Economic impact of canola type and date of seeding

Growers try to seed canola at a time in the spring when they will achieve the highest net returns with the lowest risk. To help better understand the risks and rewards of early (late-April to mid-May) and normal (early to late-May) seeding dates, and the interaction with hybrid, open-pollinated and Polish-type canola varieties, research scientists with Agriculture and Agri-Food Canada at Beaverlodge, Lacombe and Lethbridge initiated four years of field trials from 2001 through 2004.

Yield and risk analysis found several general trends, but the interaction between time of seeding and canola type varied across location.

Less risk for hybrid canola seeded early

Lacombe

At Lacombe, the hybrid was less risky than the open-pollinated and Polish varieties. For early spring seeding, hybrid canola showed the potential for higher net returns. The Polish canola consistently generated the lowest net returns.

For normal spring seeding, the risk results were consistent with that for early spring seeding. The only difference was that hybrids were more likely to have a higher net return potential in good growing years. Under adverse growing conditions, there would be less difference in net return between hybrid, open-pollinated and Polish canola. Early spring with a hybrid canola at Lacombe will likely have higher net return potential across a range of growing conditions.

Lethbridge

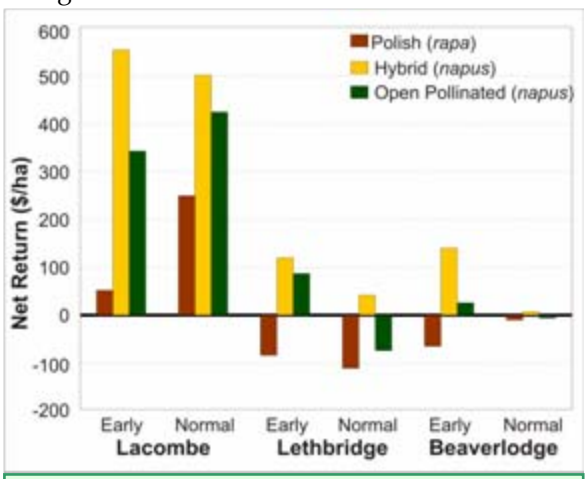
At Lethbridge, under irrigation, the hybrid canola generally had higher potential for net returns compared to the other two canola types. For early spring seeding, the net returns were less consistent than at Lacombe. If growing conditions are bad and yields low, losses were lower with open-pollinated canola than the hybrid. But, the potential for extremely high net return was greater for the hybrid than the open-pollinated canola. Risk analysis found that the hybrid canola type is preferred for a risk averse decision maker.

For normal spring seeding, the potential for severe loss or extremely high return seemed to be similar for all cultivars. However, the hybrid had a higher potential net return, followed by open-pollinated and Polish canola.

Beaverlodge

There were several drought years during this study, lowering the average net return for all seeding dates and canola types. For early spring seeding, the hybrid canola showed higher potential net return compared to the open-pollinated canola. The Polish canola followed with the lowest potential net return at early spring seeding dates.

For normal spring seeding, the potential for a loss was higher for hybrid, followed by open-pollinated and Polish canola. But, the potential for extremely high net return was higher for Polish, followed by open-pollinated and hybrid cultivar. However, the risk analysis revealed that the hybrid would be preferred over other canola types by a risk averse decision maker because of better performance across a wide range of growing conditions.



The mean of annual net returns for canola cultivars for different time of seeding at Beaverlodge, Lacombe and Lethbridge, 2001 – 2004.

Source: B. M. Upadhyay, E. G. Smith, K. N. Harker, J. T. O'Donovan, R. E. Blackshaw, and G. W. Clayton. 2006. Economic Impact of Canola Cultivar and Time of Seeding Decisions. Working paper. Conversion: $/ha divided by 2.47 = $/ac.

In summary, across locations, the hybrid had the highest return followed by open pollinated canola, while the Polish canola was least profitable. The early spring seeding of hybrid tended to be more profitable than the normal spring seeding. The hybrid was generally less risky than open-pollinated and Polish canola, although the risk varied by location.

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