

Healthy 'Ulu Trees Begin with Soil

Natural Farming Methods

by drake

My Farming 'Aumakua

- Eric Weinert of Puna
- Ginger John of Onomea
- Dr. Park of Hilo
- Master CHO of Korea
- Gil Carandang of the Philippines
- Elaine Ingham of America



Healthy Soil is more than just dirt

- Diverse Micro-Organisms
- Water and Air content
- Organic Matter and humus
- Rock minerals a.k.a. dirt



Indigenous Micro-Organisms

- Bacteria, Fungi & Yeasts
- Diversity is the key
- Ratios and balance dictates plant life
- Just-in-time feeder of plants
- Immune system and revitalizer



Rainfall & Wind Deliver Nutrients

- Rainfall has 8% oxygen content
- ability to dissolve lava rock (basalt)
- Rainfall has higher energy field
- Wind brings nutrients from far away



Rock Minerals & Trace Nutrients

- 96% of plant is from air, water, sunlight
+ 4% is from rock minerals
- Hawai'i has very fertile rock
- Hard to hold nutrients with so much rain



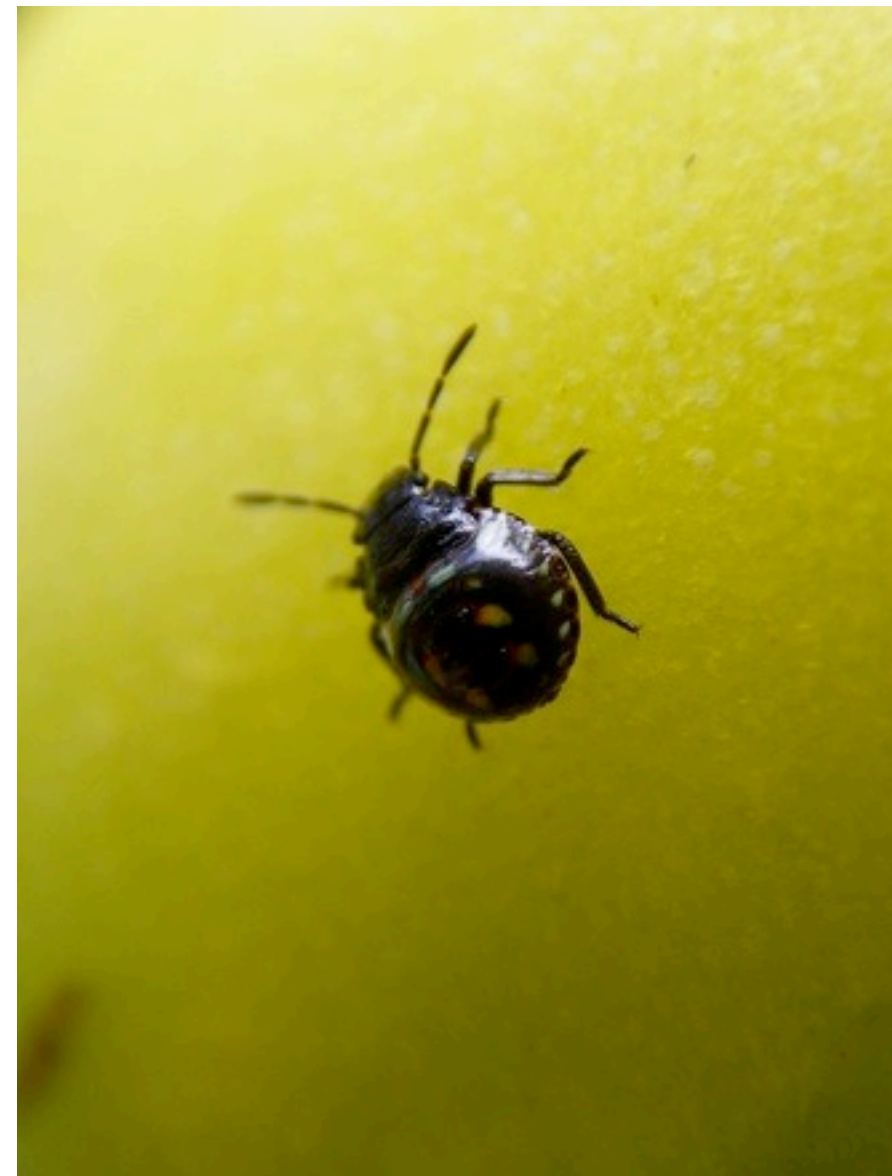
Complementary Plants & Weeds

- Healthy forest always polyculture
- Weeds are serving a purpose
- Charcoal and carbon stores build up
- Ferments of fruits falling / plants decaying



Macro-Organisms, Insects & Pests

- Remove dead or dis-eased plants
- Aggregate certain nutrients
- “I used to have a lot of pests, now I just have a lot of bugs”



Preparing a New Orchard

- Soil Foundation lecture at <http://goo.gl/z1Zf2>
- Indigenous Micro-Organisms (IMO)
 - can be bought or made
 - applied at 5lb per 100 sq feet
- Woody Material under & beyond dripline
- Biochar soak up toxins & hold moisture
 - applied at 2lb per 100 sq feet



