



IREC Wet weather strategy workshop

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Information for innovation



Adapting to Change

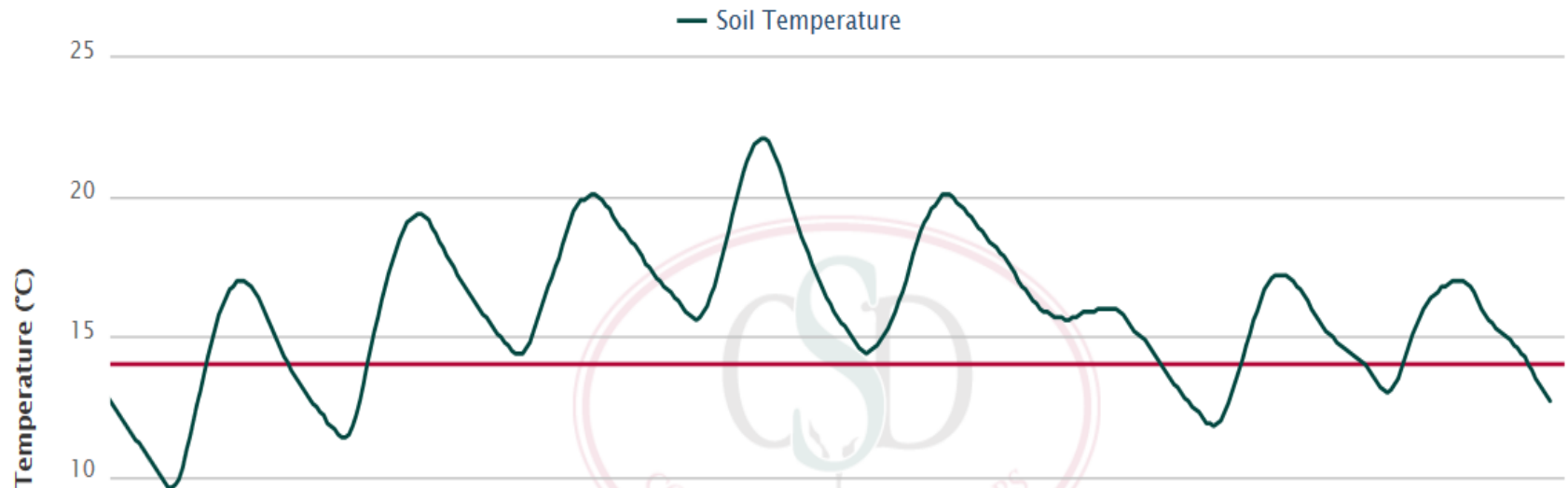


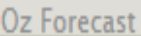


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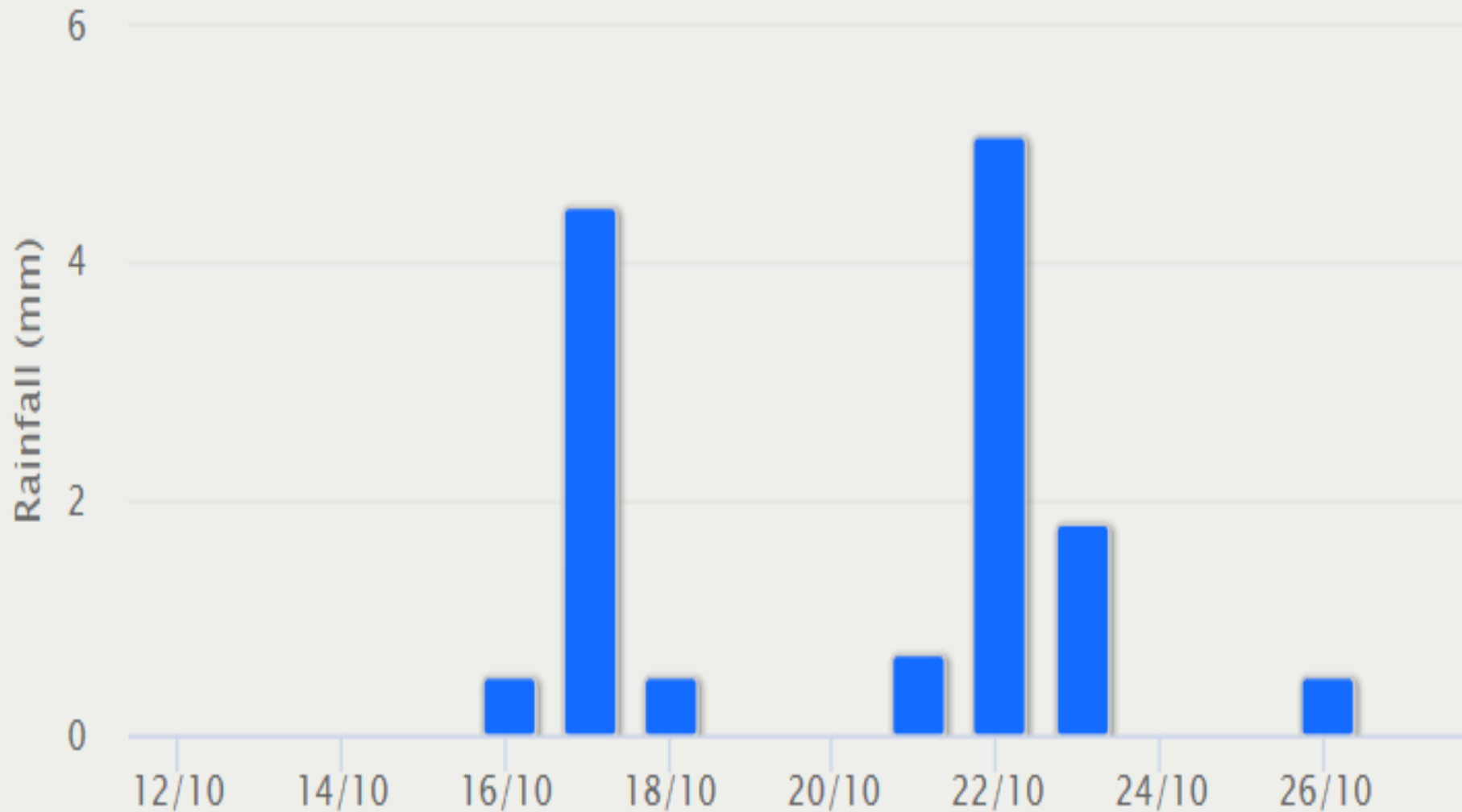
[Home](#) > [The FastStart Fund Soil Temperature Network](#) > [Hay](#)

