



#### Rene & Jo



# **Company Profile**

Commercial Productions
 Pilot Productions
 Hand Pollinated Nurseries
 Replicated Maize Trials

#### **Comparison of Benefits**

#### Advantages of NZ

- Minor infection only by common rust and NLB
- No common or head smut (Pukekohe)
- No serious bacterial diseases
- No serious fungal diseases
- No ECB
- No other major pests

#### Disadvantages

 Requires fungicide in some years

# Comparison continued

- Cool climate produces good yields and is reliable
- Flint and Di-Haploid yields + quality are exceptional
- Good rainfall

 Tassel blasting does not occur  Cool climate slows development and return times of seed

- As above
- Relatively high humidity. Gibberella needs to be managed on susceptible inbreds

# Monthly Rainfall (mm)



# Average Temp.



# **Production Planting**



# Side-Dressing Urea



# Jo Driving the Beast!



# Flowering



# Pilot Production – Flowering



### Sweetcorn



# Weed Control

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#### Herbicide use in NZ

- Atrazine and oil used on all crops. Can scorch white corn and other specialty types.
- For Bromoxynil used on all crops. Can scorch white corn. No damage noted on 'normal' corn nurseries.
- Nicosulfuron used with care. Prefer to confine use to yellow dents. Safety needs to be confirmed by clients. Not for use in HP nursery. NZ rates are very high compared to the rest of the world.
- Mesotrione. Only 1 year of use. Appears to be safer than nicosulfuron. NZ rates appear to be higher than European recommendations? Safety to be confirmed by clients. HP use? Looking for feedback.

#### Continued...

Dicamba used occasionally. Mostly on convolvulus. Have used it widely in the past with dropper nozzles and this method is very safe.

Pyridate used quite widely in the past. Excellent safety on maize nurseries. Can be lethal on some sweetcorn. Excellent on triazine resistant fathen.

Various other herbicides available but either used infrequently or not at all. Including, clopyralid, bentazone, primisulfuron, flumetsulam

#### Herbicides

- Acetochlor as pre-em
- (840g/l as an EC)
- Atrazine & oil post-em
- (500g/l as an SC)
- For Bromoxynil post-em
- (200g/kg as the octanoate ester WP)
- Nicosulfuron post-em
- (40g/l as an SC)
- Mesotrione post-em
- (480g/l as an SC)

- 2.1kg to 2.52kg a.i./ha
- 1.5kg a.i./ha + 1% oil
  (300l water/ha = 3l oil/ha)
  400gm a.i./ha

- 40gm to 60gm a.i./ha
- 72gm to 96gm a.i./ha

#### Herbicides - continued

- Dicamba post-em
- (500gm/l as the dimethylamine salt)
- Pyridate post-em
- (450g/l as an EC)

200gm to 300gm a.i./ha

450gm a.i./ha

# Grading



# Grading



# Drying Bins



# Shelling



# Up the Elevator



# Sheller

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# Sheller – Gentle rubber beaters



# **Pre-Cleaner**



# Drying Bins



# Nursery

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# Nursery Plots 1) Short plots = 3m = 15 plants 2) Long plots = 5m = 25 plants 3) Di-haploid plots = 2m = 1-10 plants 4) Topcross plots = 4m = 20 plants



#### Shoots we love to hate



# **European Flints**



# Flint selfs

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# **Di-Haploids**



# **Yield Trials**



# **Trials at Harvest**



#### Mulching after Harvest



# Sprayer for Plots & Small Productions

