Canola in the Central West

Grower Experience:

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Lynton
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Overview:
Wayne Dunford regards canola as an important part of his rotation as it provides a break in cereal diseases, improves soil structure and has been profitable when oil prices were high. However he believes that canola is a hungry crop which uses more nutrients than cereals and does not handle water stress as well. He does not sow canola unless sub-soil moisture is sufficient and believes canola is a higher risk crop than cereals. Wayne details some of his management practices in growing canola; one critical factor is to always bare earth spray for Red Legged Earth Mite control immediately after sowing. When canola prices fall below $300/tonne port Wayne questions taking the risk of providing the inputs required to grow canola successfully.

Lynton is 23km West of Parkes and canola has been an important part of our cropping rotation for some time. However it is only one part of the rotation and is a higher risk crop than cereals. Year in year out it usually runs second to wheat in profitability and sometimes third to pulses, although it is not often we get a good pulse crop! Having said this, canola offers added benefits as a cereal disease break, soil structure improves due to it's large root system and wheat yields in following crops are improved.

Canola has half the Water Use Efficiency (kg grain/mm) of wheat and does not handle water stress as well as wheat. Because of this we only sow if there is 2 ft of sub-soil moisture. To rely on growing season rainfall is too risky with canola. We sow in mid-May, and in 1999 waited for rain and sowed Oscar in the first week of June, this crop was as successful as the early sown crops. I believe late sown crops compensate in the spring with extra growth. Early crops can grow a huge amount of vegetation which is difficult to handle at harvest time and may cause stress on the crop in a dry period later in the year. Applying nitrogen too early can also cause too much vegetative growth. Early sown crops also appear to get more diseases than later ones.

The soil at Lynton is low in phosphorous and sulphur, so 200kg/Ha of DAP is spread before sowing canola and 100 kg/Ha is sown with the seed. This nutrient load is topped up with urea depending on tissue tests later in the year. Urea is not used at sowing as it causes too much vegetative growth and with all inputs up front the risk is higher.

Coming out of pasture, usually lucerne/clover based but some grass based pastures too, the paddock is usually chemical fallowed first then worked twice. This tillage removes humus from the surface in order for the Treflan to work. A mix of Treflan and Roundup is sprayed on 2-6 hours before sowing canola. A John Deere chisel plough with Sanderson

points and 12" row spacings is used to sow the seed in the top inch and a Phoenix prickle chain incorporates the Treflan and seed.

Insects vary from season to season, but a bare earth spray (eg. Talstar) is essential and critical immediately after sowing for Red Legged Earth Mite control. I have tried border spraying with limited success. Plant populations depend on this control of Mites. Heliothis is seasonal and needs to be watched but I have only sprayed once in 7 years. Aphids can be a problem, they tend to show up when plants are under stress and I have sprayed for aphids a few times.

I don't windrow canola and have never had a problem with direct heading. Better oil content is reported with direct heading and some seed is cut off too green with windrowing. The main reason 1 do not windrow is the extra cost. I have insured for hail a few times and believe this is better crop insurance than windrowing. I have seen a windrowed crop lose 50% of yield from a hail storm anyway, and I believe allowing it to ripen naturally gives the best yield and oil content. I have increased the seeding rate for canola to 4 kg/Ha to get a good germination and keep stem size down, finer stems closer together are better to handle at harvest time.

Benefits of including, canola in a rotation include improved soil structure due to the canola plant's large root system and breaks in cereal diseases. Wheat yields do increase after canola crops, however canola has the potential to deplete nutrients in the soil if not enough are applied, and remember canola is not a legume! The break in cereal diseases is important, and was obvious in 1999, where canola stubble wheat paddocks were much less affected by diseases such as Take All.

Canola should only be used in a rotation every fourth year. When oil prices were good it was tempting to go wheat/canola/wheat/canola.... however canola diseases become an issue then. Canola is a more volatile crop than cereals, higher risks are associated with it. One year we totally lost a canola crop from frost, it was a dry year, the canola was struggling and the frost killed the seed in the pod. We cut the crop for hay, and it made good hay as it was still green. The frost did not seriously affect the wheat, but did damage lupins. Canola flowering is spread out, so frosts at flowering are not a big problem. We tend to spend more resources on providing nutrients to canola crops than cereals. However rather than saying it is more expensive (and therefore higher risk) to grow canola than cereals maybe we should be asking ourselves 'should we be spending more on our cereals to maximise their profitability?'

Canola is an important part of my cropping rotation as it has been profitable in it's own right and provided benefits to following crops. However it requires a lot of water and nutrients to be successful, and when port prices fall below about $300/tonne I question taking the risks involved in growing canola.