By Hugo Lochner

Canola symposium of the Protein Research Foundation: Exciting times ahead

Speakers at the symposium were, from the left: Andries Theron, vice-chairman of the PRF, Rob Wilson of DuPont Pioneer in Australia, Rick Horbury, technical adviser of Bayer in Western Australia, Gerhard Scholtemeijer, PRF chairman, Dr John Kirkegaard of the CSIRO in Canberra, Australia and Prof Ferdi Meyer, director of BFAP.

Canola can potentially be more profitable than wheat and barley, but producers will have to increase their average yield by 0,4t/ha. New hybrids and genetically modified (GM) cultivars that are in the pipeline, can give the industry a boost.

In the winter rainfall region of the Western Cape, the profitability of wheat and barley can be better than canola. However, if producers can increase the average yield of their canola from the current 1,4 to 1,76t/ha, canola will be just as profitable. This was the opinion of Prof Ferdi Meyer, director of the Bureau for Food and Agricultural Policy (BFAP), at a canola symposium presented by the Protein Research Foundation (PRF) at Kronenberg near Paarl.

With new technology and good management practices, the yield can be increased to 2t/ha. Certain producers have already achieved yields of 3t/ha, said Gerhard Scholtemeijer, PRF chairman.

Dr John Kirkegaard of the Commonwealth Scientific and Industrial Research Organisation (CSIRO) in Canberra, Australia, said canola can potentially produce a yield of 5t/ha. In Australia yields of 4 and 5t/ha have been achieved in trials.

Rob Wilson of DuPont Pioneer from Wagga Wagga, Australia, said yields of 3t/ha are possible in the right areas. New hybrids and GM canola can play a major role, adding advantages such as vigorous seeds, uniform ripening, higher yield and oil content, resistance against certain diseases and risk management.

A welcome boost

Scholtemeijer said GM canola will provide a welcome boost to the Western Cape canola industry. With Roundup Ready® canola, up to 100 000ha of small grain fields can be brought back into production. The PRF is aiming to get GM canola for the Western Cape.

The first canola in South Africa was planted in 1992. Approximately 400 tons were harvested from 400ha. In 1994 the PRF provided the first funds for canola research, because the organisation recognised the oilseed's potential of making a valuable contribution in the production of sufficient protein for animal consumption in South Africa. In 2014/15, more than 123 000 tons of the crop were harvested.

Andries Theron, vice-chairman of the PRF, said the organisation plays a major role in the funding of canola research. With traditional institutions' standard of research being under suspicion, partnerships between producers and companies such as Bayer and Du Pont Pioneer will have increasingly greater importance.

Managing higher yield

Dr Kirkegaard said producers have to keep up with the changing climate. The current trend in Australia is to plant earlier in an effort to adapt to changing weather patterns. Management and cultivar choice play a major role.

In early planting systems, it is vital to:

- Identify the optimum flowering period for the site. Factors to consider are frost, heat, water stress and radiation.
- Target the earliest planting date to hit the optimum flowering period. Plant long growers first.
- Manage for adequate biomass at flowering for yield target. Make sure of the most cost-effective nitrogen, seeding rate, growth type.
- Identify ways to allocate more of the biomass to grain. Suitable cultivars are important.

Producers should ensure that they plant seed of good quality and vigour, and preferably large in size. In respect of seed quality, the seed size is the main factor. This can have a greater effect on yield than planting depth. He warned that producers must target a suitable and even planting depth, however. In ideal conditions, the optimum depth is 10 to 15mm, but in practice a depth of 25mm is more common for adequate moisture.

There must be good soil-seed contact and adequate moisture, and seeds must be separated from the fertiliser and protected from pests. Canola seeds are small, and therefore pressure wheels should not place excessive pressure on them.

For more information on the canola symposium, visit *www.proteinresearch.net*