"Woolloondool", Hay

[Last 7 Days](#)[7 Day Forecast Temperature](#)[Last 24 Hours](#)[Last 30 Days](#)[Surface Moisture Volume](#)[Location of "Woolloondool"](#)



GFS Extended Forecast





Moisture Manager Planting Update: 7 October, 2016

Multi-week Rainfall and Temperature guidance summary (7 October, 2016):

Source	Model Accessed	Temperature Forecast	Precipitation Outlook
POAMA Multi-week(BOM)	7 October	Cooler than average all areas	Rain event 9-22 Oct: Emerald, Balonne & McIntyre Clear to 29 Oct all remaining areas
Japan Met Assoc.	7 October	Cooler than average. Warm 22-31 Oct	Clear 8-14 Oct all areas Clear 15-31 Oct all areas
Beijing Climate Centre	7 October	Cooler than average	Clear 6-15 Oct all areas Clear 16-25 Oct except Emerald (rain) Rain 26 Oct - 4 Nov all areas
NCEP (GFS) 16-Day	7 October	N/A	Emerald: 20mm 14 Oct Balonne: 30mm 21 Oct Darling Downs: 10mm 21 Oct Border Rvrs/Gwydir: 20mm 21 Oct Namoi: 40mm 21 Oct Walgett: rain 16-21 Oct Warren: rain 16-21 Oct Hillston: rain 19-21 Oct Hay: rain 20 & 21 Oct

Summary (7 Oct, 2016)



At the time of this analysis;

- Most of the rainfall activity looks to be in Q'ld during October
- NCEP(16-day) is showing a general system affecting all areas 19-21 October – NSW predicted rainfall not consistent with other models. This may fade away, but worth keeping an eye on in another week.
- The SAM remains strongly negative pushing drier south-westerly's though the Macquarie, Namoi and Gwydir. Research has shown historically; this has **not been good** for moisture circulation in the heart of cotton growing areas.
- 2 of 4 models showing temperatures rising towards the end of October but generally cool throughout.

BLACK root rot delays development of the crop.

Symptoms

Seedlings are stunted and slow growing early in the season compared with healthy plants from the same field. Roots appear black and there are generally few lateral roots. The black layer can be removed by thumb and forefinger exposing a white centre. As the season gets warmer the black layer sloughs off and normal growth resumes. Usually first observed as patches of stunted, slow growing cotton seedlings apparent only early in the growing season. In subsequent seasons

the patches may no longer be obvious as the pathogen spreads throughout the field.

Fungus can infect the centre of the tap root causing a 'black heart'.

Environmental factors

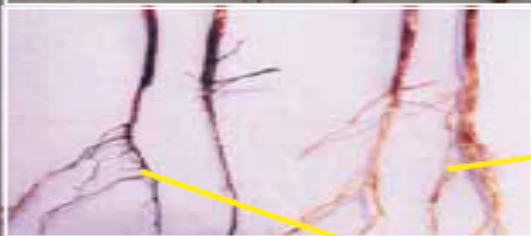
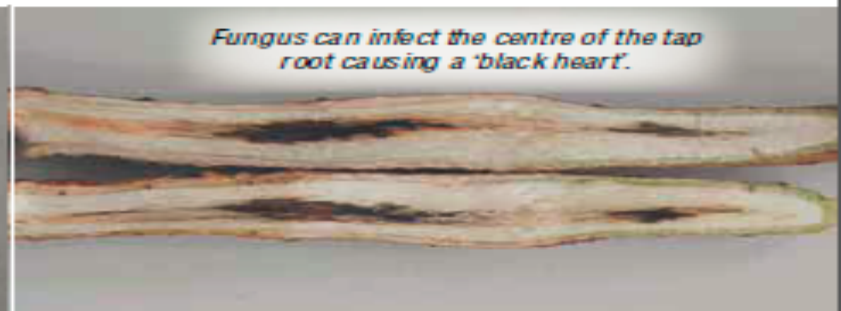
Favoured by cool wet conditions.

Symptoms will be more severe in medium to heavy clay soils.

Favoured by cotton following susceptible crops, including most legumes and cotton.

Looks like

See pages: 12, 20, 31, 33, 49, 50, 51, 52, 59.



CRDC trial 2000

Table 20: Decline in the population of *Thielaviopsis basicola* after summer flooding of a field at Merah North

	Sampling position	
	50 in from head ditch	50 in from tail ditch
Water depth (cm)	30	55
Soil temperature ^A maximum (°C)	26.2	25.6
Soil temperature ^A minimum (°C)	23.8	24.1
Population before (spores/g soil)	359 ± 69	485 ± 53
Population after (spores/g soil)	8 ± 3	19 ± 4
Population reduction	98%	96%

^A10 cm below the top of the bed.

Questions?

