



## Summer Legumes Field Day at Jimbour

On the 18th February Conservation Farmers held a summer legume field walk as part of their legume soil health project. Grower numbers were a little down as many were rushing to get sorghum harvested prior to the predicted weekend rainfall. Those who were present, were able to see firsthand summer legume options and could discuss all aspects of legume production with the researchers and consultants in attendance.

Growers and consultants alike found the day really interesting, especially as many more growers are now including legumes in their rotations. The reasons for the increase in legume adoption are varied. For some like host and trial co-operator St John Kent, it is related to looking at options to reduce reliance on applied Nitrogen, but for others it is to help in the management of problem weeds or diseases. Regardless of the agronomic reasons for adoption of legumes, economic are important too.

Steve Muller from Dalby Rural Supplies said "we have seen increases in plantings of mung beans. The recent price increases for mung beans have made them more competitive and worth the risk of including in the rotation. They provide a summer cash flow and give growers access to alternative chemistry to control weeds such as feather top rhodes grass and barnyard grass."

John Fuelling of Fuelling Ag said "legumes are increasingly important in crop rotations. They are a

valuable tool for Integrated Weed Management (IWM) programs, giving more control options to growers. Often growers plant legumes primarily to improve weed management. The added bonus is their contribution to soil Nitrogen."



*Fuello and St John*

## Summer Legumes Field Day at Jimbour continued

For growers like St John who are targeting soil Nitrogen improvements, biomass production is critical. Research findings indicate that as a general rule, legumes can fix 15-25kg of Nitrogen for every tonne of shoot biomass accumulated. Legumes also provide Nitrogen residues after decomposition of soft plant tissue.

The focus of the field day was primarily summer legumes, and although mung bean plantings have increased, many would like to see a more robust commercial legume for summer. The trial plots included alternatives: guar; which has good seed production but not huge biomass production, and lab lab; which has exceptional biomass production. At this stage neither guar nor lab lab are viable commercial crops, although lab lab is likely to fit well as a green manure option.

Winter legumes are generally more widely used in rotations. "The steady increase in the use of faba beans in winter rotations on the Darling Downs is largely driven by good prices and biomass production," said Steve Muller.

John Fuelling has also seen a gradual increase in the use of faba beans, often replacing chickpeas, specifically for their biomass production and their ability to fix Nitrogen.

All those present are looking forward to seeing the project results, including soil Nitrogen levels, crop yields and analysis of the economics of including commercial crops or green manure legumes in crop rotations.

St John Kent summed up the legume soil health project well; "We regularly see a legume effect in following cereal crops. Through this project we hope to start to quantify that effect and to collate scientific proof of Nitrogen fixation, yield implications and the economics of including legumes into the cropping system."

*Kathryn Galea, St John Kent, Rod Kerr, Daniel Rodriguez*



# Summer Legumes Field Day at Jimbour continued



*Phillip Syme, Mitch Seis, Cameron Bolan*

