

4. Kelly, J. W. 1973. Introgressive hybridization between red and silver maples. University Microfilms International: London, England. 105pp. Master's Thesis, State University College of Arts and Science.
5. Murray, E. 1969. *Acer* × *freemanii*. *Kalmia*. 1:2-3.
6. Wright, J. W. 1953. Summary of tree-breeding experiments by the Northeastern Forest Experiment Station 1947-1950. U.S.D.A. Forest Service Station Paper No. 56. pp. 8-15.

PETER DEL TREDICI: *Acer saccharinum* has two times the number of chromosomes as *A. rubrum*. Do the hybrids therefore favor the *A. saccharum* parent?

KRIS BACHTELL: Not necessarily from what we have seen. They are quite variable as to which parent is favored.

IT'S A PLANT INTRODUCTION PROGRAMME (P.I.P.) PLANT

DAVID SCHMIDT

Royal Botanical Gardens

Box 399

Hamilton, L8N 3H8

Ontario, Canada

Botanic gardens are cultural, scientific, and educational institutions based on the world of plants. Historically, old world botanic gardens were private or university associated places reserved for scholars and the cognoscente of the day. Fortunately, especially among North American botanic gardens and arboreta, this is no longer the case. Indeed, in most instances, it is quite the opposite. We encourage visitors and public membership through advertising and educational promotion—sometimes to the point where we must remind ourselves that while we may be a “tourist attraction”, this is not our primary role. Our plant collections are both living museums and research laboratories where we demonstrate and document the diversity of the plant kingdom. In doing this, we are constantly trialing and evaluating new plants to determine their potential. Unfortunately, many plants which prove to have merit fail to go beyond the boundaries of the botanic garden or arboretum. Most of us at some time or another will have encountered a plant we thought had a great future in horticulture; yet, for some reason, it fell into the position where the trade failed to grow it because of lack of demand and garden designers could not recommend it because it was not available. Both groups regretted the situation but were not able to do much about it: a horticultural “Catch 22.”

To help remedy this situation in eastern Canada, Royal Botanical Gardens, in co-operation with the Growers Group of Landscape Ontario initiated the Plant Introduction Programme

(P.I.P.) in 1983. It was essential to the project to have input from all aspects of the horticulture industry. Thus, growers, educators, researchers, landscape architects, contractors, and retailers were invited to participate. With the help of these professionals and seed money from the Growers Group, it was possible to establish goals, parameters, and a procedural framework for the project. Once this was in place, it was possible to obtain additional support from the Ontario Ministry of Agriculture as well as Food and Agriculture Canada.

Unlike many similar schemes, it was decided not to limit potential introductions to only new plants. Obviously, this broadens the scope enormously and permits us to consider native plants and older cultivars of merit.

A Steering Committee and three Subcommittees—Financial, Research, and Development and Marketing—were established to administer the programme.

An initial industry-wide call for plants to be considered for the programme yielded over 150 suggestions. Of these, 19 taxa were considered immediately worthy of further evaluation and, in 1984, some 40 professionals representing all sectors of the horticulture industry were invited to the first P.I.P. field day at Royal Botanical Gardens. Participants were asked to rate each plant's visual characteristics and its potential for use by retailers, designers, and contractors. The results of this poll were used to prepare an initial short list of plants for introduction. The selected plants were then planted in evaluation gardens at Royal Botanical Gardens and at several test stations across Canada. Concurrently, production of stock plants and propagation research began.

Once sufficient stock plants of a given selection are available, they are sold to participator nurseries who agree contractually to produce a minimum number of plants by a prescribed date. P.I.P. advertises and promotes the plants to help create a demand and provides the growers with labels and coloured brochures. The limited number of stock plants are distributed only to participator nurseries. However, once the plant is on the market it may be purchased, grown, and sold by anyone. Should the plant happen to be a Royal Botanical Gardens introduction, then the Canadian Ornamental Plant Foundation royalties are returned to the programme as are funds generated by the sale of stock plants.

The first P.I.P. plant to be marketed in 1987 was *Potentilla reptans* 'Pleniflora', a sun-loving, low, creeping, herbaceous ground cover which produces 2 cm diameter double yellow flowers throughout the summer. It has a vigorous growth rate, spreading rapidly to form a dense mat. It is hardy to Canadian Plant Hardiness Zone 3b and was selected in response to designers' and contractors' needs for hardy, vigorous, fast-growing utility ground covers. It propagates very easily from runners or divisions and is well suited

to container growing.

The 1988 P.I.P. plant is *Viburnum farreri* 'Nanum'. Particularly suited to small gardens, it is a dwarf, rounded shrub with upright branching to height of 1 m and a spread of 1.5 m. The fragrant, blush-pink flowers open in mid to late May in Hamilton. The emerging leaves are wine-purple, turning to a summer dark green and back to purple in the autumn. It is hardy through Canadian Plant Hardiness Zone 6 and will grow in sun or partial shade. It propagates very easily from softwood cuttings.

Future introductions may include *Syringa vulgaris* 'Sensation', a French hybrid lilac in which each deep purple floret is edged with white; *Syringa vulgaris* 'McMaster Centennial', a double white lilac, originating from breeding programmes at Royal Botanical Gardens; some flower bud hardy selections of *Cornus florida* from native Ontario populations; a selection of *Cephalanthus occidentalis* with superior flowering and fall colour; and a selection of *Cercidiphyllum japonicum* with very interesting branching.

All of these plants and more are undergoing extensive testing and evaluation to determine their hardiness, adaptability, and best methods of propagation and production.

P.I.P. is neither a grand nor costly project. It is not designed to replace or compete with private, public, or commercial plant breeders and promoters. It does, however, provide another avenue through which good plants can reach our gardens and demonstrates how, with a little encouragement, all sectors of the horticultural community can work co-operatively and productively toward a common mutually beneficial goal.

DALE HENDRICKS: How do we get plants that are in the program?

DAVID SCHMIDT: Once a plant is introduced to our nurseries they will produce stock, then introduce it to the landscape trade. You can write us to find out who the participating nurseries are.

WAYNE MEZITT: We have been growing the lilac 'Sensation' for 20 years. Is your program also a reintroduction program.

CHRIS GRAHAM: The P.I.P. program does not deal with strictly new and unique plants. It is a recognition program (popularization program) for plants that have merit but are not being grown.

BILL FLEMER: Was that *Cercidiphyllum* a selected cultivar?

DAVID SCHMIDT: Just a seedling form of the plant with a distinctive growth habit that is growing in the garden.