Comparison of oat varieties and hay yields

Key findings

- The highest yielding commercial oaten hay varieties at Hart in 2009 were Wintaroo, Tungoo and Mulgara, averaging 6.7 t/ha.
- The highest yielding variety was the breeders line, SV9200-3 (8.7 t/ha).

Why do the trial?

To measure the hay yield of 6 oat varieties and lines against the current industry standards.

How was it done?

Plot size	1.4m x 10m	**Fertiliser**	DAP @ 60 kg/ha + 2% Zn Urea @ 50 kg/ha 10th August
Seeding date	15th May 2009		

The trial was a randomised complete block design with 3 replicates and 6 varieties.

Seeding rates were adjusted for grain size to achieve a plant density of 220 plants per square metre.

All plots were assessed for hay yield by cutting 1 square metre of dry matter per plot at 10cm above the soil surface, at the milk dough stage. The cutting dates are shown in table 1.

Edge rows were excluded from the sample area.

Results

The average hay yield for oats sown at Hart on the 15th of May in 2009 was 6.7 t/ha.

The breeders line SV97200-3, which is a long season variety took advantage of the spring rainfall and was the last to be cut (Table 1). It produced the highest hay yield of 8.7 t/ha. The next highest yielding variety was Wintaroo at 7.1 t/ha, which was 22% behind SV97200-3. Tungoo and Mulgara were not significantly different to Wintaroo. The lowest yielding oat lines at Hart in 2009 were Kangaroo and Brusher, averaging 5.6 t/ha.

Table 1: Cutting date and hay yield (t/ha) for oaten hay varieties at Hart in 2009.

Variety	Date of cutting	Hay yield (t/ha)	% of Wintaroo
SV97200-3	19-Oct	8.7	122
Wintaroo	30-Sep	7.1	100
Tungoo	30-Sep	6.7	94
Mulgara	23-Sep	6.3	89
Kangaroo	23-Sep	5.7	81
Brusher	23-Sep	5.5	77
Site mean		6.7	94
LSD (5%)		0.8	12

Carlyn Mellor, Stuart Sherriff, Chris Lawson and Sam Trengove at the Hart Eve Dinner 2009