Essential facts about hybrid canola seed

Profitability and productivity are both key financial drivers on the farm today. And, with the kind of returns growers are currently getting for their crops, it’s important growers find new, more cost-effective ways to manage their farm. One way is the adoption of new technology. Hybrid canola seed, for example, has certainly helped growers with their profitability and productivity goals over the last few years. That’s why the hybrid canola seed market has grown from 27% in 2002 to almost 50% in 2005, thanks to significant increases in yield, stand uniformity and harvestability.

However, new technology and new ways of doing things usually cost more money. And that’s the case with hybrid breeding and seed production – the costs are definitely higher than those associated with the breeding and production of open-pollinated (OP) canola varieties.

Faced with rising seed cost, some producers have been tempted to save and replant farm-saved hybrid seed as a practical way of reducing their input costs; however, there may be legal and other considerations that stand in the way of such a strategy.

Consider the impact. If you use farm-saved hybrid seed, you should be aware of both the scientific and practical issues. Compared to OP canola varieties, grain from hybrids (what plant breeders call the F2 generation) will not faithfully reproduce itself when used as seed. If the F2 generation seed is planted, it will produce a range of progeny which may differ in yield, maturity, disease resistance, quality traits and more. For example, the F2 seed from many of the hybrids will have significant variations in herbicide tolerance and male plant sterility. This creates large practical problems when determining an appropriate seeding rate that compensates for the variability in seed performance.

Be informed. Researchers from Agriculture and Agri-Food Canada, in partnership with the Alberta Canola Producers Commission (ACPC) and the Saskatchewan Canola Development Commission (SCDC), have recently been investigating the impact of using farm-saved seed grown from canola hybrids and OP varieties. In 2004, trials were conducted at Scott, SK and Lacombe, AB and in 2005, they were conducted in the following locations: Scott, Melfort and Canora, SK and Lacombe, Beaverlodge and Lethbridge, AB. While complete results will not be available until later in 2006, initial indications reveal:

- Certified hybrid canola seed always yielded significantly more than farm-saved seed from those same hybrids.
- The yield advantage from growing certified hybrid seed was always greater than any potential cost savings associated with farm-saved F2 seed.
- Increasing the seeding rate to compensate for farm-saved seed was generally not considered beneficial.
- No benefit was seen from using larger-sized seed as a way to promote higher yields.
If you’re looking to lower your input costs and are considering planting farm-saved F2 canola seed, here are some things to think about – especially those lost opportunity costs.

First, the grain used for seed represents lost income if it was sold on the open market. Secondly, increased seeding rates, storage costs (and losses), management, cleaning and testing, treating and time pressures all add up to increased costs. When these factors are considered, the price difference between certified and farm-saved F2 seed is not that significant and the increased risks make the strategy even less attractive.

Another point to consider is that seed treatment options are more limited with farm-saved F2 seed. Certified hybrid canola seed comes treated with Helix® or Helix XTra® seed treatments, the brands many growers have come to trust to get their canola crop off to the best possible start and for higher yields. These products are only provided to high-end, high through-put commercial seed treaters, because of the specialized equipment needed to achieve accurate and uniform coverage on the seed.

Let’s also not forget that Canada’s canola customers appreciate and demand a high quality product for their consumers. These markets could be jeopardized with the use of farm-saved F2 seed that results in seed with less clearly defined grain qualities.

**Bred for success.** Syngenta recognizes that diminishing returns currently available to growers mean changes must be made to keep canola production financially viable in western Canada. But planting farm-saved F2 seed is not the answer. Canola breeders will continue to develop better, higher-yielding canola hybrids. The premiums associated with these new technologies will support further enhancements in plant breeding. But keep in mind, with the increased cost in hybrid seed comes an increase in the return on investment for the grower.

**Plan your management strategies now**

At the producer level, all indications show that using farm-saved F2 canola seed is not an effective way to trim production costs. Certified, treated hybrid canola seed has proven itself by consistently providing higher yields, brought about by state of the art genetics and outstanding seed treatment technology.

If you want more information on how to get your certified hybrid canola seed off to the best possible start, call Syngenta’s Customer Resource Centre to get your copy of *Canola Stand Establishment: A Guide to Best Management Practices.*