



IMPROVED STUBBLE & SOIL MANAGEMENT PRACTICES FOR SUSTAINABLE FARMING SYSTEMS IN THE LIEBE GROUP REGION

Year:

2009 - 2012

Funding Provider:

Grains Research and Development Corporation (GRDC)

Lead Organisation:

Liebe Group

Collaborators

CSIRO

Aim:

This project had three main aims:

1. Increase knowledge of the implications of stubble management on soil water.
2. Provide increased information about soil amelioration practices (lime/gypsum/deep ripping).
3. Increase knowledge of the long term effects of soil biology on crop production.

Project Information:

Liebe Group members had identified that a greater understanding of soil and stubble management practices on soil water and plant development was required to increase crop resilience through extended winter dry periods and to increase flexibility in the farming system. Greater utilisation of rainfall is important whether it be through conservation of summer rainfall, maximising infiltration rates and/or reducing subsoil constraints to give crops better access to stored moisture.

The Liebe Group worked with CSIRO and local growers to investigate the effects of stubble management on soil water dynamics. This involved the establishment of a new long term trial which measured soil moisture continually throughout the season using below ground moisture probes. These probes helped monitor plant water use throughout the season and determine the value of out of season rainfall. This trial was expected to quantify differences in stored soil moisture between management practices including stubble burning, full stubble retention, stubble grazing, weed control and fallow.

The project conducted a baseline analysis of current practice and past research into these fields to assist with the evaluation of the project. At the conclusion of the project, a series of grower interviews were conducted to monitor changes in grower practices over the life of the project. These interviews aligned with work conducted in the previous Liebe Group GRDC Adoption Project.

PROJECT FUNDERS



REPORTS & LINKS