

Minimum Till
Minimum Water
Maximum Profit

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Disclaimer

- The information in this presentation is relevant to Mayfield Farming Company and may or may not be applicable to your farming environment
- The presenter recommends that individuals seek their own independent advice before applying methods outlined in this presentation.
- The presenter is pretty sure that he may not be a reliable source of information
- The presentation contains mild course language and scenes which may offend some viewers

Why Change?

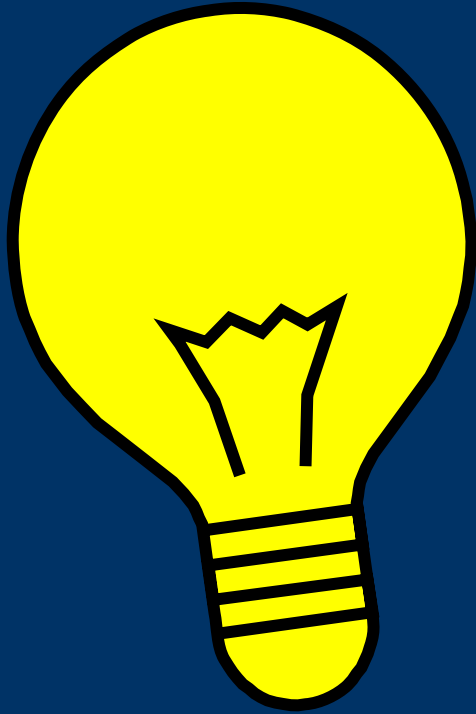
- Lack of water
- Need to protect soil health
- Need to reduce input costs
- An alternative to double-skip
- Need for Crop Rotations

**How can we
use water more
efficiently?**

**How can we
reduce crop
costs?**

**And keep the
stubble
standing...**





Then Glenn had a
moment of
inspiration...

**I've
got it !!**



TMR-COTB-LSS-PS

- Two metre row
- Centre of the bed
- Leave stubble standing
- Planting system



**Let's
do it!**

**You can only
find out
by trying!**

**OH NO!
Now I'm going to
have to modify all
the gear!**

And so the
adventure began...



The Trial

- First trial crop planted in October 2006
- Two-metre wide rows
- Planted in the centre of the bed
- Left sorghum stubble standing

- **RESULTED IN**
Reasonable yields of 4.9 bales to hectare
and good quality
- showed promise

The Method

- Modify planting, spraying & picking equipment to suit new spacing
- Use of GPS was important



The Method



- Planted 300 hectares in 2007
- 80BRF, 70B, 70BRF
- Disc-in fertilizer

• No ground work apart from required pupae-busting

The Method

- And then for some SH*T!
- 3000 tonne manure over two weeks



Benefits of Stubble



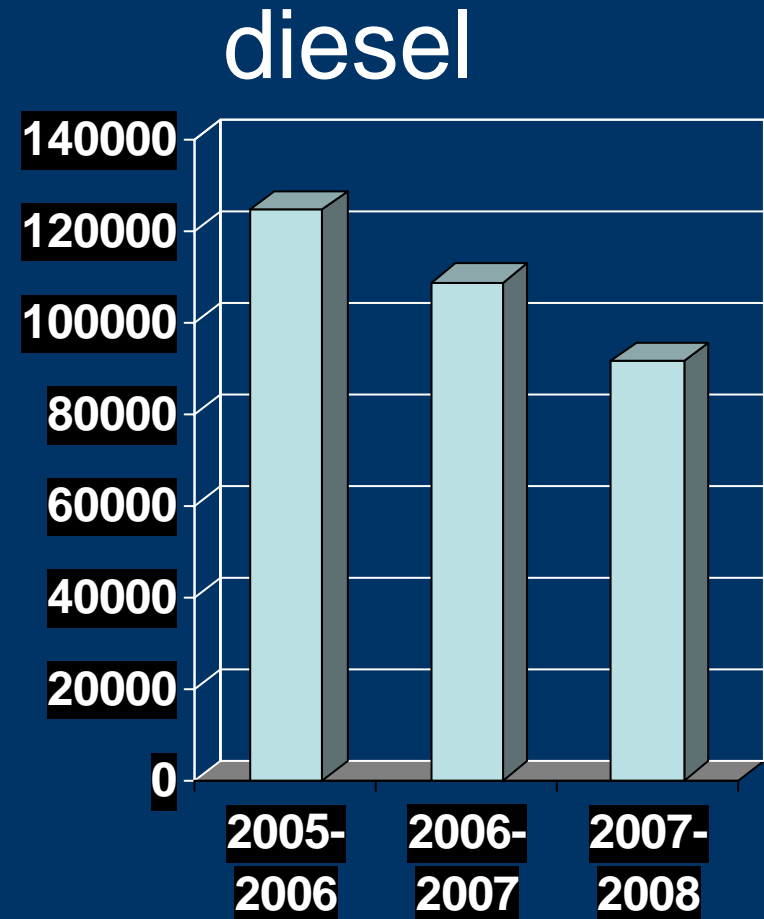
- Stubble harbours beneficials
- Stubble protects young growing plants
- Water penetration

