

Germinating ideas

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This edition of Germinating Ideas will look at establishing a viable plant stand and the main factors to consider in preparing for planting and the coming season. Planting is a critical time on the cotton calendar and attention to detail will pay off with a better seedling establishment and plant stand. There is also a reminder about the CSD website and its role as an information provider to the cotton industry.

Planting considerations

With the 2006–07 season on the horizon it is important to plan ahead to be prepared for planting. Having everything ready and in place ready to go can reduce the stress of planting cotton at this very busy time.

There are many factors that can affect

the final plant population in a cotton field. They will have varying effects according to their severity and interactions with others.

Some of these considerations are-

- Water up versus pre water;
- Soil type;
- Stubble type and cropping history;
- Soil tilth;
- Planting equipment/type;
- Planting depth;
- Insect and weed presence and pressure;
- Herbicide program;
- Disease history;
- Row configuration;
- Soil temperature; and,
- Seed quality — germination and vigour (SVI)

Information on seeds per kg, germina-

tion percentage and the Seed Vigour Index (SVI) is available from CSD seed resellers and the CSD website's information centre.

INFORMATION IN A CLICK

The CSD website is experiencing a large increase in the number of hits as the amount of information continues to build on the site.

The site is continually being updated and a weekly Web on Wednesday video presentation provides in-depth interviews on many current issues. Facts on Friday is also updated as an information sheet on topical issues. These can also be emailed or faxed direct to you if required. These are just a few of the many choices available to registered web site users.

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Attention to detail will pay off at planting time.

The site's main headings are:

- Corporate profile;
- Varieties;
- Trial tracking;
- Information centre;
- Agronomy tools; and,
- Request information.

By clicking on any of these headings it is possible to choose from a number of sub headings and this will lead to specific pages within the site. There are also links to many relevant cotton and agricultural sites and the results from the past four years of CSD trials are available on line.

The Variety Performance Comparison is a very useful source of variety performance. It is under Agronomy tools → Variety selector → Variety Performance Comparison. This allows users to compare any two varieties' yield and fibre quality data across all areas across several years. Specific sites and years can also be obtained along with either dryland or irrigated trial results. 🌱

PLANTING RATE FORMULAE CALCULATIONS AND EXAMPLES

The following formula can be used to assess how much seed is required.

Kg of seed per hectare required =

$$\frac{\text{Number of plants per metre (required)} \times 10,000}{\text{Seeds per kg} \times \text{germination rate \%} \times \text{establishment rate \%}}$$

Desired plant population (plants per metre)	÷	Germination %	÷	Expected field establishment %	=	Seeds per metre
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Examples

Field 1 (soybean fallow)

$$12 \div 0.85 \div 70 = \text{seeds per metre required}$$

- The establishment percentage in this case is 70 per cent due to increased seedling disease after soybeans

Field 2 (fallow, good conditions and pre irrigated)

$$12 \div 0.85 \div 90 = 15 \text{ seeds per metre required}$$

- The establishment percentage in this case is 90 per cent due to excellent conditions

Seeds per metre	×	10,000 metres per hectare	÷	Seeds per kg	=	Planting rate
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Examples based on Sicot 71 with 10,500 seeds per kg.

Examples

Field 1 (Soybean fallow)

- Seeds per metre (20) × 10,000 ÷ 10,500 = 19 kg per hectare

Field 2 (Fallow, good conditions and pre irrigated)

- Seeds per metre (15) × 10,000 ÷ 10,500 = 14 kg per hectare

Planting rate kg per hectare	×	hectares	÷	20 kg bags	=	Number of bags of seed required
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It's almost planting time again.