

## **Trayning workshop focuses on building better soils**

About 60 farmers turned out to a workshop in Trayning looking for answers on how to improve soil fertility.

The key message delivered by renowned soil scientist Dr Christine Jones was that farmers need to understand how plants and microbes interact to build carbon rich top soil. The day was hosted by Wyalkatchem farmers Ian and Dianne Haggerty as part of the Wheatbelt NRM Soil Conservation Incentives Program.

Dr Jones has developed a following from broadacre farmers keen to find an alternative to conventional farming, as droughts and frosts continue to cut yields and the cost of fertilizer and chemicals grow.

Dr Jones encouraged farmers to change to biology friendly fertilizers, instead of the more commonly used synthetic fertilizers high in available nitrogen and phosphorous, which inhibit root growth and hence biological activity in the soil.

“If a plant is given nitrogen and/or water soluble P upfront, there is little need for the plant to function properly,” Dr Jones said.

“The lack of a good root system and the cessation of carbon transfer to the soil means plants cannot access the trace elements and minerals they need for healthy immune system function.”

Dr Jones said crops become very susceptible to insect and disease attack when essential trace elements are lacking through lack of microbial activity.

“Farmers then find themselves on the insecticide and fungicide treadmill. The use of these chemicals further inhibits life in the soil.

“Ever-diminishing soil health is accompanied by ever-increasing input costs,” Dr Jones said.

“Improving biological activity in the soil helps to build rich top soils, but this can’t be done when high analysis fertilizers like N and P are being used.”

Ian Haggerty told the group that abandoning traditional farming practices and moving into biological farming required a careful transition period.

“Because soil function has been impaired by chemicals it needs a gradual integration of biological farming practices,” Ian Haggerty said.

The information day concluded with an open forum and interactive discussion on ways to transition to farming practices that restore soil function and carbon building in agricultural soils.

The Wheatbelt NRM Soil Conservation Incentive Program provides opportunities for farmers to trial practices that improve soil health and help to cut the risk of problems like wind erosion.

For more information contact Dan Ferguson from WNRM on 9690 2259.