DURING recent years, there have crept into the trade a bewildering number of Philadelphus species and varieties. The plants themselves, though of value when in flower, are not particularly outstanding at other seasons of the year, though there are notable exceptions. It is interesting to note that "Standardized Plant Names" (published in 1923) lists 58 species and varieties; Rehder’s "Manual of Cultivated Trees and Shrubs" (1927) lists 40 species and about as many varieties, while the "Plant Buyers’ Index" (1931) lists no less than 68 different types in the trade. This is truly a bewildering number, particularly to the lay gardener who has the opinion that there are at the most only a dozen different Philadelphus from which to choose. In fact, one nurseryman feels the genus to be so important that he lists as many as 29 different kinds.

A careful study of the group, particularly with the ornamental qualities of these plants in mind, will show that there is a surprising similarity among varieties and even among species. Ordinarily, gardens are planted to be enjoyed longer than a week or two, the length of time these plants are in bloom, and plants so selected should have as many good qualities as possible so that they may be enjoyed at various seasons.

To illustrate this point, take as an example the flowering dogwood, *Cornus florida*. This is a plant which is of interest in the winter because of its excellent horizontal branching habit. In the spring it is outstanding with its lovely flowers opening before the leaves appear; in the summer it is of interest for its good, dark green foliage all summer long; in the early fall the excellent fruits turn a brilliant red while the leaves are still green, a very good color combination; and
in the late fall the leaves turn a brilliant red color. Because this plant has ornamental interest at all seasons of the year it is one of the best woody plants to use in landscape work.

On the other hand, take the widely planted *Philadelphus virginalis* varieties: True, they have very large, double, fragrant, white flowers, which may last at the most two weeks, but before and after that time, there is nothing ornamental about these plants. In fact they are always of poor shape, often slightly tender, at least in New England, and in any event are best used to the rear of other shrubs which may have more to recommend them over a longer period of time.

With this critical attitude in mind, we can better examine the Philadelphus group, picking out important plants which have particular landscape value of one sort or another, and neglecting to mention many which are either inferior or at least not quite on a par with those selected.

In the table we have tried to list the best of the Philadelphus and, since several are similar, arranged them in groups accordingly. Undoubtedly, there are some left out, and individuals who know the group well would be able to add several more to the list, particularly in the hybrid groups. However, since each group has its own peculiarities, it is doubtful if any more general groups would be formed, and, from the landscape point of view, the plants selected certainly are representative. The table is simply assimilated in order to give at a glance the general ornamental characteristics of each group of Philadelphus.

**Height**

In general, most of the Philadelphus are vigorous growers and free from insect and disease troubles. Certain species, of which *P. coronarius* is an example, are hardy over a very wide area of the United States, several species being native to this country. The large-flowered hybrid types are the ones which tend to winter kill in New England and other northern sections during very severe winters, but even these are hardy south of the Mason and Dixon line. Most of them will do fairly well in New England if given some protection. They are easy to grow and not exacting as to soil requirements. There are both tall-growing and low-growing kinds.

*Philadelphus maximus* is perhaps the tallest growing of the group, good old plants of this getting up to 30 feet in height. The lowest growing are the *P. cymosus* and *P. Lemoinei* hybrids, the latter probably being the lowest of all, seldom exceeding 4 to 5 feet in height.

[56]
Double-flowered Philadelphus virginalis, Albatre
Flowers and Fragrance

Though in general the *P. coronarius* types usually bloom earlier than do some of the others (*P. hirsutus*, not mentioned in this list, is the first of all to bloom) the double-flowered types usually hold their flowers longer than the others though they commence to bloom as soon as do the majority. They all bloom within a two-week period and so cannot seriously be classed as "early" or "late." Usually they start just after the hybrid rhododendrons and just before the mountain laurel, this time being about the middle of June in normal years at the Arboretum though it is advanced about a week this year due to hot, dry weather. Ordinarily, *P. pubescens* might be classed as the last of the group to bloom.

Mock-Oranges, particularly the old-fashioned kind, are noted for their fragrance and because of this and their similarity in appearance to orange blossoms they thus get their names. Known long before the common lilac, the Philadelphus was originally called Syringa, and even today this common name has persisted. However, the botanical term Syringa has since been applied to the common lilac and so the better common name for the group of Philadelphus might well be mock-orange. Perhaps the most fragrant are *P. coronarius*, *P. tomentosus* and *P. Zeyheri*. One is about as good as another in this respect. This would mean that if fragrance was the main reason for using these plants, certain species are more outstanding than others and should be used with this in mind. The table lists the comparative fragrance of the different groups.

The majority of the Philadelphus bear their flowers in upright or drooping clusters or racemes. However, one group (*P. inodorus, floridus, grandiflorus* and *laxus*) have only about three flowers on each stalk and these do not bloom all at the same time, so, when in bloom, the plants are apparently covered with small, individual, single blossoms. This gives a truly interesting effect, since they are apparently more or less regularly spaced over the entire plant. This same group also is noted for its drooping branches, which face to the ground very well. *P.insignis*, probably the only one listed which is not in the trade, is the only one which has the flowers in panicles.

