

NEW PLANT INTRODUCTIONS AND THEIR IMPORTANCE

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When raised from seeds, plants sometimes exhibit characteristics which differ greatly from those of other members of the same seedling lot. These variations create many new varieties which a more knowledgeable horticultural public has found increasingly interesting in recent years. Some examples of this are given below.¹

Variation in Japanese Dogwood (*Cornus kousa*) seedlings. *Cornus kousa*, the Japanese dogwood, provides a striking example of the variation that can arise when plants are raised from seeds. An amateur horticulturist in the Boston area started a number of *C. kousa* plants from seeds in 1957. About 80 of these were lined out in a field where they have grown to flowering size. This year one inflorescence was collected from each of 24 trees and these were assembled and photographed. No two were alike. Some had good ornamental characteristics while others were obviously inferior.

Both *Cornus kousa* and *C. florida* have small globose clusters of insignificant flowers which are accompanied by four showy bracts. The combination comprises an inflorescence which is often loosely termed a flower. We will, for the sake of simplicity, use the term "flower". One tree had larger than normal flowers which measured from 6 to 6½ inches in diameter. Individual bracts were broad with a small neck. The bract tips, however, were recurved giving the flower a "floppy" look. One tree was double-flowered with the additional bracts varying from flower to flower in size, shape, and number. Some flowers had 6 bracts while others had 7 to 9.

The tree which presented the most pleasing appearance had flowers about 5 inches in diameter with wide, overlapping bracts which were slightly cupped. The color was a good white. Many Japanese dogwoods display their flowers in a manner so that they must be viewed from above to be seen at their best. Not so with this specimen; its flowers are borne so that they can be seen at eye-level.

In addition to variation in flower characteristics, there was also a diversity of growth habits. Some specimens were narrow in shape while others were broad and rounded.

Variation in Flowering Dogwood (*Cornus florida*) seedlings. Flowering dogwood (*Cornus florida*) also exhibits variation when grown from seed. From an ornamental point of view, some trees are far superior to others. Small, thin bracts characterize some flowers, while large, broad bracts are found in others.

¹ Ed Note: Mr. Fordham showed slides illustrating these examples.

Variation in Sugar Maple (*Acer saccharum*) seedlings. Sugar maple (*Acer saccharum*) seedlings also vary widely. A good example of the variation that can occur in growth rate and tree shape is illustrated by a row of roadside trees at Rochester, New Hampshire. It is probable that they were collected in the nearby woods — once a common practice. The result of this kind of random selection is an unsightly hodge-podge. Some of the trees are tall and narrow while others are broad-spreading. Trees from selected clones of plants, on the other hand, would create a uniform row of trees and a more pleasant prospect.

Variations in shape of the sugar maple allow the landscaper to choose a form exactly suited to his design, location, or whim. Those broad and spreading would be best suited for school grounds, parks, home landscape or any situation where maximum shade was an objective. Clones characterized by tall, narrow, trees would be fitted for use as small street trees in lawns, or in locations where a narrow tree is desired. The large, narrow, oval, specimen is a shape which one frequently sees near homes in New Hampshire and Vermont. Its form must have been appealing to those who brought the trees from the woods to decorate their grounds.

MALUS 'DONALD WYMAN'

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Malus 'Donald Wyman' came into being as a volunteer seedling in the crabapple collection of the Arnold Arboretum. It was first noticed in the late 1940s. Observational notes on the flowering and fruiting characteristics of *M.* 'Donald Wyman', kept since 1955, indicated that the seedling had attributes — particularly its fruit — which made it worthy of a cultivar name.

Each year in spring it produces a mass of small whitish blossoms which are followed in autumn by an exceptionally heavy crop of small bright red fruits which hold their color and remain on the tree into winter. While fruits of some crabapples become soft and ready to be eaten by birds by mid-September and on through autumn, others go into winter in a firm condition and are not suitable for birds until they have been modified by freezing. *Malus* 'Donald Wyman' is in the latter category and this trait is an outstanding feature.

During the cold winter months when snow covers the ground and there is a dearth of food for birds, crabapples of this type are important. They can make the difference between survival or death for many birds. In the Arboretum crabapple collection during the winter,