

## **“White Clover Irrigation Project”**

### **2010-11 Season Update**

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#### ***Project Summary***

The objective of the project is to improve the knowledge base of white clover irrigators and assist in further developing a professional approach to irrigation management. Specifically it aims to focus on the delivery of irrigation to reduce environmental water losses, increase efficiency in timing and potentially \$net return/ML applied, enhance pollination and exhibit to the wider public a significant advancement in irrigation practices that maximise minimal water use and hence the impact on the groundwater resource.

The project will further enhance understanding of the benefit and need for continual monitoring soil moisture technology for the purpose of irrigation scheduling, give leverage and be leveraged by the developing understanding and use of ETo, crop factors and crop evapotranspiration in irrigation management. The research will serve as a good case study for the use of improved irrigation delivery for centre pivots for all pasture seeds as well as focus on the importance of soil moisture monitoring and the advantages it presents.

#### ***Results from 2010-11 season***

On the basis of first year results, modifications to the sprinkler outputs and the soil moisture probes were undertaken prior to the closure of the white clover seed crop in October 2010. Modification of the trial design included a control which was the standard rotator configuration on the pivot and a statistically analysable replicated layout for the 2010/11 harvest.

As you know the white clover seed production season was hampered by significant rainfall. This challenged the irrigation management of the crop and hence the trial. The research was further challenged by the small plot harvester becoming unavailable at the point of harvest. The trial harvest process had to be modified and hand harvesting was invoked as well as use of a conventional header. Hand harvested samples are currently being assessed. The highlight of the research this season was that soil moisture levels were able to be reduced to well below previously considered ‘acceptable’ levels with no apparent negative impact on seed yield under any of the treatments. The soil moisture data recorded through this season will be of particular value to the irrigated white clover seed industry and to pasture irrigators in general.

# **“Investigating Economic solutions to long-term productive grazing systems”**

## **SEPLA’s Pasture Project**

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To keep up with the constant changes and challenges of agricultural grazing systems the SEPLA’s group has embarked on a producer developed investigation into the best economic solution to pasture establishment, persistence and management techniques to ensure long term productive grazing system.

The group has identified the challenge, that as the climate continues to be extremely variable and the margins in farming narrow, the profitability of each enterprise needs to be continuously monitored and improved. Producers are always given advice and recommendations about the best way to establish and manage their pastures, the key to their grazing enterprise, but much of the advice is conflicting. With the high cost of pasture establishment, above that of annual running costs, producers can ill-afford to make mistakes with pasture redevelopment in order to establish persistent and productive stands. This identification of an area in need of local research had developed into a project that builds on from the previous research undertaken by the group.

The project was developed with site specific aims, to reflect the questions of the individual producers involved in hosting each of the 4 research sites, whilst still reflecting the overall aims of the project to ensure the adaptability of the information to the broader membership of the group. The specific objectives of the sites range from focusing on comparing high, medium and low seeding rates, species selection and paddock preparation and their effect on longer-term productivity of the pasture stand.

The first of the four on-farm sites were established in 2010, with the remaining three sites to be established in the Autumn/Winter of this year. In addition to pasture persistence and productivity measures being taken from 2010 to 2013, soil testing will be conducted at each site to provide a baseline on nutrient status as well as indicate any soil remediation that may be required.

With interesting results already being collated from the first site this project is sure to provide a valuable insight into the development of productive and persistent pasture stands within the study region.

This project is supported by Meat & Livestock Australia through a Producer Demonstration Site (PDS) grant.

South East Price Livestock Achievers

