New bean cultivar opens door for combine harvesting

Labour-intensive harvesting counteracts high dry bean prices. Will a sugar bean that can be combine-harvested change all that? Robyn Joubert reports.

Dry bean prices are significantly higher than those of its cousin the soya bean, but dry beans have a reputation as one of the more labour-intensive field crops to harvest.

'Quality is good as pods don't touch the wet soil.'

While farmers would love to use combine harvesters to get around high labour costs, dry beans are generally hard to harvest mechanically because the plants tend to lodge and the pods are carried close to the ground. But this could change with the release two years ago of an upright-growing dry bean cultivar.

The new sugar bean cultivar, named Ukulinga, was developed by Pro-Seed in conjunction with McDonald Seeds in Pietermaritzburg. It's been grown extensively in Mokopane (Potgietersrus), the Nigel/Delmas area, Harrismith, and the major bean growing areas of northern KZN.

'The cultivar has a bush-growth habit with a long maturity period, which makes it suitable for the Highveld dry bean production areas,' says Bruce McDonald, owner of McDonald Seeds.

'A strong upright stem prevents it from lodging. The lowest pods are about 5cm above the soil surface. Even in the wet season, the quality of the beans is good as the pods don't come into contact with the wet soil.'

Farmers conduct trials

During the past season, farmers in KZN and the Free State have experimented with mechanically harvesting the Ukulinga dry bean, with good results. "The trials have shown that the combine harvester can pick up the plants without any problem and the number of plants left behind was negligible," says Bruce.

'Spillage was minimal due to the Ukulinga pod's resistance to shattering.'

In a trial in the Bergville area, a 7ha block was harvested in less than two hours. The grower, who did not wish to be named, said that mechanical harvesting is the way forward for dry bean production and that the contracting rates for combining are R650/hour plus fuel.

Using a row spacing of 30cm, he harvested 2.2t/ha, which is more than his average yield in that field.

"In the coming season, farmers growing this variety intent to conduct experiments with fertilisation and spacing trials to optimise Ukulinga yields," says Bruce. "Going back to windrow harvesting is not an option for them."

Contact Bruce McDonald on 033 346 0121 or e-mail bruce@mcdonaldseeds.co.za.

Photos: Rob Melis