

# **10 of our best decisions at Verbinnen's Nursery**

Alex Verbinnen



# Verbinnen's Nursery Ltd

*your natural choice for native trees and shrubs*



**Hamilton, Ontario**

# Our Markets

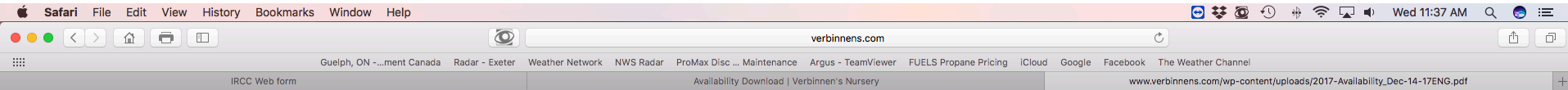
- Naturalization Landscaping
- Conservation Authorities and Municipalities
- Other Nurseries





10 of our best decisions...

# #1 Posting our Availability List Online



**Verbinnen's Nursery Ltd**

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## PRICE LIST WITH AVAILABILITY

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Description	Common Name	TYPE	AVAILABLE	Quantity Pricing			
				Q1	Q100	Q250	Q1000
Abies balsamea 40-60cm 1 Gal Coco Fibre - fc	Balsam Fir	Evergreen	24	7.84	7.40	6.98	6.65
Abies balsamea 60-80cm 2 Gal Coco Fibre - fc	Balsam Fir	Evergreen	5	12.39	11.69	11.03	10.50
Abies balsamea 80-100cm 2 Gal Coco Fibre - fc	Balsam Fir	Evergreen	17	13.57	12.80	12.08	11.50
Abies balsamea 40-60cm 1 Gallon - fc	Balsam Fir	Evergreen	24	7.37	6.95	6.56	6.25
Abies balsamea 60-80cm 1 Gallon - fc	Balsam Fir	Evergreen	86	7.84	7.40	6.98	6.65
Abies balsamea 60-80cm 2 Gallon - fc	Balsam Fir	Evergreen	214	12.09	11.41	10.76	10.25
Abies balsamea 80-100cm 2 Gallon - fc	Balsam Fir	Evergreen	402	13.57	12.80	12.08	11.50
Abies balsamea 100-125cm 2 Gallon - fc	Balsam Fir	Evergreen	131	15.70	14.75	13.91	13.25
Abies balsamea 125-150cm 10 Gallon - fc	Balsam Fir	Evergreen	5	62.53	58.99	55.65	53.00
Abies balsamea 150-175cm 15 Gallon - fc	Balsam Fir	Evergreen	9	82.58	77.91	73.50	70.00
Abies balsamea 175-200cm 15 Gallon - fc	Balsam Fir	Evergreen	1	86.12	81.25	76.65	73.00
Acer freemanii 75-100cm 1 Gallon - fc	Freeman Maple	Single stem	16	7.37	6.95	6.56	6.25
Acer freemanii 100-125cm 1 Gallon - fc	Freeman Maple	Single stem	9	7.84	7.40	6.98	6.65
Acer freemanii 125-150cm 1 Gallon - fc	Freeman Maple	Single stem	23	8.38	7.90	7.46	7.10
Acer freemanii 100-125cm 2 Gallon - fc	Freeman Maple	1-2 Stem	10	10.32	9.74	9.19	8.75
Acer freemanii 125-150cm 2 Gallon - fc	Freeman Maple	EcoLine	42	11.21	10.58	9.98	9.50
Acer freemanii 150-175cm 2 Gallon - fc	Freeman Maple	EcoLine	95	13.57	12.80	12.08	11.50
Acer freemanii 175-200cm 2 Gallon - fc	Freeman Maple	EcoLine	38	16.20	15.30	14.44	13.75
Acer nigrum 20-40cm 2x5in Plug - fc	Black Maple	VPL	340	2.25	2.12	2.00	1.90
Acer nigrum 40-60cm 2x5in Plug - fc	Black Maple	VPL	180	2.48	2.34	2.21	2.10
Acer nigrum 100-125cm 2 Gallon Coco Fibre - fc	Black Maple	Whip	9	15.10	14.19	13.39	12.75

