



## Planter modifications from 1.5 m to 1.8 m

The Bugeja's of Homebush began planting into a controlled-traffic system in 2006. They chose to modify their current 1994 Bonel planter rather than purchase a new one. This planter is a one-man operation, a dip system which they feel is more reliable than a spray system, has a consistent feed, and has provided good results in the past.

The planter has two elevators – one from the main bin to the front hopper, and one from the hopper to the chute. The Bugeja's made a number of modifications to the planter, some were necessary for the conversion to controlled-traffic, while others were additional changes which were not essential from the start, but which they could see provided long term benefits. The Bugeja's see planting as the most important job, and while having good quality billets is important, they also feel that a consistent planting feed, rate, and even spread of billets is also essential.

### Goose Neck

The first modification was to widen the planter frame and install a gooseneck to add more room between the planter and the hopper and make the planter more manoeuvrable.

While this modification could be done in your shed, the Bugeja's were running out of time and engaged an engineering group to do the work - \$12,500.



### Chute modifications

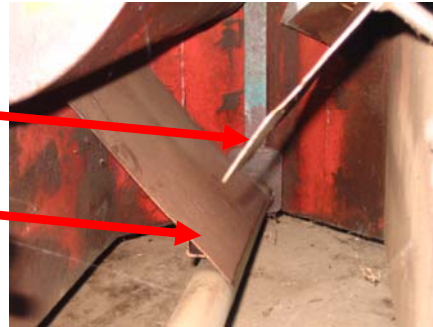
The chute was widened to 460 mm to allow for a wider stool at 1.8 m. To give a good even spread of billets they installed a pipe in the middle of the chute, with two feeder chutes - one feeder chute to the left, and one to the right.



Left and right hand feeder chutes.

Pipe installed down the centre of the chute to evenly distribute the billets.

Left and right hand feeder chutes to distribute the billets. These plates are different widths to allow half the billets to fall to the right, and the other half to the left



The ends of the chute were also lengthened with these 30 mm high tails to help with soil placement. When the dirt is pulled back over the billets, they were being pushed in closer together. These tails stop the soil dragging the billets together as the soil now needs to go over these and then fall on top of the billets.

**Crumble roller**

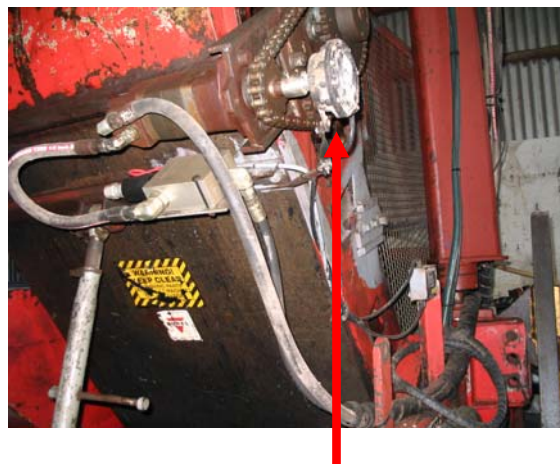
A crumble roller was added to lightly compact the soil after covering the billets. It leaves the soil with a slight crown.



**Planting rate monitor**

A billet planting rate monitor was installed to allow the Bugeja's to specify the amount of cane put in the ground. The monitor requires calibration but ultimately it will plant exactly the quantity specified.

The planting rate monitor displays the number of elevator slats per 100 m of row.



The planting rate motor changes the speed of the slates to ensure the correct number per 100 m row is distributed if the tractor speed changes.

**Essential and optional modifications for controlled-traffic:**

Modifications	Time	Money	Benefits
Goose Neck – optional	Two weeks at engineering works	\$12,500	More manoeuvrable
Chute modifications - essential	Less than three days	<\$1,000	More even spread of billets Allows for wider stool Better placement of soil on billets
Crumble roller - optional			Light compaction of soil
Planting rate monitor - optional	Two weeks on and off for calibration	\$5,500	Very even planting rate along block Exact planting rate known

*The information in this fact sheet was provided by the Bugeja's as part of the Homebush Innovative Farmers Group, with funding from SRDC.*



**Homebush Innovative Farmers**