The Greening of Poland's Nursery Industry

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In the 8 years since the collapse of Communism, Poland's nursery industry has made a turnabout and is gaining recognition and status. A recent study (Sept. 1997) involving contacts, observations, and personal visits to Poland's nurseries, arboretums, botanical gardens, and garden centers reveals a positive pattern of growth. Polish nursery operators have realized the importance of plant differentiation, crop specialization, marketing techniques, nursery exhibits for the trade, and public and customer service.

PREFACE

Current observations and studies indicate that Poland's nursery industry is growing and its production is of fine quality.

RESULTS AND DISCUSSION

Collegial Poland's Plant Propagators' Society came into being in 1997 with the cooperation of the Great Britain and Ireland Region. The one-day conference was attended by approximately 100 people representing nurseries, students, and academia from Poland. Presentations included 12 technical sessions and three poster sessions with participation from Poland, Ireland, Germany, and England.

Innovative. Production and marketing are two areas in which Poland's nurseries are making a difference—whether it is marketing "oversized" crabapples for eating, developing practical tools for carrying plants, overwintering nursery stock with layers of reusable mesh, or offering imaginative standards for limited garden space, the greening of Poland's nurseries shows innovation.

Distinctive. Poland' s nurseries specialize in specific crops and then market them through distribution centers. This remarkable change from a production-driven infrastructure is distinctive. Domestic and export markets are growing at the rate of 30% annually.

Trendsetting. Over 30 taxa of top-grafted willows are marketed by Polish nurseries. These culitvars are used in small and large landscapes, rock gardens, patios, and balconies. The trend started 6 years ago with the pendulous form of willow, *Salix caprea* 'Kilmarnock'.

Blossoming. Annual international nursery shows are the industry's most powerful communications program. These professional exhibitions are unusual in the sense that they enable both the trade and public to participate. While star billing goes to the plants, the exhibition includes the following: a plant doctor clinic, children's activities, seminars, plant sales, and show gardens displayed by the industry.

CONCLUSION

There is an opportunity and a need for the exchange of horticultural ideas, plants, and practices. We (trade associations, nurseries, academia, and government personnel in both countries) desire to create a horticultural exchange.

Use of Ethephon Treatments to Reduce Seed Set and Stimulate Shoot Production in *Kalmia latifolia*

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INTRODUCTION

Nursery production of mountain laurel (*Kalmia latifolia* L.) often involves labor-intensive, manual deadheading of flower clusters immediately after flowering to stimulate the formation of new shoots. A chemical method of deadheading that encourages shoot production would save time and labor costs while maintaining current production schedules. Perry and Lagarbo (1994) used ethephon sprays to eliminate fruit formation in flowering pear (*Pyrus calleryana*) and American sweet gum (*Liquidambar styraciflua*). They found that 1000 ppm ethephon applied to runoff at full bloom eliminated 95.3% and 99% of fruit in flowering pear and American sweet gum, respectively. Proper timing of ethephon application was crucial for these results. On the basis of these studies I tested the effectiveness of ethephon in reducing seed set and stimulating shoot production and growth in *K. latifolia*. Since blossoms in mountain laurel open over an extended period of time and since nursery production may involve many cultivars which bloom at different times, the current experiment made no adjustment for bloom stage. I wished to answer the following questions: (1) does ethephon have any potential in chemical deadheading of mountain laurel; (2) what are the appropriate rates of application; (3) is shoot production and growth stimulated; (4) does ethephon have any phytotoxic effects?

MATERIAL AND METHODS

Experiments were conducted on field-grown mountain laurel cultivars at Broken Arrow Nursery, Hamden, Connecticut, in the spring and summer of 1995 and 1996. Treatments were applied on cultivars 'Snowdrift', 'Hoffman's Pink', and 'Angel' in 1995 and 'Snowdrift', 'Hoffman's Pink', and 'Tinkerbell' in 1996. In each year plants in different populations of each cultivar were treated in a completely randomized design.

Single applications containing 0 (water), 500, 1000, and 2000 ppm ethephon were made on 9 June 1995 and 5 June 1996. In 1995 seed set was estimated by counting the number of nonsenescent seed capsules out of the total number of blossoms (= % viable seed capsules), and new shoot production was scored as the total number of new shoots per plant. In 1996 seed set was estimated by counting the number of flower clusters which were completely senescent out of the total number of flower