# #1 Posting our Availability List Online

- Our customers know clearly what we have
- Saves time for our office staff



- Customers often email an order of exactly what they want.
- Less room for error
- Our program makes it simple to generate a current availability list

# #2 Shipping Schedule Monitor

The image shows a large monitor displaying an Excel spreadsheet titled "Shipping Calendar 2017.xlsx". The spreadsheet is organized into a weekly grid with columns for days of the week (Monday to Saturday) and rows for specific shipping destinations and times. The data is as follows:

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
15	City of Sudbury - load	Evergreen 8:30 - 105831 - Leno Park	Maitland Valley CA-105687 part b	HRCA - 105950 9AM	NPCA - 105775,987	
16	Uxbridge - 105604,901,975	City of Sudbury - deliver	City of Kitchener - 105743	Bay Area Restoration - 105860 9.30AM	Dutchmaster 105996,998	
17	Ausable - 105617	Baseline - 105979,980	RBG - 105806,997	Serino - 105946	Kraus	
18	Aquaphyte - 40815	City of Markham - 105988	Aquaphyte - 40821	Hort Assoc. - 105782	Uxbridge - 105758	
19	NRS - 105780	Carl Hills - 105640,705	Warwick orchards - 105565	Danielle - 105999	Antony Goodban - 106001	
20	AVK - 105989	Timm Enterprises	Beech Nursery West - 105908	Geoscape - 40820	HRCA - 106011,012	
21		Victoria Koch - 105720		Kraus		
22		AVK - 105995		Pick up at Burl Oak Systems		
23	Sheridan - 105669,974					
24	Victoria Day	23 Tuesday	24 Wednesday	25 Thursday	26 Friday	27 Saturday
25		Make it green - 105715	Pep Dominique - 105067	Grimo Nut - 105222	town of Richmond Hill - 105629	HRCA - 105951 8am
26		Bruce Tree - 105888	Wellington made - 105932	Bay Area Rest 10am- 105855	Oakridge - bare root	Evergreen - 106025
27		Hillen - 105661		Lomco - 105566	Andy Novak - 106009	
28		Pep du Golf-105160	Truck gone 10am-12noon		NVK - 105663	
29		Winkelmolen pick up	Aquaphyte - 40821	Cramer - 105474	Kraus - 105246	
30		Set up Ferguson shipment???		Stems Flower Farm - 106030		
31		Hortico - 106020		HRCA - 106036 2.30 pm		
32		Sheridan - 105994,6010,6013,6014,018		Uxbridge - 106033		
33		VBN Delivery	Shipping Company	Carl Hills - 105640		
34				June Pick up		
35					Supplier deliveries	

## #2 Shipping Schedule Monitor

- LCD TV
- Hooked up as an additional monitor
- Microsoft Excel Program
- Easy for Office Manager to keep up to date
- More accurate = less mistakes





# #3 Colour Tags and Identification Code

Color represents seed zone



- ✓ Easier Shipping
- ✓ Easier Inventory
- ✓ Less Error

# #3 Colour Tags and Identification Numbers

## Identification (ID) Code

- Easy to implement
- Benefits of tracking
  - Monitoring good performance
  - Monitoring poor performance
  - Helps to solve inventory problems
  - Customer confidence



Seed Zone

Format at beginning

Source

Year it started with us

## #4 Acid Injection System

- Installed in our greenhouse in 2010
- Adjusting pH to 6.0



# #4 Acid Injection System

## Our Water

**Submitted for:** Verbinnen's Nursery - Alex Water  
**Client Sample ID:** Water Sample #1  
**Sample description:** Back Well

Analysis	Results (unit)
pH	7.28
EC (Total Salt)	0.90 (mmhos/cm)
Total Dissolved Solids	576.00 (ppm)
Nitrate Nitrogen	6.00 (ppm)
Chloride	86.00 (ppm)
Bicarbonate	326.35 (ppm)
Total Hardness	413.74 (ppm)
Phosphorus	<1.00 (ppm)
Potassium	3.23 (ppm)
Calcium	121.41 (ppm)
Magnesium	26.77 (ppm)

# #4 Acid Injection System

## *Acer rubrum*

Production Qty:

