A rotation of cotton and corn has been a great success on the “Mayfield” property of Glenn Fresser at Nandi, via Dalby.

Farm manager, Brian Strand, said a typical rotation would be a crop of corn, followed by cotton the following summer, and then an opportunity crop or long fallow before returning the paddock to corn again.

Brian said there was definitely a yield increase in the cotton following a maize crop.

“It is quite noticeable,” Brian said. “Cotton loves growing after maize. I would guess a one bale per hectare benefit.”

The maize hybrid Pioneer 3237 has been a solid performer on the Fresser farm.

Brian said 3237 was the major variety grown on the property and had been an excellent performer over many years.

Last season the hybrid averaged more than 12 tonnes of grain per hectare in commercial paddocks and reached yields of 12.46 tonnes per hectare in on-farm trials.

“We had good results this season with maize doing well in a particularly long and hot summer,” Brian said.

He said 3237 had been their main variety because of its consistent high yields and ability to handle stress.

“We run short of water occasionally and it is handy to know it can pull through a few tough conditions.”

The new hybrid Pioneer 31G98 has been grown on the farm for the past two seasons and has performed well in both years.

Both 31G98 and 3237 have demonstrated good standability.

Brian said they had concentrated on feed hybrids in recent years, which generally yielded higher and ultimately were more profitable than the processing types. The grain was sold to local feedlots.

Irrigation is sourced from overland flows into ring tanks and bores and so water is at a premium.

“We grow the crops to maximise our returns on our most limiting resource — water,” Brian said.

He said cotton was the main crop grown on the farm for turning water into dollars with maize coming in a close second.

Each year a number of trials are conducted on the farm in an effort to identify techniques to maximise yield increments and profit.

Last season the trials included hybrid comparisons, different planting rates and increased water application.

Brian said an extra watering provided a yield benefit of 400 kilograms per hectare and demonstrated the case of “water in, yield out”.

He said both cotton and maize were predictable to grow, meaning they will normally provide a yield matched to the crop inputs.

Commercial maize on the property is grown at a rate of 65,000 plants per hectare.

This target for the commercial areas has proved to be ideal for the water and nutritional regime used on the farm.

Brian said a higher population of 72,000 plants per hectare showed no significant yield difference.

“The rate of 65,000 plants per hectare is not far off the mark for our management system,” he said.