Enhancing Existing Orchards

- Apply soil foundation
- Feed plants directly with fermented plant/ fruit juices, calciums to strengthen
 - dilute 1:500 and apply weekly
- Treat area with sea water to revitalize mineral content of the soil
 - dilute 1:30 and apply 3 times



Making a Fermented Plant Juice

- Gather material at day-break
 - growing tips are best; do not wash
- Mix with brown sugar
- Lomi until juice begins to flow
- Pack in jar til 2/3 full; cover in dark area
- Ferment for 5 days
 - pour off liquid; discard solids





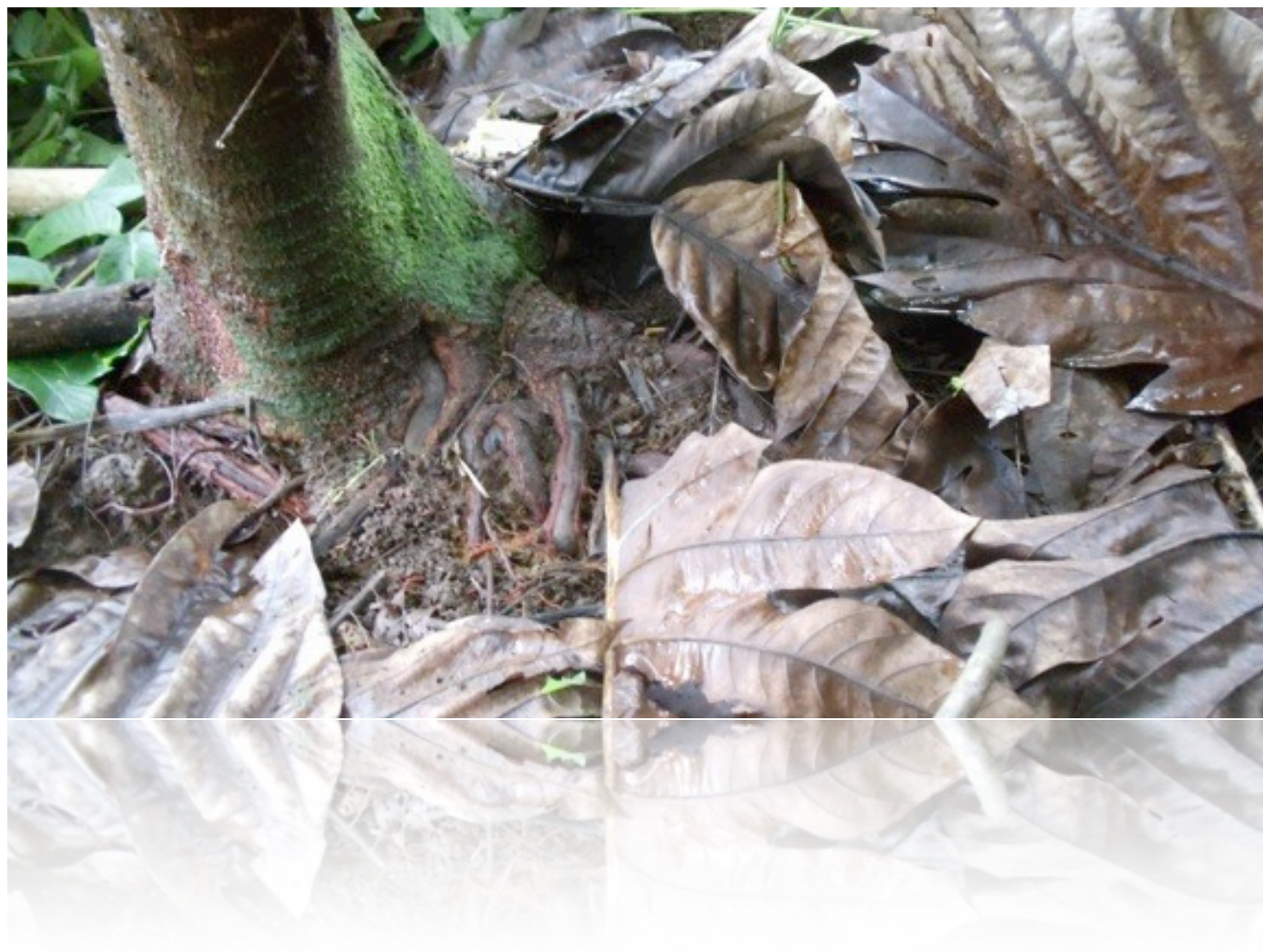
My 'ulu



IMO on fallen leaf matter



Close up of soil under 'ulu



Natural understory



Diverse Fungus under canopy



Surround base with chopped wood



Adequate access to sunlight

Using Fermented Plant Juice

- Dilute 1:500 with natural water
- Spray on leaves and soil in the evening
- smaller particle size the better
- Best to use during the growing phase
- Many other uses



More Natural Farming

- NaturalFarmingHawaii.net
- Drake@naturalfarminghawaii.net
- Regular monthly meeting in Hilo on 2nd Tuesday of the month
- March 10th Harvest Festival in Hilo