- 2009: 0
- 2017: 17,500



Seeded: April 17/17

Photo: July 24/17

# #4 Acid Injection System

Extended to Container Area Behind  
Greenhouse



# #4 Acid Injection System

## *Acer rubrum* – 2 gallon

- Sown April 2016
- Potted May 2017
- Healthy liners



July 2017

# #4 Acid Injection System

## Cost in Use

In 2016 we used \$440 of Sulfuric acid



- \$416 for Greenhouse (94.5%)

- \$24 for 2 gallon *Acer rubrum* (5.5%)



# #4 Acid Injection System

## Build your own

*A water containment system is required*

Materials	Approximate Cost
Pool Pump	\$500
Pulsatron Chemical Pump	\$775 (meteringpumpsusa.com)
Walchem Controller	\$1,500
Sensor	\$200
Plumbing supplies	\$150
<b>Total</b>	<b>\$3,125</b>

For our system: We paid \$4,225 in 2010 (not including installation)

# #5 Early Summer Potting

## Typical Method

Begin with 1yr  
plug/BR liner



Potted  
(Spring)



Ready for sale  
(Mid Summer – Fall)

## “Early Summer Potting Method”

Plug Seeding  
(March - May)



Potted – 1 gallon  
(Early July)

**\*Prime\***



Ready for sale  
(Fall & Spring)

# #5 Early Summer Potting

Early July



# #5 Early Summer Potting

40-60cm 1gallon by autumn



## #5 Early Summer Potting

### Benefits

- Lower input cost
- Avoid potting during spring rush
- Opportunity to adjust production based on spring sales
- Lower irrigation required over summer
- Healthy plants

# #6 Bulb Trays

Dimensions: 16" x 24"

Cost: ~\$2.50 ea.