Advantages over double-skip

- Sunlight to every part of the plant
- Able to leave all stubble standing
- Ability to grow various crops in alternate place on permanent bed

Financial Benefits

- Reduced labour costs
- Reduced seed, fertilizer, chemical costs
- Half licensing costs
- Reduced fuel use
- No aerial spraying



Overall farm consumption of diesel reduced from 125,000 to 92,000 litres.

Environmental Benefits

- Reduced carbon footprint
reduced fuel use – means reduced emissions
- No aerial spraying
- Best use of stubble – no burning.

Practical Benefits

- Wider rows means we could easily see where the water was up to!
- Wider heads on picker made it easy to clean out spindles!

Planning Benefits

- Versatility – can ramp up the irrigation and fertilizing if conditions allow
- Certainty – gives us more confidence that we can grow a crop each year
- Financial budgeting - simplified due to set rotations

The Results

- Loaded up with fruit from top to bottom
- Could defoliate without waiting for top bolls



The Results - Yields

- Farm average
7.29 bales / hectare
- Best field average
8.05 bales / hectare

Mirid trial of 3 modules
by DPI:
9.12 bales / hectare

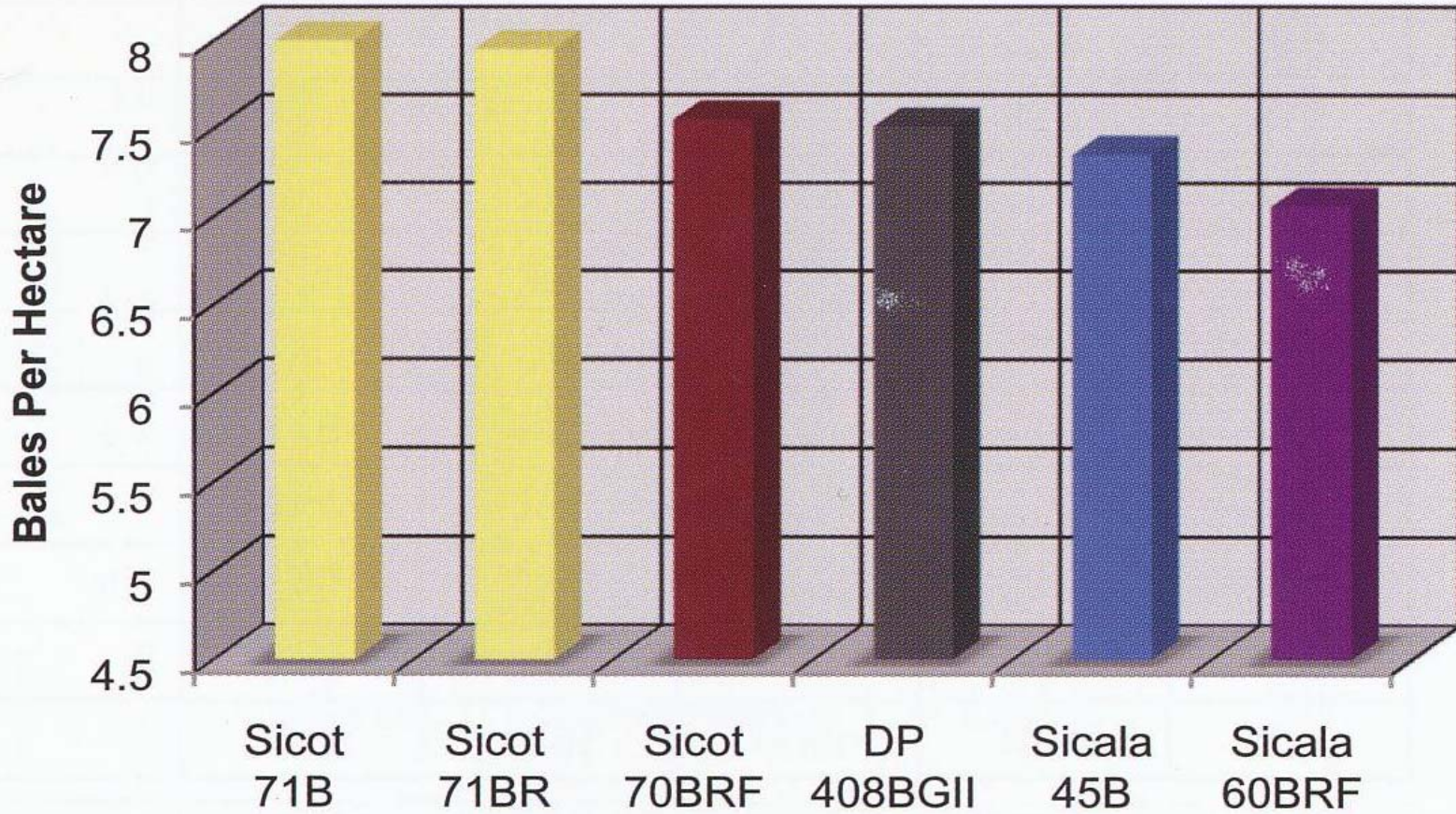


CSD Trials





Scale Change

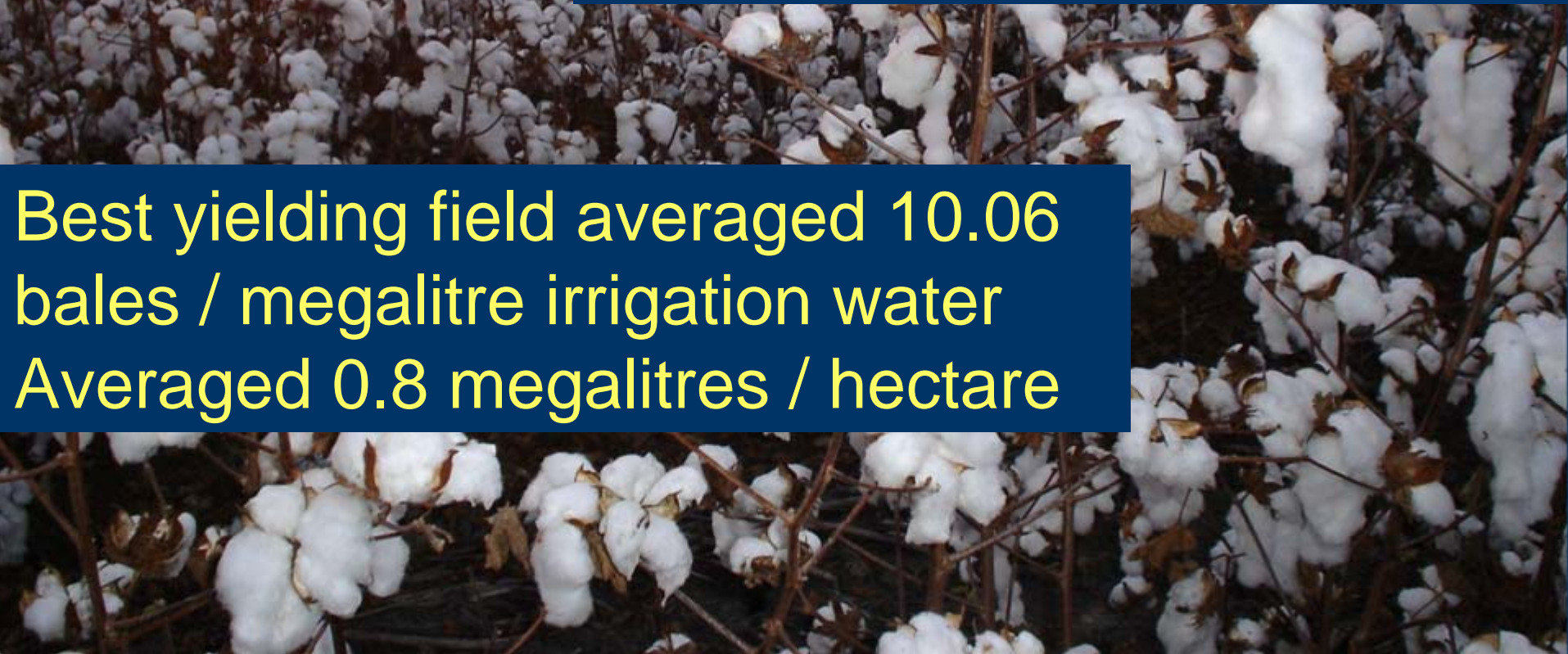


The Water Efficiency



- Farm averaged 5.83 bales / megalitre irrigation water
- Farm averaged 1.25 megalitres / hectare