*Philadelphus virginalis* varieties are 3 to 7 flowered, depending on the variety. "Argentine," for instance, has 3 flowers, while "Vir-ginal" and "Glacier" have usually 5 to 7 flowers in each raceme. The majority of the Philadelphus species have, of course, racemes of many flowers.
# THE BEST SPECIES AND VARIETIES OF PHILADELPHUS (Mock-Orange)

<table>
<thead>
<tr>
<th>Species</th>
<th>Height in feet</th>
<th>Form</th>
<th>Hardiness</th>
<th>Flower Diameter (inches)</th>
<th>Single or double flowers</th>
<th>Fragrance</th>
</tr>
</thead>
<tbody>
<tr>
<td>P. coronarius</td>
<td>6-12</td>
<td>Upright</td>
<td>Hardy</td>
<td>1½</td>
<td>Single</td>
<td>Very fragrant</td>
</tr>
<tr>
<td>P. coronarius deutziaeeflorus</td>
<td>6-12</td>
<td>Upright</td>
<td>Not perfectly hardy at Boston.</td>
<td>1½</td>
<td>Double</td>
<td>Very fragrant</td>
</tr>
<tr>
<td>P. cymosus Banniere</td>
<td>6-12</td>
<td>Upright</td>
<td>Some injury during winter of 1933-34, but plants not killed to ground. Worthy of protection.</td>
<td>1½</td>
<td>Single</td>
<td>Very fragrant</td>
</tr>
<tr>
<td>P. cymosus Rosace</td>
<td>6-12</td>
<td>Upright</td>
<td>Not perfectly hardy at Boston.</td>
<td>1½</td>
<td>Double</td>
<td>Very fragrant</td>
</tr>
<tr>
<td>P. inodorus</td>
<td>6-12</td>
<td>Drooping and mound-like; branches facing</td>
<td>Hardy</td>
<td>1½</td>
<td>Single</td>
<td>Not fragrant</td>
</tr>
<tr>
<td>P. floridus</td>
<td>6-12</td>
<td>Upright</td>
<td>Probably not perfectly hardy but more so than P. cymosus</td>
<td>1½</td>
<td>Single</td>
<td>Not fragrant</td>
</tr>
<tr>
<td>P. grandiflorus</td>
<td>6-12</td>
<td>Upright</td>
<td>As hardy as P. cymosus</td>
<td>1½</td>
<td>Double</td>
<td>Fragrant</td>
</tr>
<tr>
<td>P. laxus</td>
<td>6-8</td>
<td>Upright</td>
<td>Not perfectly hardy at Boston.</td>
<td>1½</td>
<td>Single</td>
<td>Fragrant</td>
</tr>
<tr>
<td>P. microphyllus</td>
<td>6-8</td>
<td>Upright</td>
<td>Not perfectly hardy at Boston.</td>
<td>1½</td>
<td>Single</td>
<td>Fragrant</td>
</tr>
<tr>
<td>P. gordonianus</td>
<td>8-20</td>
<td>Upright</td>
<td>Probably not perfectly hardy but more so than P. cymosus</td>
<td>1½</td>
<td>Single</td>
<td>Not fragrant</td>
</tr>
<tr>
<td>P. Lemoinei Girandole</td>
<td>4-5</td>
<td>Drooping</td>
<td>As hardy as P. cymosus</td>
<td>1½</td>
<td>Double</td>
<td>Fragrant</td>
</tr>
<tr>
<td>P. pekinensis</td>
<td>6-8</td>
<td>Upright</td>
<td>As hardy as P. cymosus</td>
<td>1½</td>
<td>Single</td>
<td>Fragrant</td>
</tr>
<tr>
<td>P. insignis</td>
<td>6-20</td>
<td></td>
<td></td>
<td>1½</td>
<td>Single</td>
<td>Not fragrant</td>
</tr>
<tr>
<td>P. maximus</td>
<td>6-30</td>
<td>Upright</td>
<td>Not perfectly hardy at Boston.</td>
<td>1½</td>
<td>Single</td>
<td>Fragrant</td>
</tr>
<tr>
<td>P. pubescens</td>
<td>6-20</td>
<td></td>
<td></td>
<td>1½</td>
<td>Single</td>
<td>Fragrant</td>
</tr>
<tr>
<td>P. purpurascens</td>
<td>6-12</td>
<td>Drooping</td>
<td>Not perfectly hardy at Boston.</td>
<td>1½</td>
<td>Single</td>
<td>Fragrant</td>
</tr>
<tr>
<td>P. tomentosus</td>
<td>6-8</td>
<td>Upright</td>
<td>May suffer in severe winters but worthy of protection.</td>
<td>1½</td>
<td>Single</td>
<td>Fragrant</td>
</tr>
<tr>
<td>P. virginalis Argenteae</td>
<td>6-8</td>
<td>Upright</td>
<td>As hardy as P. cymosus</td>
<td>1½</td>
<td>Double</td>
<td>Slightly fragrant</td>
</tr>
<tr>
<td>P. virginalis Glacier</td>
<td>6-8</td>
<td>Upright</td>
<td>Not perfectly hardy at Boston.</td>
<td>1½</td>
<td>Single</td>
<td>Fragrant</td>
</tr>
<tr>
<td>P. virginalis Virginian</td>
<td>6-8</td>
<td>Upright</td>
<td>Not perfectly hardy at Boston.</td>
<td>1½</td>
<td>Single</td>
<td>Fragrant</td>
</tr>
<tr>
<td>P. Zeyheri</td>
<td>6-8</td>
<td>Upright</td>
<td>Not perfectly hardy at Boston.</td>
<td>1½</td>
<td>Single</td>
<td>Fragrant</td>
</tr>
</tbody>
</table>

