

MONSOL S.A sustainable coffee farm

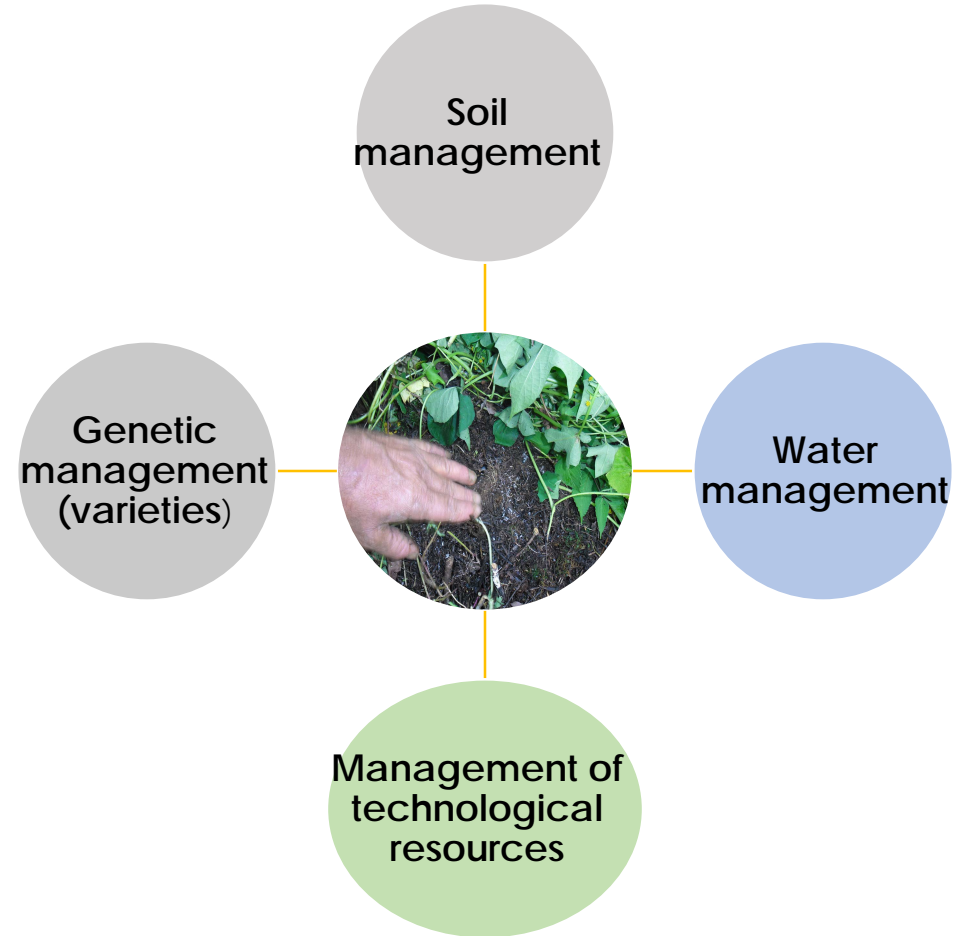


EXPERIENCES FOR SUSTAINABLE COFFEE FARMING & VALUE ADDING VIA a MICRO-SCALE COFFEE MILL IN Los SANTOS ZONE of COSTA RICA

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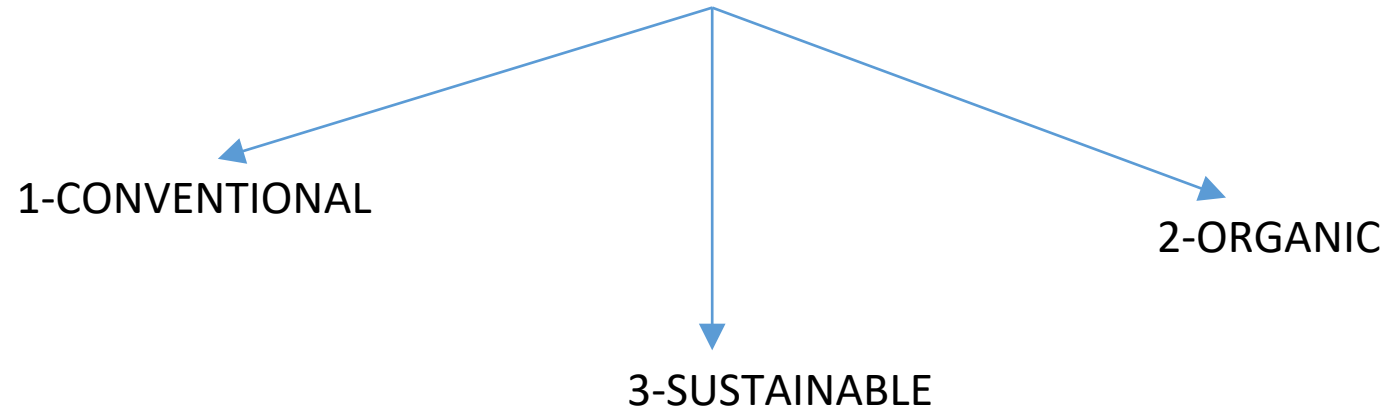
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Management components at the farm



Types of production implemented on the farm

Farm soils characterised as clayey, acid, low in organic matter & on steep slopes



