

Late breaking news on canola

Until recently the perception has been that canola must be sown at break of season, usually early May and consequently some growers miss the season.

But in 2007, with high prices and a relatively good finish, trials using new varieties suggest canola can be sown as late as June and still be profitable.

Canola production has grown significantly in Australia in the past five years and is now seen as an important part of the farming system, with increased Grains Research and Development Corporation (GRDC) investment paralleling that production.

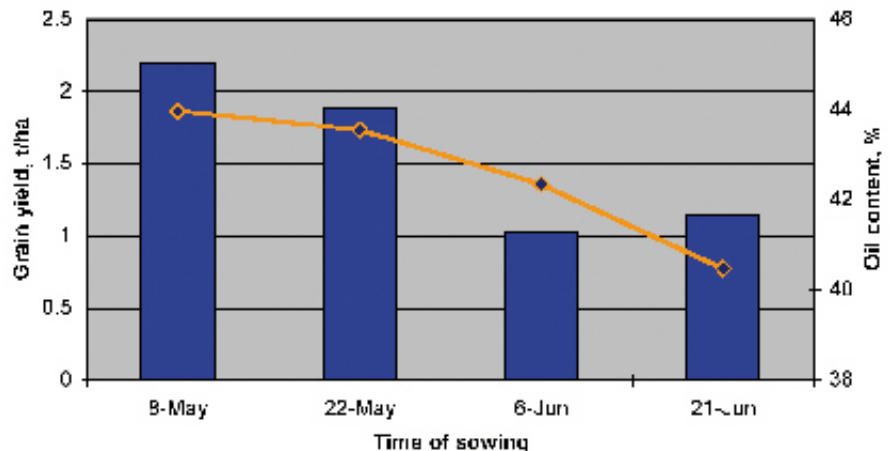
December 2007 estimates from the Australian Oilseeds Federation of nationwide canola production for the 2007–08 season were in excess of one million tonnes.

According to the GRDC's Manager for Pulse and Oilseed Breeding, Brondwen MacLean, GRDC investment priorities in canola are increased disease resistance, notably blackleg, improved quality and better management practices.

The GRDC-supported Western Australian No Tillage Farmer's Association (WANTFA), offered a demonstration site at Meckering (about 100 km east of Perth) where Dr Mohammad Amjad of the Department of Agriculture and Food WA, Northam, trialled 12 triazine tolerant (TT) canola varieties.

The trials were sown at four kilograms per hectare on May 8 and 22 and June 6 and 21, 2007, after spraying with a knockdown.

FIGURE 1: Mean yields and oil content decreased with delay in sowing from early May to late June at Meckering



Dr Amjad said varieties adapted differently to early and late sowing.

In calendar year 2007 Meckering received 324 mm of rain, including 236 mm during the growing season (May to October).

Late spring rain contributed to better grain filling and increased canola yields.

"Flinders TTC was the best tested canola variety adapted for May sowing and CB Tanami was better adapted to June sowing in 2007," Dr Amjad said. "All canola sowings were profitable, but profit margin decreased with later sowing."

Dr Amjad indicated that mean yield loss was about eight per cent for every one week delay in seeding from May 8 sowings to June 21.

Oil content from the trials was influenced by variety and sowing date.

Early May sown canola had higher oil content, with a mean reduction of 0.6 per

cent for each week of delay in seeding from May 8 to June 21.

The highest gross margin of \$873 per hectare was achieved from the May sowing and \$287 per hectare was the highest gross margin for the June sowing.

The gross margins were calculated by using a farm-gate price of \$510 a tonne, with a 1.5 per cent bonus for oil content above 42 per cent. Growers are paid for their canola crop on the basis of a bonification scheme. Research has shown that moisture availability and temperature during seed development strongly influence oil content.

Dr Amjad said costs to calculate gross margin were based on a medium rainfall scenario, such as Meckering and the break-even canola yield was 0.55 tonnes per hectare.

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Dr Mohammad Amjad of DAFWA speaking to growers at the GRDC supported WANTFA Spring Field Day, 2007 at Meckering.

