

# The On-Farm Pole Nursery

A guide to growing your own

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TE KAUNIHERA Ā-ROHE O TE MATAU-A-MĀUI

# What do we want

## 3m A grade poles

**Cattle proof** – robust, 55 – 70 mm butt end dia.

**Driveable**– straight stem, 30 mm min top end dia.

**Site suitable** – field conditions

## Yield

**50%** - first rotation, management

**80%** - second rotation, management

**10-20%** - no management



# Planning

## Think Ahead

**Need** - How many poles do you need? What is your plan for the next 5 -10 years?

**Why so many** – planting pattern, priorities, poles/ha

**Capacity**– handling & storage, transport & distribution on farm, gear & labour, timing

## Site

months

**Size & Access** – allow for headlands and handling areas, vehicle access during winter

**Soils** – limitations

**Layout & rotations** – compact block or row, 3 or 4 year rotation

# Crop Management

## Weed Control

**Competition** – moisture & nutrients

**Quality** – better yield, less variation

**Orchard style** – strip along rows

## Fertiliser

**Base Levels** – pH, P and K

**Nitrogen** – spring boost, 20 – 25 kg N /ha

## Irrigation

**Volume & Supply** – water take or dam

**System** – under canopy

**Scheduling** – low vs high tech



# Thinning & Pruning

## Thinning

**New cuttings** – thin multiple shoots to single dominant leader, mid-to-late December

**Stool regrowth** – 1<sup>st</sup> year: thin to two best leaders, late December to early February

– 2<sup>nd</sup> year: thin to one leader if the other underperforming, <20 mm stem diameter approx. 1 m above ground

**Advice** – if in doubt, especially with 2<sup>nd</sup> year thinning, seek advice

## Pruning

**Side branches** – 2<sup>nd</sup> year on, up to 1.8 m or 1/3 of crown

**Forking** – 1<sup>st</sup> year growth

**Timing** – late December to early February, alternate with thinning if multiple rotations

# Case Study

- Site** north facing, gentle slope; moderately deep, poorly drained silt
- Area** 1610 sq m effective (yellow line) within existing paddock (blue line)
- Cuttings** 2000 - 250 mm 10-15 mm top end dia.
- Varieties** 1000 Veronese & 1000 Kawa poplar
- Layout** double rows 3 m apart; 400 mm apart in row and 500 mm between double rows  
row orientation east - west
- Site Prep** pre-plant strip spray, glyphosate
- Irrigation** low pressure sprinkler during strike of cuttings, moved by hand



# Case Study

**Survival** approx. 1300 out of 2000, 62-65%

**Age** 4 years

**Production**

3m A grade: Veronese	98
Kawa	160
<b>Total</b>	<b>258</b>
Yield	21%

3m B grade: Veronese	92
Kawa	76
<b>Total</b>	<b>168</b>
Yield	13%

**Management**

weed control	no
fertiliser	no
irrigation	some, new cuttings
grass	sheep, cattle
thinning	cuttings, 1st yr single leader
pruning	no



# The Take Home Message

- You get out what you put in – be prepared, allow time
- Plan ahead –pole needs, nursery requirements, advice
- Less is more – don't go too big too soon
- It's a crop, manage accordingly – the basics
- Thinning – key to pole size
- Beware temptation – today's expedient, tomorrow's compromise
- Monitor performance – grade and keep records

