

CASE STUDY

Digging Up The Dirt On Soil Health

Region: Darling Downs, Queensland

Location: TAFE South West, Toowoomba QLD 4350

Industry: Agriculture

Issue: Community looking for more information on soil Health, nutrient and disease interactions, chemical influence on plant nutrition and plant health and the future of glyphosate.

Course of Action: Educational Seminar

Background: Throughout the Darling Downs, conversation has started to grow surrounding soil health, chemical use and its effects on the soil system. Concern over soil health, productivity and chemical use, particularly in relation to chemical resistance had been noticed by the Condamine Regional Landcare Facilitator (RLF) and Conservation Farmers Inc (CFI) to be an issue grower's wanted to know more about. The opportunity to engage an international plant pathologist Professor Don Huber from Purdue University arose and a partnership between BEAR Biologics, Healthy Soils Inc Rockhampton and the Condamine Regional Landcare Facilitator in conjunction with Conservation Farmers Inc was formed to bring this opportunity to the local community.

"Digging Up the Dirt on Soil Health" Seminar: The Digging up the Dirt on Soil Health Seminar was run on the 26th July at the Toowoomba South West TAFE. The RLF invested as a major sponsor through support from the Australian Government and the National Landcare Programme. As a result, an invaluable opportunity was given to share what the role of the Regional Landcare Facilitator is, what projects have been facilitated with CFI and NLP support and the opportunities for collaboration in the future. Further sponsorship was received from Rural Boss, Kialla Pure Foods, Earth Life Rock Minerals and Barter Card. This enabled trade



Left, Sarah Fea discussing the day with local growers at morning tea. Right, Fantastic turn out with 100 people from the region coming along to find out more about soil health

stands to be included in the day and for the event to be fully catered.

The seminar covered numerous topics relating to soil health and plant health interactions. The aim of the seminar was to highlight the importance of soil health and to provide information on how glyphosate and other herbicides operate, the impacts of overuse of chemicals in the soil, the impact of chemicals on soil biology, nutrient cycling and crop lifecycles and to increase awareness and create opportunities for discussion around the future of weed control and management systems.

The key note speaker was Professor Don Huber who has years of experience and is an award-winning, international scientist and Professor Emeritus of plant pathology at Purdue University. Throughout the day Professor Huber discussed topics such as disease and nutrient interactions, effects of glyphosate and other chemicals on the farm and glyphosate and genetically modified organisms in agriculture. Professor Huber's presentations were passionate and thought provoking leaving participants with different perspectives to consider.

Local speakers included Dr Lukas Van Zweiten presented on "chemical residues in the soils today" with insight into what the NSW Department of Agriculture is focusing on at the moment. As well as, Mr Graeme Sait co-founder of Nutri-Tech Solutions presented the critical links between soil health and human health.

Not only did the day provide some great information on the scientific and technical aspects of soil health, but also included three innovative farmers Mr Colin Clark, Mr David Lange and Mr Brenden Ballon. These

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local farmers discussed what they were doing on farm to improve their soil health. The three farmers discussed some of their challenges on farm and the success they have had with trials in cell grazing, cover cropping, multi specie fodder cropping and much more.

The day ended with a forum style question time which allowed everyone in the audience to get some answers to very specific issues. The interactive session encouraged the continued discussion of soil health and possible alternative management strategies to remove the reliance on the use of Glyphosate, for desiccation or for weed control. It highlighted the need for further investigation into these areas and respectfully challenged current paradigms.

Outcome: The seminar was a huge success with 100 growers, producers, industry professionals and community members attending. It created a great deal of discussion and debate surrounding soil management and chemical management. The day also led to one of the local growers whom attended connecting with presenting farmer Mr Brenden Ballon. This interaction resulted in further communication between the two, ultimately leading to a farm visit that provided a fantastic exchange of knowledge and information.

A Secondary outcome of the seminar was that the day allowed the RLF to clarify what the role entails

and upcoming events. This interaction has resulted in the RLF aiding growers to connect with groups in their areas and continue the information sharing surrounding sustainable agriculture.

Future: CFI and the RLF will be investigating opportunities and collaborations to increase the information sharing around this topic as a result of the strong response. Numerous growers indicated the need for more information on this topic, in particular alternative strategies to glyphosate. This is a positive indication that the formation of a soil health based group in the region is a real possibility. Sarah Fea stated that

“We all heard clearly the WHY to change the selection of some of our production tools, now we need to explore together the successful HOWS! I am looking forward to facilitating that through the development of, and collaborative capacity of an active SE Qld Soil Health group.”

Sarah Fea from BEAR Biologics is in the process of forming such a group. For more information on the soil health group please contact Sarah Fea on 0439 827927 or sarah@bearbiologics.com.au or to get involved with the Condamine RLF, CFI and sustainable agriculture in the Condamine Catchment contact Jenny Freeman on 0428 385 356 or cfilandcare@cfi.org.au



Images above: *Left, Dr Don Huber is one of the leading GMO experts in the world. He is an award-winning, internationally recognized scientist and professor of plant pathology at Purdue University, with 35 years' experience. His agriculture research is focused on the epidemiology and control of soil-borne plant pathogens, with specific emphasis on microbial ecology, cultural and biological controls, and the physiology of host-parasite relationships. His research over the past few decades has led him to become very outspoken against genetically modified organisms (GMO) and genetically engineered (GE) foods and the use of Roundup in agriculture in general. Right, The Regional Landcare Facilitator presenting.*