



**Farmer to Farmer
Soil Best Management Practice
Ground Covers for Soil Health**

**'Wilson River Pecans'
Debbie and Geoff Bugden**



Wilson River Pecans Ground Covers Demonstration Project

Biological Farming

“Working with Nature”

EVERY FARM IS UNIQUE:

Our pecan farm is situated on Boatharbour Road Boatharbour about 7km outside of Lismore on the Wilson River. As such the 100 acres is on a flood plain. We expect the river to flood every year. It comes up for one day, sits there for a day and takes about one day to go down. Depending on the size of the flood the flat can go under anything from a few inches to about 10 foot of water.

A mature pecan nut tree can drop about 56kg of leaf, husk, bark and stick onto the ground below. If this matter is not turned into humus and incorporated into the soil we can lose it in the flood every year.

Pecan nut trees are deciduous and lose their leaf about June every year not coming into bud break until about September. "See Before photo below" I have been trialling various means of incorporating the leaf litter and such into the ground. I have found that by boom spraying compost tea, with a stubble digesting fungi as an inoculant, onto the ground assists greatly in reducing the time taken for the matter to break down (about 50 days. I have also found that by spinning winter cover crops such as Vetch and different varieties of clovers onto the leaf litter, that they grow quickly and vigorously. This appears to take hold of the leaf litter which is turning into humus, and hold onto it. As a result I tend to lose less of the above in the case of a flood covering the flat.

The above is a yearly exercise but I not only have all the well known benefits of the Vetch and clover ground covers but the added benefit of not losing all my leaf litter and humus.

BENEFITS:

- Retain and increase organic matter
- Decrease erosion
- Attract beneficial insects
- Improve soil nutrient cycling
- Improve soil structure

BEFORE



AFTER

