

Crystal mungbeans sparkle as an opportunity crop

Spending time and effort to grow a mungbean crop will achieve better yield and quality.

This is the motto of Lee Moller, manager of 'Araluen' Biloela Queensland, who has been growing mungbeans for five years. Already, his proven successes include winning the 2004–05 Australian Mungbean Association (AMA) National Award for Excellence.

Mungbeans are an excellent fit into a northern farming rotation for producers looking for a quick crop that requires minimal water and fertiliser.

Lee views mungbeans as an opportunity crop, which he grows in preference to sorghum as they usually offer better returns and require very little water.

Lee usually plants mungbeans as a broadacre crop at 22 seeds/m² – the recommended established plant population for mungbeans is 20–25 plants/m². But in the 2006–07 season he planted the Crystal variety in rows for the first time at 15 seeds/m² which performed very well.

"Crystal yielded 1.2 tonnes per hectare, against Satin's yield of 0.6 tonnes, so this was a great yield considering the very dry season," he said.

"I really liked the way Crystal sets its pods up higher, which means that we don't have to have the header front on the ground picking up dirt."

The AMA variety, Crystal, was released commercially in September 2008 and has been extensively tested by the Queensland and New South Wales departments of Primary Industries in 35 regional yield trials.

Good performer – both dryland and irrigated

Queensland Department of Primary Industries and Fisheries (DPI&F) plant breeder, Col Douglas, said this variety had performed well in both spring and summer plantings, under both dryland and irrigated systems and boasted strong disease resistance and superior grain quality.

"Initially bred by CSIRO

from a cross of White Gold, Emerald and an experimental variety, Crystal has been extensively trialled over five years in a joint DPI&F and NSW DPI program, based at Hermitage Research Station near Warwick, with additional field evaluation conducted at Biloela and Narrabri," Col said.

In field trials over the past five years, Crystal produced yields that were on average 20 per cent higher than Emerald and four per cent higher than White Gold.

"Research also suggests that of current commercial varieties it has the best available package of disease resistance for tan spot, powdery mildew and halo blight – all diseases of concern for mungbean growers," Col said.

The 'Araluen' crop was sprayed twice, once for mirids at 30 days and again for bean pod borer. Lee has attended the AMA certified agronomist course and does most of the agronomy and insect checking himself, in consultation with Biloela agronomist Cambell Hill.

"This season we would like to grow Crys-

tal side by side with White Gold as a comparison," he said. Lee has already planted a crop of Crystal in the 2008 spring.

Marketing is vital

Pulse Australia northern region development officer Gordon Cumming said that it is imperative to consider the marketing of mungbeans.

"Mungbeans are marketed as a vegetable crop, as opposed to a bulk grain commodity, and growers should discuss variety choice and marketing options before they plant," he said.

As the winner of the 2004–05 AMA national crop competition Lee won a trip to Kuala Lumpur, Malaysia, inspecting the international mungbean industry.

"It's great to see what happens to the seed after we sell it to the exporter – I could see first hand what the buyers are looking for and why," he said.

"As a result I came home and decided to put more effort into growing mungbeans so I could better meet these markets."

"I market my mungbeans through Damian White at Biloela and I believe that understanding the mungbean market around the world helps with marketing mungbeans locally."

The National Mungbean Improvement Program funded by the Grains Research and Development Corporation, DPI&F and NSW DPI released two new high yielding varieties, Crystal and Satin II, in September 2008 with their commercial partner, the AMA.

DPI&F pulse and grain legume industry development officer, Jayne Gentry, said the program was funded for a further three years with a mandate to build on these productivity gains and would deliver improved reliability by incorporating superior disease resistance to tan spot, powdery mildew and halo blight.

For further information visit www.dpi.qld.gov.au under 'field crops'.



Lee Moller, manager of 'Araluen' near Biloela in the Dawson-Callide region of Queensland.