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One of the key messages arising from his research was that growers should choose new canola varieties.

"New varieties are generally more disease resistant and more capable of adjusting for grain yield and oil content, with changing climate and weather conditions, throughout the growing season," he said.

Also, growers should consider planting two or three new canola varieties, with different maturities, to help reduce climatic and production risks.

Dr Amjad said that aside from canola's role as a profitable crop in its own right, it was also a good break crop and wheat yield increased following canola.

Further information: Dr Mohammad Amjad, Ph: 08 9690 2249



Canola varieties sown at different times at the GRDC supported WANTFA demonstration site at Meckering.

Time to consider nitrogen top up for canola

It's time for canola growers to consider a top up of nitrogen to boost canola yields. Canola Research Officer with Centre for Cropping Systems, DAFWA, Mohammad Amjad said growers who wanted to top up nitrogen should consider doing so early in the season, within a few months of seeding.

"The yield potential for canola is generally established during the stem elongation stage, four to eight weeks after sowing, when the entire nitrogen should be applied," Dr Amjad said.

"The amount of nitrogen required depends on the paddock history, soil types, crop rotation, fertiliser history (soil tests), season and the environment," he said.

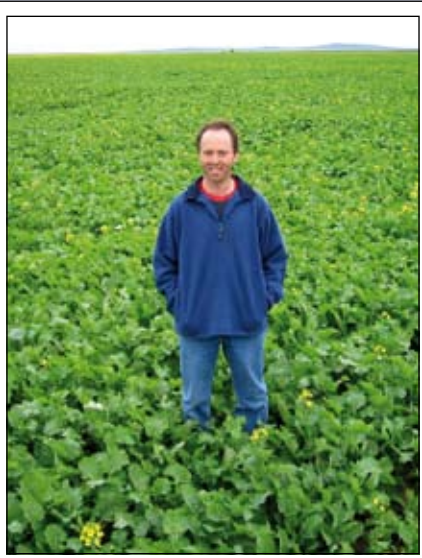
Dr Amjad said DAFWA research on canola nutrition assisted in providing guidance on canola nitrogen timing and application decisions.

"In low rainfall areas (up to 330 mm) with a yield potential between 0.8–1.2 tonnes per hectare, the required nitrogen application for canola averaged 45 kg N per hectare following the cereal phase compared to 30 kg N per hectare following the legume or pasture rotation," Dr Amjad said.

"In medium rainfall areas (330–460 mm) with a yield potential between 1.2–1.8 tonnes per hectare, the required nitrogen application for canola averaged 65 kg

N per hectare following the cereal phase compared to 40 kg N per hectare following the legume or pasture rotation.

"Similarly in high rainfall areas (460–600 mm) with a yield potential between 1.8–2.5 tonnes per hectare, the required nitrogen application for canola averaged 95 kg N per hectare following the cereal phase, as compared to 65 kg N per hectare following the legume or pasture rotation," he said.



Michael Fels checks his growing canola crop at Wittenoom Hills. Michael had topped-up nitrogen to boost canola yield.

Department crop nutritionist, Ross Brennan said it was very profitable to apply fertiliser nitrogen to canola crops if the season is favourable.

"Our research, jointly funded by DAFWA and GRDC, has shown for soils that are deficient in both phosphorus and nitrogen, large grain yield responses occurred when these two elements were sufficiently applied," Ross said.

"Applications of increasing rates of nitrogen decrease oil and increase protein concentration in canola grain," Dr Amjad said.

"Growers are advised to assess their canola establishment and yield potential, and top-up nitrogen, preferably within four to five weeks for early maturity varieties (like CB Tanami) and within six to eight weeks for mid to late maturity varieties (like ATR Bravo)," he said.

"Growers in areas where the seasonal outlook is not so promising could consider the option of not topping up any more nitrogen, particularly when yield potential is lower.

"Profitability and economic return for applying additional nitrogen should be the prime consideration in making decisions," he said.

For further information, contact Dr Mohammad Amjad at Northam (08 9690 2249) and Ross Brennan at Albany (08 9892 8474).