

# Organic Hazelnut Growing and Harvesting

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# What is Organic Growing

- “An organic product means one in which an organic standard is in force and is produced in compliance with the standard by an operator” Organic Products and Production Bill 2021.
- The Principles of Organic Production seek to produce food of optimum quality by managing productive ecosystems in a holistic manner i.e. sustainable and non-polluting.
- BioGro set the current standards but MPI is trying to muscle in through the Organic Bill

# Getting Started

- Apply for registration with BioGro, Asure Quality, or Organic Farm NZ
- Initial soil test: DDT and other potential contaminants
- 3 year conversion to full certification
- Ground preparation and herbal ley etc (untreated, uncoated seed)
- Shelter establishment and maintenance – NO ROUNDUP. Also as buffer for neighbours' sprays
- Source of hazel trees – bare rooted and certified if available

# Tree Planting

- Plant with certified hot compost (which can contain blood and bone)
- Compost diary (temperature and certified ingredients)
- Weed control with clean cardboard and/or mulches, flame weeder or mechanical techniques. (“Interceptor” herbicide?).
- Bio-control of pests as few pesticides permitted. No GMO’s

# Tree Maintenance

- Mulch from mowing inter-row
- Effective microorganisms (EM) – includes N fixing bacteria.
- Annual inputs: RPR, Boron (ulexite, organibore), Mg (kieserite, dunite), Sulphur (leadersul) – all certified
- Encourage beneficial insects with beetle banks, roughage along fence lines etc
- Cow parsley ??!!

# Sward Maintenance

- Inputs as above
- Mowing between trees and inter-row
- Weedmat along tree rows – can be important to rotate mat between rows
- Grazing with geese/sheep? etc. – adds nutrient

# Monitoring

- Certification requires soil test every 3 years
- Inspection annually either by auditor or by peer review.
- Soil condition is part of review as is check of inputs (permitted and restricted), dedicated machinery or washdown requirement for contractors' machinery.
- Improvement in bio-diversity is required.

# Harvesting

- The most demanding part of organic hazel production
- Suckers cut by mid-Feb
- “Scalping” mow by late-Feb
- Aim to have netting laid by 1<sup>st</sup> week in March
- Machine harvesting throughout April and May.
- Retrieve cleaned netting June and July!!



# Netting for harvest





# Vacuuming off netting



# Harvest Continued

- Now with larger crop we hand haul the nets to headland, empty them out and vacuum harvest from there.
- The harvester separates twigs, leaves and blank nuts to some extent.
- The harvester bags the nuts which can be washed if muddy but with tested water or Council potable water.

# Drying nuts

- Initially bags of nuts (only part filled) are carried to a sunny, rodent-proof, drying floor or verandah.
- A fan is necessary for quick early drying
- To achieve the required 6% or less moisture forced drying is likely to be needed.
- A friendly grain farmer with a drying silo is a godsend but an affidavit of prior clean-down of the silo and that it is contaminant free is needed.