

More on *Forsythia* 'Meadowlark'

Dale E. Herman and Norman P. Evers

With extreme flower-bud hardiness, showy flowers, quality foliage, ease of propagation, adaptability, and vigor, *Forsythia* 'Meadowlark' promises to become a popular ornamental shrub for northern landscapes. Introduced last year by the agricultural experiment stations at North Dakota and South Dakota state universities, in collaboration with the Arnold Arboretum, the selection is hardy in the northern plains, where forsythias were previously unsuccessful. Flower buds have shown hardiness at temperatures of -35°F , and the plant is therefore recommended throughout zone 3 of the USDA and Arnold Arboretum hardiness maps.

The plant originated via the breeding work of Dr. Karl Sax and Haig Derman at the Arnold Arboretum. It resulted from a cross of *Forsythia ovata* (early forsythia) and *F. europaea* (Albanian forsythia). Dr. Harrison Flint, while working at the Arnold Arboretum, observed a plant from this population in full bloom after the unusually cold 1966-67 winter, while a mass planting of *F. × intermedia* 'Spectabilis' surrounding the new hybrid was nearly devoid of flowers. Flint propagated and distributed the plant, which was eventually tested by the authors in North and South Dakota. It has bloomed consistently in these states for 10 years.

'Meadowlark', which begins to bloom when only three years old, bears bright yellow flowers in profusion in early spring. In

size and quality they are superior to those of both parents, and their color is a deeper yellow than that of *Forsythia ovata*.

The shrub is vigorous, drought-tolerant, and rapid growing, reaching a height of 2 to 2.75 m. Its spreading form is dense and regular.

The mature leaves are ivy green and maintain their color until late fall. A purple-bronze cast is the first indication of fall color, though the leaves often change to golden yellow under favorable fall conditions. The foliage is luxuriant and virtually pest free throughout the growing season.

This plant may partially replace several pest-ridden *Cotoneaster* and *Lonicera* (honeysuckle) species. It may also be used instead of certain large *Caragana* (pea shrub) and *Philadelphus* (mock orange) species with inherently leggy growth habits.

The selection is easily propagated from softwood cuttings in a 1:1 (by volume) peat-perlite medium, with 90 to 96 percent rooting common. It can also be propagated by semihardwood cuttings, by hardwood cuttings (with bottom heat), and, in limited numbers, by layers.

Forsythia 'Meadowlark' was officially registered in January 1984 by the Arnold Arboretum, which serves as the registration authority for the genus *Forsythia*. To date, 13 wholesale nurseries have initiated commercial propagation. Distribution to retail nurseries will begin in spring 1985.

Propagation Materials Available

Anyone interested in commercial propagation of this selection may send written requests for materials to: Dr. Dale E. Herman, Department of Horticulture and Forestry, North Dakota State University, Fargo, ND 58105. Dormant, bare root liners will be available for shipment between March 10 and May 10, 1984. Hardwood cuttings can also be supplied. Potted liners will be supplied in June and July 1984 if prior arrangements are made for pickup. Softwood cuttings can be supplied during June.

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BOOKS

How to Grow Tree Seedlings in Containers in Greenhouses, by Richard W. Tinus and Stephen E. McDonald.

USDA Forest Service General Technical Report RM-60. Rocky Mountain Forest and Range Experiment Station, Forest Service, U.S. Department of Agriculture, Fort Collins, CO 80526. 256 pp.

JOHN H. ALEXANDER III

An appropriate subtitle for this book might be "The Mass Production of Seedlings for Forestry." Not a book for the home gardener, it is a manual for the professional nurseryman or prospective nurseryman.

Intending to give as much information as possible, a system of "Confidence Levels" is used to indicate assurance in some of the research. "Level A: thought to be complete and accurate. Level B: believed to be valid, but is subject to further testing. Level C: based on observation . . . offered in the view that some knowledge is better than none."

The authors begin with the question, "should you grow your own trees?" and go on to discuss the alternatives, carefully guiding the reader through the steps necessary to determine the most appropriate size and location for a container nursery.

The first 33 pages give advice for determining size and site. A market evaluation is