\(^{1}\) All flowers are borne in racemes except in *P. insignis*, which are in panicles, and the group (*P. inodorus, P. floridus, P. grandiflorus, P. laxus*) usually has only about 3 flowers on each stalk. The *P. virginalis* types have from 3 to 7 flowers on a stalk depending on the variety.
An interesting group which was not mentioned in the list given in the table because they are none too hardy in New England are the *P. purpureo-maculatus* varieties (*P. Lemoinei × P. Coulteri*), noted because of the small spot of purple color at the base of each white flower petal.

**Shape**

Most everyone is familiar with the tall, upright, often arching habit of the old-fashioned *P. coronarius*. For many years, particularly prior to the introduction of the hybrids and some of the species, this was taken as being indicative of the entire group. Today, however, if shape were the only character in which we were interested, we could get a Philadelphus (*P. coronarius nanus*) which is a dwarf growing, dense, compact, round-topped plant, seldom getting over 1½ feet tall; or fairly low arching Philadelphus that look considerably like deutzias except that they are considerably more graceful as for example certain *P. cymosus* or *P. Lemoinei* varieties like *P. Lemoinei* "Avalanche"; or still other round growing forms which face to the ground well like *P. inodorus* and *P. splendens*.

This group contains some of the best Philadelphus for general landscape use, simply because of their excellent, mound-like form. Their branches face to the ground well, making it possible to use them in the foreground or even as specimen plants where they may be observed all the time. Even when not in flower, their drooping branches and general rounded form is outstanding all the year and hence they can be well used where this characteristic is desired.

**Pruning and Use**

Mock-Oranges, as well as many of the honeysuckles and forsythias, need some renewal pruning every few years. The older branches might well be thinned out at certain intervals. This need not be done all at once unless necessary, but at least over a period of years. Thinning out, cutting back the old or dying branches to the ground, is much the best method to use on these plants as a group. Certain species may tend to get bare of branches at the base and when this occurs a careful cutting back is in order. All members of this genus can stand severe pruning, since they are all vigorous growers, and, if the occasion demands may be cut down to the ground entirely and will come up in a comparatively short time.

Consequently then, though the Philadelphus are used primarily for their lovely flowers in June, there are certain types more fragrant than
The handsome *Phillyrea* *splendens*.
others; there are certain types with larger flowers or more interesting flowers than others, and above all, there are different forms available, making them useful for different landscape purposes the entire year. Tall-growing species, like *P. pubescens*, might well be used in background plantings for the foliage is comparatively free of insect and disease pests. Others, like *P. splendens*, *P. Lemoinei* "Avalanche," etc., can be used as specimen plants. In hot, dry situations the *P. coronarius* type has been successfully used as a screen and even as a clipped hedge. A good, fast-growing, vigorous group of plants which can be used for various purposes and an excellent group on which to demonstrate that a few of the best well selected types will be perfectly adequate to exemplify the many offered in the trade today.

**Victor Lemoine**

A general discussion of the Philadelphus group would not be complete without a word about Victor Lemoine, that great French nurseryman who has done so much to enrich our supply of ornamental plants. Many of the varieties of Philadelphus, highly valued in the trade today, can be traced directly to the nurseries of Victor Lemoine and his successors. Born of a long line of horticulturists in 1823, he graduated from college and learned his gardening practically, working for others until he was finally able to branch out for himself. Among the places at which he worked was that of Louis Van Houtte, at Ghent, Belgium.

Lemoine established his business in 1850 at Nancy, France. Since that time the firm became one of the leaders in the world for hybridizing and introducing new varieties of woody plants. The number of different plants with which he worked is astounding. Some of them include Gladiolus, Paeonia, the double-flowered Begonia, Deutzia, Diervilla, Delphinium, Heuchrea, Syringa, Philadelphus and many others. During his life, he was the recipient of many outstanding horticultural honors, including the George Robert White Medal, presented by the Massachusetts Horticultural Society in 1911. When he died in 1911, horticulture lost a man who did more than any one else in modern times in originating new varieties of ornamental woody plants.

**Donald Wyman**