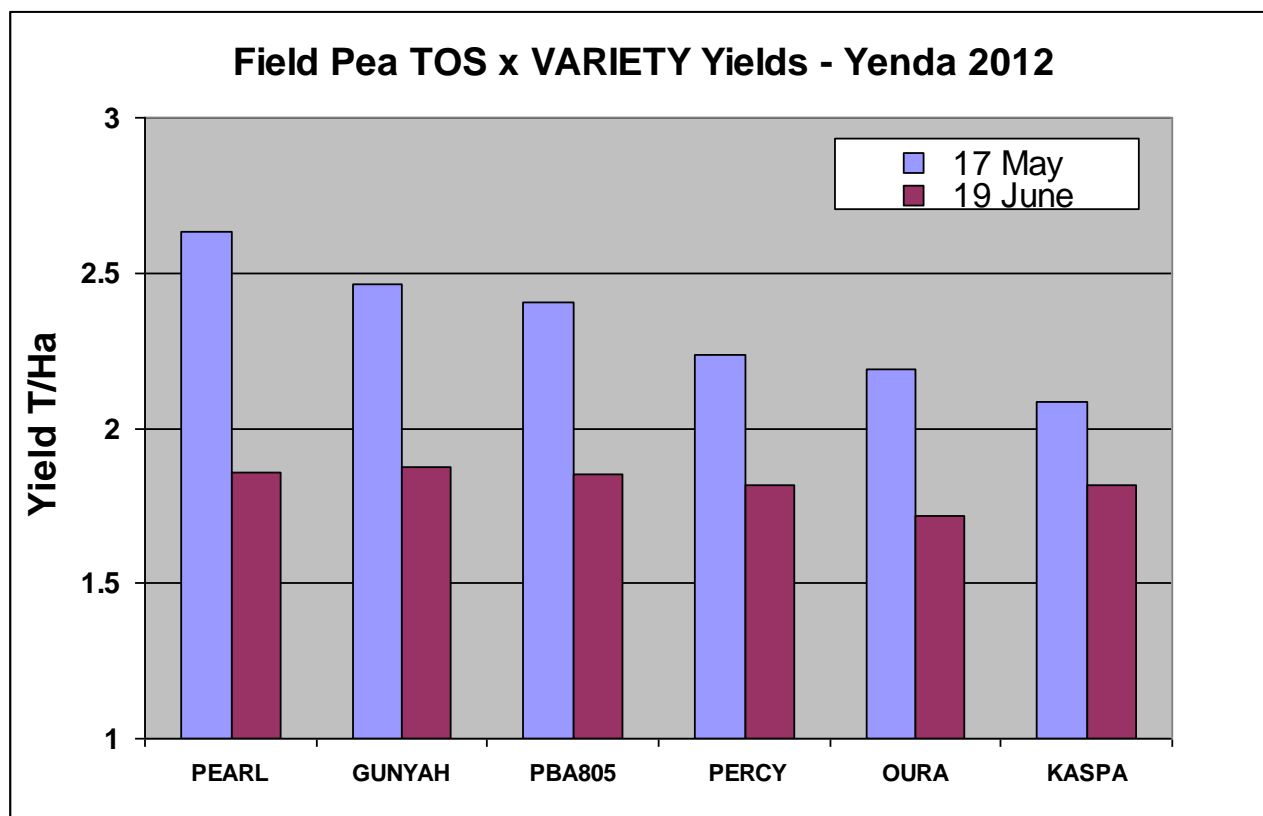


Figure 2. The effect of TOS on grain yield (t/ha) of six field pea varieties at Yenda in 2012.

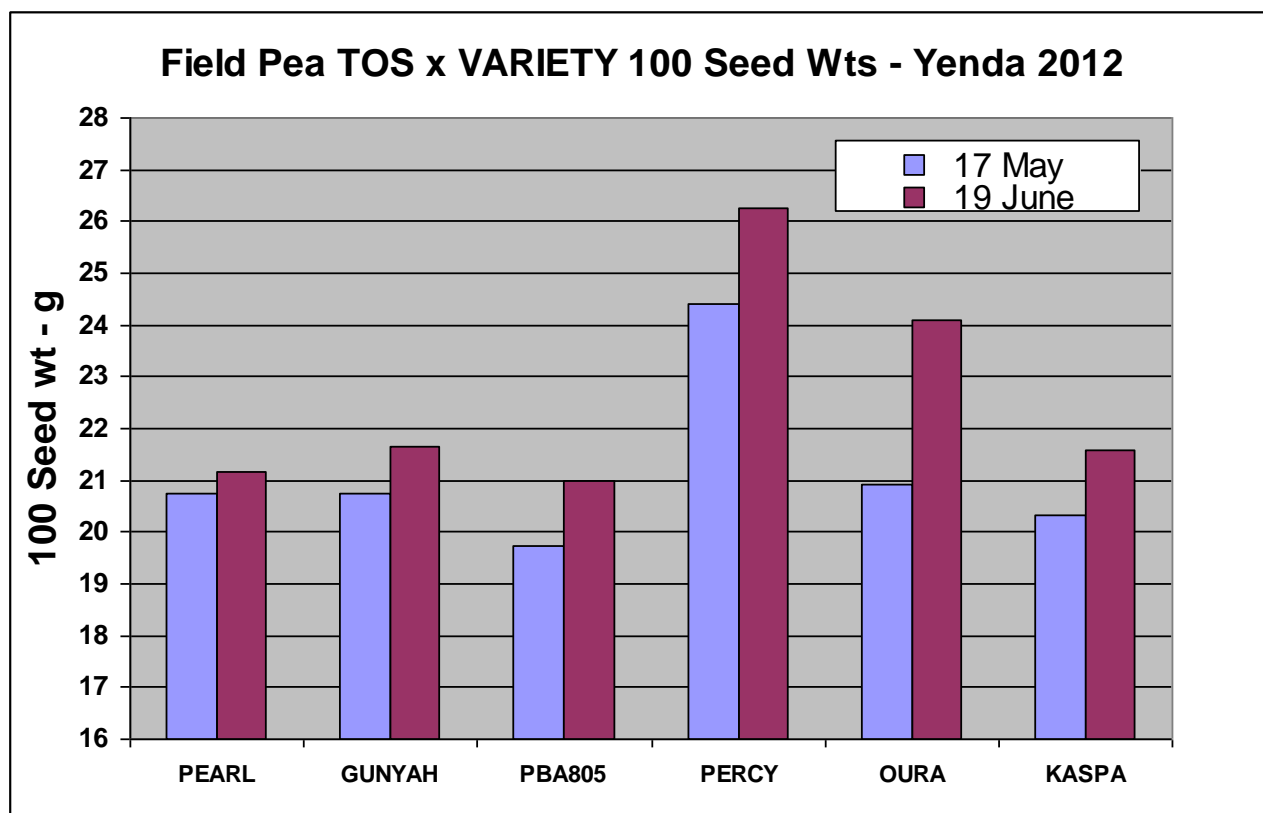


Figure 3. The effect of TOS on 100 seed weight of eight field pea varieties.