Best yielding field averaged 10.06 bales / megalitre irrigation water
Averaged 0.8 megalitres / hectare

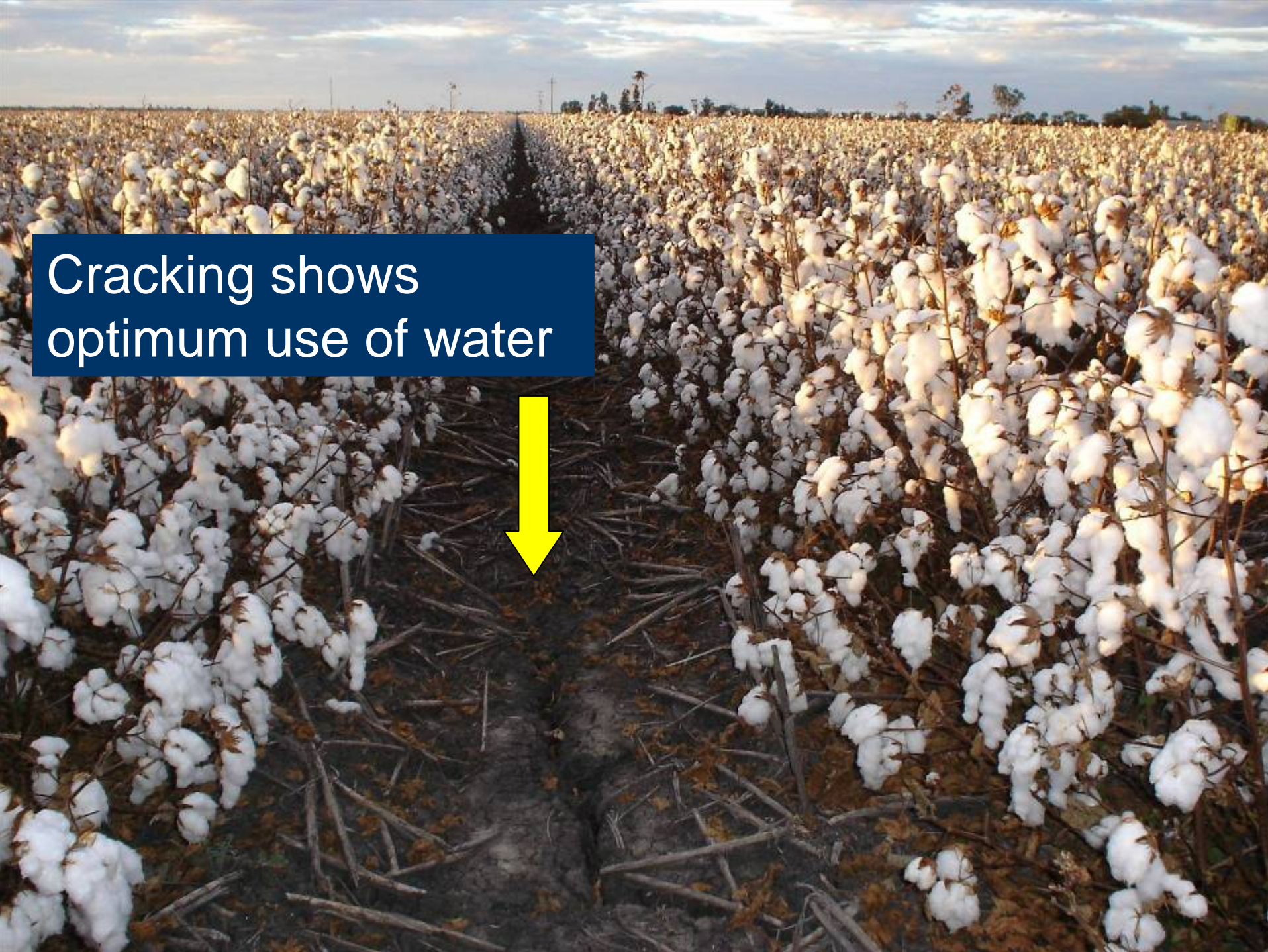


The Water Efficiency

Did get rain at the right time:

