

New England Greenhouse Conference & Expo

2006-2007 New England Floriculture Grant Awards Progress Reports

Cox, Douglas and Paul Lopes. University of Massachusetts. Evaluation of cranberry pomace and other available composts as growth media for floriculture crops.

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Trials utilizing cranberry pomace have been conducted for several years by Paul Lopes with commercial growers in Massachusetts. Growers have produced crops such as hardy mums, poinsettias, flowering hanging baskets and mix containers of flowering annuals. These trials have shown promise in utilizing cranberry pomace as a component in soil media and have familiarized the growers with the use of cranberry pomace. This project was conducted to study plant growth response to cranberry pomace mixes more carefully under controlled conditions. It is part of a larger project supported by a grant from The New England Greenhouse Conference.

Our work with cranberry pomace media so far suggests that it has good potential as an alternative growth medium component. If we only tested calibrachoa we'd probably conclude that pomace has no problems and it's "good-to-go" for use by growers. However, results with seed geranium demonstrate why we plan to grow other species of crops in pomace media beginning this fall with poinsettia and to continue commercial field trials. Right now the only explanation for the different response of calibrachoa and geranium to "old" pomace may be that the calibrachoa cuttings had a much larger and more extensive root system at potting than did the seed geranium which was started in a much smaller-sized plug cell.

Groden, Eleanor and Lois Stack. University of Maine. Biological control of the lily leaf beetle in Maine.

Hagen, Margaret. University of New Hampshire Cooperative Extension. Greenhouse production basics. NH

Neal, Cathy. University of New Hampshire Cooperative Extension. Evaluation of *Eustoma grandiflorum* production and market potential in New Hampshire. NH (Cathy.neal@unh.edu)

Twenty-one varieties of *Eustoma grandiflorum* (a.k.a. lisianthus) were planted in a field study comparing yield and quality in field vs. high tunnel environments. The varieties were limited to pink, blue, rose and lavender colored, double-flowered types in the series 'ABC', 'Echo', 'Mariachi' and 'Cinderella'. Several picotee types (white petals with colored rims) were included for novel varieties. Seedlings were grown in a greenhouse and transplanted to the field when ready, with transplanting dates ranging from May 30 to June 8, 2007. Plant spacing in the 24"-wide plastic mulched raised beds was 4" within rows and 5" between rows (6 plants/sqft). Harvest began on July 31 and was done twice a week through September, then once a week in October. Each stem was harvested when at least one flower was fully open. The field harvest was discontinued on Oct. 16 due to poor size and quality, but the tunnels were harvested through the end of October. Yields and stem lengths are much greater in tunnels than in field production; however, the weight per stem was reduced in the tunnels and it was observed that many second-cut stems were thin and brittle, more in some varieties than others. These trends appear to be consistent with data from similar trials we conducted the previous season (with fewer varieties) reported in these articles:

Perry, Leonard. University of Vermont. Hardiness of Stepables. (Leonard.Perry@uvm.edu)

Stepables (www.stepables.com) are a very popular brand of perennials, on the market for a few years now, sold nationwide. The suggestion to investigate their hardiness originally came from one of the New England wholesalers of these, supported by discussions with growers and the variability often seen listed in hardiness ratings. Additionally, the suggestion was made and followed to investigate similar plants in other brands. Plants of this brand and Nooks and Crannies were obtained in fall 2007 in 4-inch pots in which they are sold, acclimated under natural conditions in northern Vermont, then brought into a greenhouse in mid-November where they were held at 40F. Plants were frozen in January to one of five temperatures in controlled freezers (28, 23, 18, 13, 8F) for two hours, then returned to 40F. Six replicates were frozen of each of the 24 species. Data will be taken in spring on regrowth and survival.

Puglisi, Sadie. University of New Hampshire Cooperative Extension. Pricing survey of fall garden mums in New Hampshire. (sadie.puglisi@unh.edu)

Between September 9 and September 21, five agriculture educators surveyed various retail outlets in their respective counties to find trends in mum pricing. Our goal was to answer the questions “what affects the price of mums”.

Retail outlets were divided by the county they were located. The type of retail outlets were separated as:

- Garden Center: to include greenhouses, Agway’s and feed stores.
- Farm Stand: to include orchards, fruit and vegetable stands
- Roadside Stand: this is solely a retail outlet that buys products wholesale and sells them at a remote location, not connected to a farm.
- Retail Center: to include box stores and grocery stores

Data taken at each location included the following:

1. Percentage of crop that is grown on location (as opposed to purchased wholesale).
2. Quality rating (using a system created by the survey team) Shape rating - timing of sale - size - pest damage -drought stress – yellow leaves - = Final Rating
3. Pot size (s) available
4. Does the price change on a given day or holiday?
5. Volume discount? (ex. 3 for \$10.00 or 1 for \$3.99)
6. Methods of payment accepted by the seller?
7. What other products are for sale at this location?
8. How long has the seller been selling mums?
9. How many pots does the seller sell each year?

A total of 80 retail outlets were surveyed. Statistical analysis will show if there are significant differences in the price of mums between counties, between retail types and between pot sizes.