Evaluation of Wide Row Lupins

Aim: Assess the yield of wide (18 inch) versus narrow (9 inch) lupin rows.

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Location: East Maya

Background: Growing lupins on wide rows is becoming increasingly popular in the Northern Agricu NAR). The stubble handling benefits allow lupin crops to be sown into heavier stubble than previously. Other benefits such as herbicide safety and the potential for increased drought tolerance are also being explored. This demonstration aimed to quantify the yield benefit from sowing wide row lupins in the NAR.

Trial Details:

Plot size and replication	12m x 300m, 1 replication in four parts of the paddock
Soil type	Sand plain and duplex
Sowing date	8th May
Conditions at sowing	Dry sowing
Machinery	Flexi coil bar with knifepoints and press wheels. 9 inch spacings were used for narrow treatment and 18 inch for wide treatment.
Seeding rate	80 kg/ha Belara
Fertiliser	60 kg/ha Legume plus
Herbicides and Insecticides	IBS- 1.2 kg/ha Simazine, 0.6 kg/ha Atrazine 10th May: 85 g/ha Bounty 9th July: 100 mL/ha Select, 60 mL/ha Targa Forte, 1% Ammonium Sulphate, 1% oil, 1% wetter
Paddock History	2002 = Wheat, 2001 = Pasture, 2000 = Wheat

Results:

Soil Type	Narrow Yield kg/ha	Wide Yield kg/ha
Sandy 1	583	640
Duplex 1	779	968
Duplex 2	900	990
Sandy 1	644	768
Mean	726	841

Summary:

- On average the wide row lupins yielded 115 kg/ha higher than the narrow lupins (15% increase).
- Simazine damage was very pronounced in this particular crop. However, the damage in the wider rows appeared to be much less than that in the narrow rows.
- The same seeding and fertiliser rates were used for both treatments which made changing the bar over relatively quick. In total it took about 2 hours to change the bar from a narrow to wide row configuration.