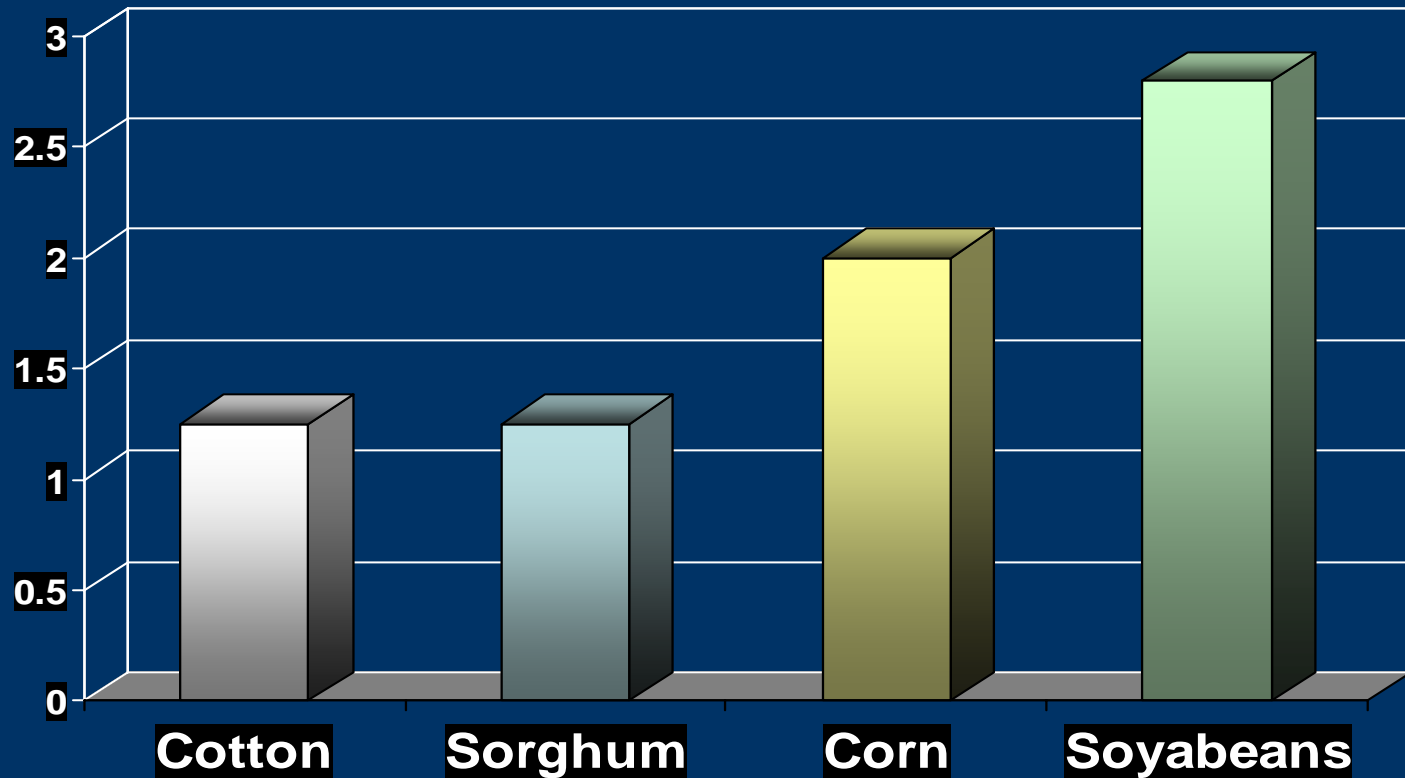
Month	mm
Sept 07	24
Oct 07	56
Nov 07	137
Dec 07	68
Jan 08	9
Feb 08	192
Mar 08	39
Apr 08	13

Cracking shows optimum use of water



The Water Efficiency

- Estimate cotton using same or less water per hectare than our grain crops



Lessons we've learnt

- Try something new... you never know where it might lead you.
- Teamwork is important
- Always listen to new ideas

What next?

- Continue to be involved in research, trials and trying new ideas
- Currently, trialing Vetch as a ground cover and to build nitrogen in soil
- More efficiencies - weed seeker
- biodiesel?



The
Challenge for
the Future..

Acknowledgements

Glenn & Audrey Fresser

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Bernie Caffrey

Murray Boshammer & the TAGS Team, Dalby

Darling wife Jessica & son Cooper!

**And the Good Lord above by who
“all things are possible”**

God owns the country, we're just share-farming it!