# #6 Bulb Trays

- Spacing
- Carry more



## #6 Bulb Trays

Wind Blow Over Prevention

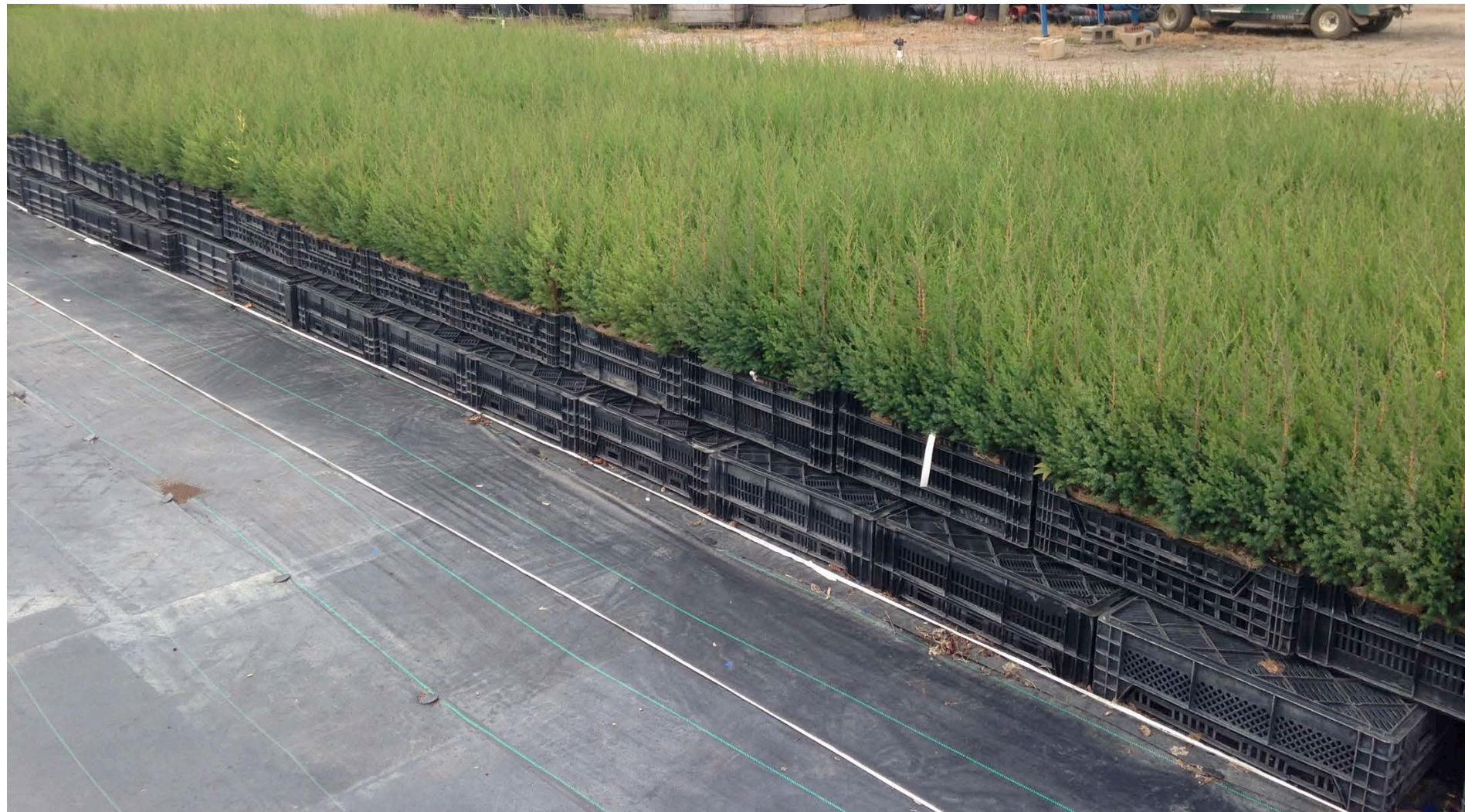




# #6 Bulb Trays

Growing

4" Pots (24/tray)



# #6 Bulb Trays

Packing in (70 plugs/tray)



# #7 Versatile Sprayer

Former Method: Hand Spraying



# #7 Versatile Sprayer

## Cannon Sprayer



## #7 Versatile Sprayer

Versatile: used for plugs, container (1 – 15gal), Field



## #7 Versatile Sprayer

Electric valve = easy to “spot spray”



## #7 Versatile Sprayer

	<b>Hand Spraying</b>	<b>Cannon Sprayer</b>
<b>People Required</b>	2 person	1 person
<b>Time</b>	3hrs +	2 hrs
<b>Product used</b>	700L	400L
<b>Consideration of task</b>	avoided	Not avoided
<b>Canopy penetration</b>	Poor	Good
<b>Area of leaf coverage</b>	Top	Top and bottom
<b>Spray uniformity</b>	Poor	Better, but not great
<b>Exposure to chemical</b>	More risk	Less risk



Application: 1.5 hrs  
July 28/14 6 km/h wind



Test with water sensitive paper placed around the driver



# #8 Plug to Field Transplanting System



## #8 Plug to Field Transplanting System



## #8 Plug to Field Transplanting System

Drip Irrigation pipe installed under plastic



## #8 Plug to Field Transplanting System

Plugs sown in the greenhouse in April



## #8 Plug to Field Transplanting System

Planted into the field in June/early July



# #8 Plug to Field Transplanting System

September



# #8 Plug to Field Transplanting System

October - November



## #8 Plug to Field Transplanting System



### Results:

- Bigger plants
- “Landscape ready plants”
- Far less weeding labour (\$)
- Far less water usage



# #9 System for Bare Root Tree Whips



# #9 System for Bare Root Tree Whips



1<sup>st</sup> Year

Seeded in April

Air pruning pot

Ready for planting in June

# #9 System for Bare Root Tree Whips

June (1<sup>st</sup> yr)



# #9 System for Bare Root Tree Whips

October (1<sup>st</sup> yr)



# #9 System for Bare Root Tree Whips

Spring (2<sup>nd</sup> yr)



# #9 System for Bare Root Tree Whips

June (2<sup>nd</sup> yr)



# #9 System for Bare Root Tree Whips

Autumn (2<sup>nd</sup> yr)

*Quercus rubra*



# #9 System for Bare Root Tree Whips



Summer (3<sup>rd</sup> yr)





#10

# Verbinnen's Relationship Model

1. God

2. Employees

3. Business





# The True Picture

Thank You!  
Merci!

