Options for managing limited irrigation water

These options are very general in nature. Every grower's circumstance, water situation and approach to risk will be different. Feel free to call BPS extension staff for specific advice for your crop or for more information about irrigation scheduling and what tools are available to help make decisions.

Growers need to know their water use for the 2014/2015 season to make informed decisions for the current season.

Irrigation Management

Prioritise irrigation requirements. Do not sacrifice irrigations on crops with high yield potential during peak growing periods. It is generally better to get crops growing quickly with optimised irrigation, rather than trying to save water for late in the season for a crop that has been drought stressed.

Do not over-irrigate young plant and ratoons. There can be a tendency for young plant and ratoon

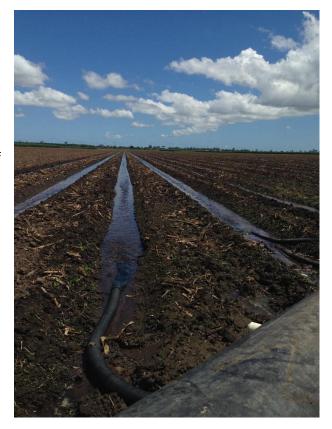
cane to be overwatered. These crops can handle some stress up to the point of making cane without affecting yield.

Manage irrigation volumes and frequency. On soils that do not crack it may be possible to increase the time between irrigations. In conjunction, inflow rates and cut-off times will need to be adjusted to ensure that the volume of water being applied does not increase.

Alternate Row Irrigation. Some soils may be suitable for alternate row irrigation if they soak well.

Minimise losses. Ensure inflow rates are high enough to get water down the field quickly (lateral soakage needs to be maintained) to minimise drainage losses. Cut-off water before it reaches the end of the field to reduce run-off losses.

Recycling. Use recycle pit water first to ensure the pit is empty most of the time to catch any run-off.



Groundwater. If you have access to underground and surface water, use both sources and ensure mixing rations are appropriate. However, over extraction of groundwater could lead to a deterioration in water quality and an increase in salinity levels.

Farming Practices

Fallows. Consider extra fallow area this season, depending on your water and cropping situation. It is more beneficial to grow 70% of your area to its potential, rather than growing 80% of your area with a significantly reduced yield.

Trash blanketing. A green cane trash blanket on appropriate soils will reduce surface evaporation. This might be an option for late cut ratoons.

Cultivation. Avoid deep ripping and excessive cultivation; on most soils deep drainage is increased with deep ripping.

Banked ends. Banked ends may be necessary to ensure the ends of rows get sufficient water especially when water is cut-off early.

Furrow shape. V-shaped furrows can assist with getting water through quickly while still getting lateral soakage into the side of the bed.

Record keeping. Monitoring and recording irrigation applications and the volumes applied will assist with decision making and managing reduced allocations.

These options have been developed by BPS extension staff, and Farmacist and Agritech consultants.

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