



**Farmer to Farmer
Soil Best Management Practice**

**Ground Covers for Soil Health
Kuranita Macadamias
Pam Woods and Brian Alcorn**



Project Objective: To increase farm productivity and promote sustainability through the use of ground covers for soil/tree health and insectary plantings for biodiversity.

Kuranita farm management
by Pam Woods and Brian Alcorn



Pictured above Brian Alcorn

'Kuranita is an orchard of 5,700 trees, all approximately 30 years old at 10x5 spacing. Since buying the orchard in 2001 we have worked at improving the soil and tree health by application of compost and compost teas and minimal use of herbicides. Now we are planting a variety of ground covers to supply biological, chemical and physical benefits to the soil. Increased soil organic matter, increased soil biology, improved soil structure, nutrient cycling and erosion control are just some of the benefits we expect to measure and observe. To augment our pest management system the insectary plantings will provide habitat for beneficial insects.'

INTRA-ORCHARD

We removed approximately 40 trees and also did selective limb removal to allow more light in to natural waterways within the orchard. Fast growing grasses (millet, rye, paspalum) from seed were sown in the exposed areas followed by smother grass sprigs and strips on the slopes and shaded areas. We have just completed autumn plantings of a mixture of white and red clover, vetch Fleur Blanc and Bolten/pinto peanut. The same seeds have been dispersed through other well-grassed areas of the orchard where there is sufficient light and also on the perimeter of the tree planting.



BOUNDARIES: The existing windbreaks on the orchard include eucalypts on the southern boundary and leptospermums on the northern boundary. The dam is located in the centre of the property and has become overgrown with unwanted weeds. The dam surrounds were cleared with an excavator and the ground leveled for planting. These areas were then planted with the following species:

- Ground covers of clover and nasturtiums (from seeds).
- Bolton peanut
- Lupins within existing tree borders.
- Extensive planting of seedlings of grevilleas, callistamons, leptospermums and buckinghamia.
- Melaleucas were planted in the areas where water accumulates for extended periods after heavy rain. Smaller quantities of other native varieties have



Dam surrounds

been planted to provide more biodiversity for both insects and birds. Compost and mulch will be spread around these trees to help them establish strong root systems. This will compensate for the soil nutrition lost to the existing eucalypts.

PROPOSED BENEFITS

- Increase soil health
- Increase nutrient cycling
- Increase soil organic matter
- Increase soil biology
- Attract beneficial insects
- Improve soil structure
- Decrease soil erosion
- Decrease runoff
- Conserve soil moisture
- Increase infiltration
- Decrease runoff

BUDGET

Seeds	\$680
Seedlings	\$600
Compost	\$200
Excavation work	\$1,200
Farm labour costs	\$600
TOTAL COSTS	\$3,280.

A grant of \$1500 from NRCMA made this work possible.



For more information contact:
info@soilcare.org

Subject line: Kuranita