Growing Pulse Crops

Grower Experience:

John Rhodes
Sunnyside
Gunningbland 2797

Overview:
John Rhodes has grown a wide variety of pulse crops during the 1990's looking for a reliable, high yielding profitable pulse to fit into his rotation. Although inconsistent yields and prices affect pulses more than cereals they can be highly profitable in their own right. Pulses are also essential in a heavy or continuous cropping program to maintain soil health, nutrient levels and herbicide rotations, which in turn provide for productive cereal cropping. Different pulses suit different soils and climates; John suggests farmers should liaise with local agronomists and farmers to determine the best pulse for their situation.

Background

"Sunnyside" is a 960 hectare property situated between Parkes and Bogan Gate at Gunningbland. Soils are 20% red-brown earths, 30% mostly self mulching brown clays, and 50% euchrozems. Average annual rainfall is 521mm. Growing season rainfall, April to October, is 286 mm. Over the past 3-4 years the area of crop has grown from a base of 450-500 hectares to 800 hectares for the 1999 sowing. In order to maintain that percentage of crop in a sustainable manner, pulses must be included in the rotation.

My experience with pulses began in 1991 with a trial planting of Blanchefleur vetch, of approximately 70 hectares. This crop was promoted by the fledgling Australian Pulse Co-operative (APC), which was just getting established in the Parkes-Forbes area, with Dick Bradley as the Secretary-Manager, Wayne Dunford as Chairman and an active board of grower Directors. APC was established primarily to market pulses, but they actively promoted the growing of pulses as well. As a result I tried a large number of pulse crops, looking for a reliable, high yielding, profitable pulse, that fitted into the rotation I was using. Chickpeas, field peas, lupins, vetch, lentils and faba beans have all been grown on Sunnyside.

Positives for Growing Pulses

- Enables heavy cropping.
- Input of nitrogen and soil conditioning.
- Herbicide rotation - enables the use of Group C herbicides such as Simazine and Atrazine which are useful on a wide range of broad-leaf weeds and grass weeds. They are particularly useful on cruciferous weeds.
- Pulses can be high yielding and profitable - Albus Lupins, in 1998, yielded three tonnes per hectare, with available prices of $300 per tonne and over. This was the most profitable crop on "Sunnyside" in 1998.

Negatives for Growing Pulses

- Inconsistent yields, even in wet years due to disease.
- Not as drought resistant as cereals.
- Fluctuating prices for pulses.

Conclusion

Legumes are difficult, but in a heavy cropping regime they are essential in the rotation because of fertility, disease, weeds and sustainability. Trial and observation should be used to find the pulse best suited to your soils and climate. Sharing experience with local farmers and agronomists is very useful in this process.