

To

Date

Tuesday February 18, 2003

2 pages from Mario Lanthier

ONTARIO NURSERY SHORT COURSE

This annual 1-day workshop was organized by the Landscape Ontario Growers' Group and held February 12 in Hamilton. About 170 persons attended.

I was invited to make two presentations.

- First presentation: review of trials with mycorrhizae at Byland's the past 2 years. Many growers expressed interest in using these products.

- Second presentation: new pest management products and techniques. Peach tree borer was a serious problem in Ontario nursery fields last summer.

"Best practices" with Cravo buildings

Richard Vollebregt, of Cravo Equipment Ltd., is preparing a "book of best practices" after spending 2 years visiting nursery growers across North America.

Recommended practice with retractable roof greenhouses:

Leave the roof and walls open unless it is too hot, too wet, too cold or too windy.

- If outside temperature is below 13°C, close the roof and walls.
- If outside temperature is over 13°C, open the roof, close the walls to block wind.
- If outside temperature is over 21°C, open the walls to cool the roots with wind.
- If wind becomes excessive, close the wall facing the wind.
- If irrigating or spraying, close everything to ensure uniform application.
- If outside temperature is above 30°C for more than 30 minutes, close the roof 85% to intercept infra-red heat, but keep the walls open.

Other notes of interest:

- The thermometer must be located outside the greenhouse (same as the rain gauge) to measure radiant air temperature (exposed to sunlight, as the plant will feel).
- "Critical stress factors" that reduce plant quality include:
 - Photosynthesis stops when leaf temperature is under 12°C or over 30°C.
 - Root injury from high temperature inside the container.
 - Leggy growth under a closed roof from low photosynthesis but high transpiration.

Nutrient management

A new provincial legislation is attempting to restrict nutrient leaching from agriculture fields. The initial concern is for the protection of ground water supply from field manure applications. All nurseries must be “nutrient certified” by 2007.

The most direct implications appear to be:

- 1) Leaching from container-grown plants will have to be reduced.
- 2) Recirculation of irrigation water may be necessary in container-grown areas.
- 3) Research is underway at Guelph University to determine “best practices”.

Advanced flowering of perennials

Two presentations by Paul Koreman, of Chicago. The man appears to know his material, but I must admit I understood very little. No notes that make sense from this.

Tour of nurseries

The day following the Short Course, I was toured by Jennifer Llewellyn, the nursery specialist at the Ontario Ministry of Agriculture.

Sheridan Nurseries

The nursery includes 2,000 acres of production and 7 garden centers. Sales last year were \$57 million, including \$2 million for perennials (\$1 million to Loblaw’s alone).

Juniper cuttings about 6 inches high are taken in December, stuck in 50-pot Jiffy trays with a 75% peat moss + 25% perlite mix. Trays are placed on a bottom heat floor with root temperature (measured with Hanna digital thermometers) at 65 to 70°F. No fertilizer is applied until rooting. Then, 100 to 200 ppm once per week of 20-8-20 (this water-soluble fertilizer was developed for forest seedling nurseries in B.C.).

Manager expects 75 to 85% rooting. Quality was excellent during our visit. I suspect the hand-watering is the key factor. Note the simple fertilization program.

Propagation numbers: 80,000 junipers, 86,000 Thuja, 51,000 Taxus, 93,000 Euonymus and an astounding 450,000 Buxus (they need more but lack space). A new disease was identified last year on Buxus, a black stem rot caused by *Volutella buxii*.

Connon Nurseries

The owner of this 500-acre nursery initiated a safety and health program after his son suffered serious face injuries during a company picnic. The program includes a dedicated 1-hour “clean up floor clutter” every Friday afternoon and many safety signs.

Propagation of junipers is done with tall cuttings collected in September, stuck in 6-inch deep plug trays. Quality was adequate during our visit, but no more.

The perennial department is fairly new. It is managed by a younger family member with a strong inclination to biological programs over chemical pesticides.