Cultural soil practices

All those that promote life in the soil



Cultural soil practices

Eliminating herbicide use

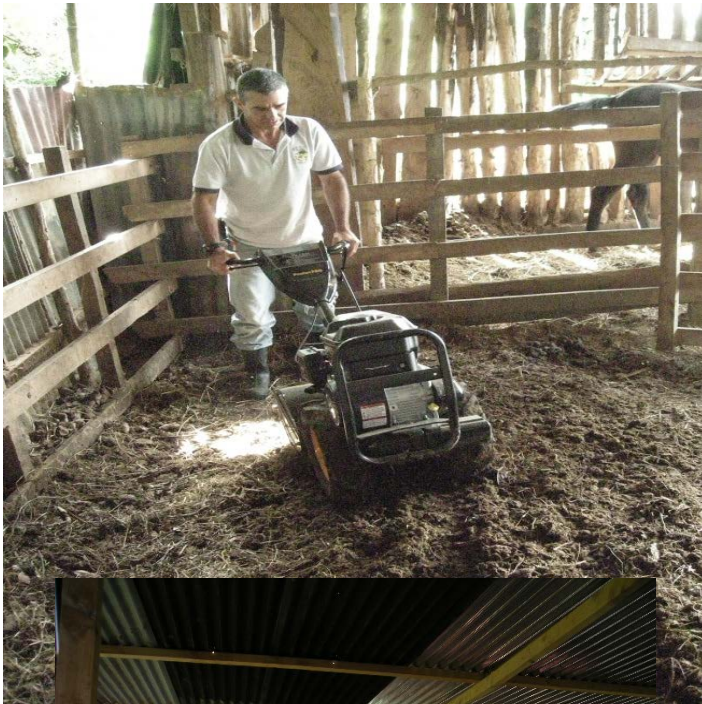
Giving priority to growth of desirable ground cover plants

Control by
mechanical/manual
slashing & applying
biofermented products
to cut green material



**Incorporating other
organic waste from
the farm**

**Horse manure, waste from livestock feeding stalls,
worm compost**





Enriched soil amendments



COVER CROPS & MULCHES

Control of ground cover
vegetation

Done by mechanical means

An estimated 35 tons of green material generated per
cutting cycle per manzana [50 tons per ha]



Common names in Spanish

Alambrillo o avioneta
Zacate de agua o Guardagua
Zacate peludo
Zacate King Grass
Zacate calingüero
Zacate estrella
Culantrillo o Anís de ratón
Cola de caballo
Lechuguilla, Margarita amarilla
Lechuguilla o Cerrajilla
Tora blanca
Berrillo, Berro de tierra
Güitite
Burio
Sornia
Santa Lucia, Flor azul
Mozote, Moriseco, Mozote negro
Catalina
Escobilla
Verbena
Llantén
Helechillo
Mora, Zarzamora
Tomatillo
Zorrillo
Cardón
Churristate

SELECTIVE VEGETATION MANAGEMENT

All the plants which grow on the farm have different purposes







Vegetation slashing in November before the start of harvest



Comparison of a conventional coffee grove in November before the start of harvest

SHADE MANAGEMENT



DISTRIBUTION OF BRANCHES & LEAVES WITHIN THE CROP



DRAINAGE



PLANT & SOIL NUTRITION

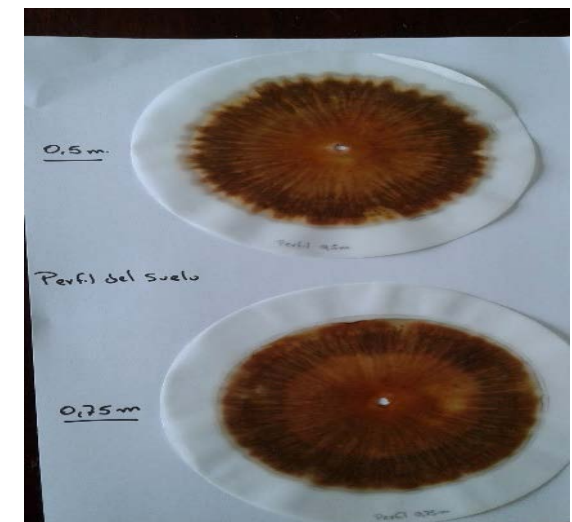
WE USE:

- 1- Incorporation of green material (slashings) 30-35 tons per *manzana* [43-50 tons per ha]
- 2- Estimated 4.9 tons leaves & branches of *poró* shade tree generated by two prunings per year
- 3- In row calcium carbonate /enriched amendments
- 4- Synthetic fertiliser complete formula
- 5- Worm compost tea + biofertiliser
- 6- Trichoderma [beneficial fungus] + wormery 'juice'



We are guided by:

- Plant observation
- Climate & weather
- Chemical soil analysis
- Soil chromatography



PRODUCTION of BIOFERMENTS



PREPARATION of SULFO-CALCIUM



Pure sulfo-calcium



sulfo-calcium with
biofertiliser



**ADDED VALUE
MICRO-PROCESSING PLANT 3rd GENERATION**



The farm is an opportunity for coffee growers to compare and take away knowledge so they can improve their production methods

