



AGRI UPDATE

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SOYBEAN CULTIVAR RECOMMENDATIONS

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The Agronomy Section within the Directorate: Research & Technology Development of the KwaZulu-Natal Department of Agriculture and Environmental Affairs, the Agricultural Research Council – Grain Crops Institute and seed companies, conducted soybean cultivar evaluation trials at Cedara, Greytown and Dundee. These trials formed part of a national cultivar trial conducted in the major production areas of South Africa.

The trials were planted in rows spaced 0.45 m, 0.75m, 0.86 m, and 0.90 m apart at Cedara, two sites at Greytown, and Dundee, respectively. The seeding rate was 400 000 seeds/hectare. The crops were grown under dry-land conditions and were fertilized for optimum grain yields, based on soil analysis recommendations from the Cedara Analytical Laboratory. Weeds, insects and diseases were controlled throughout the growing-season.

Successful soybean production is based on:

- Fertilizing the crop according to the soil analysis recommendations.

- Thorough land preparation.
- Optimum planting period.
- Cultivar selection.
- Control of weeds, insects and diseases.

Table 1 indicates the mean yields recorded from the ten highest yielding cultivars at each locality. Four seasons' data were used for Cedara and Greytown. Only two seasons' data were available for Dundee.

Although the cultivars were evaluated at these sites, farmers intending to plant soybeans in other areas should consider planting those cultivars with consistent performances at all the evaluated sites. Selections could then be confirmed by advisors with local knowledge or seed company representatives.

While grain yield is rightly considered an important factor, other characteristics should also be taken into account. These include: growing-season length, genetic modification, bottom pod height, standability and disease resistance.

TABLE 1 Soybean cultivar yields recorded at the different localities

Cedara*		Greytown*		Dundee#	
Cultivar	t/ha	Cultivar	t/ha	Cultivar	t/ha
PAN 1583R	3.86	PAN 1583R	2.84	HIGHVELD TOP	2.40
PAN 1454R	3.84	LS 6161R	2.78	A 5409RG	2.36
PAN 1664R	3.75	PAN 1664R	2.77	PAN 1664R	2.33
LS 6161R	3.73	PAN 1454R	2.64	LS 6444R	2.28
LS 6444R	3.60	LS 6150R	2.65	PHB 95Y40	2.28
PAN 1666R	3.57	LS 6444R	2.62	SONOP	2.24
HERON	3.47	PAN 1666R	2.58	DUNDEE	2.11
PHB 95B53	3.44	A 5409RG	2.54	PAN 1583R	2.10
DUNDEE	3.35	HERON	2.26	LS 6150R	2.08
A 5409RG	3.33	PHB 95B53	2.17	PAN 1454R	2.07

* Seasons 2009/10 to 2012/13

Seasons 2011/12 and 2012/13

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