

COOPERATIVE EXTENSION WORK
IN
AGRICULTURE AND HOME ECONOMICS
STATE OF NEW JERSEY

NEW JERSEY STATE COLLEGE OF
AGRICULTURE, RUTGERS UNIVERSITY,
AND U. S. DEPARTMENT OF
AGRICULTURE COOPERATING.

EXTENSION SERVICE
STATE OF NEW JERSEY
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NEW BRUNSWICK, N. J.

The following is the Radio Garden Club broadcast of
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other stations of the Mutual Broadcasting System.

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MORE ABOUT HOLLY

By G. G. Nearing,
Horticulturist, Ridgewood, N. J.

Program of the Federation of Garden Clubs
of Bergen County, N. J.

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Have you selected a few branches of Holly to decorate
the mantel? I haven't, because my Holly grows just outside the win-
dow, its leaves scratching against the panes whenever a wind blows.
Sometimes its shining, dark foliage is half hidden in snow, sometimes
sheathed in ice, with icicles dripping along the twigs and curling
around the crimson berries. All winter those green leaves and red
berries will stand festooned across my window-view, always fresh, and
I will be reminded of Christmas long after the neighbors' fireplace
decorations have dried up and been burned or thrown away.

Mine is a good Holly tree, never injured by the winter,
although growing in a place colder than New York City and somewhat
farther north. But I wish it might be a better one -- a perfect
Holly. As you walk the street you can see that some of the branches
for sale are much more beautiful than others, with larger and darker
leaves or brighter berries. They come from different trees, each
tree with a character of its own. Somewhere among the millions of
trees still standing in the upper South must be one Holly more nearly
perfect than all the rest.

I wish I had that tree. Every fall I would cut a few
tips from it, root them in sand, and eventually have thousands of
trees just like it. Of course, the best trees have been chopped down
long ago, and nothing can be done about them. They were the hardiest,
being farthest north, and more than 100 years ago were cut to pieces
and sold in the city streets - the finest first.

I once had a Holly with large, lustrous, extraordinarily
dark leaves which took on a pleasing, bronze-purple cast in winter,
and with berries as large as small cherries. People who saw it at

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Christmas time could hardly restrain a shout of joy. It was the variety *Camelliaefolium*, a form of European Holly. Dallimore writes of it as without doubt one of the most ornamental of all the varieties.

For eight years I had that Holly, and hardly a leaf browned even in the sharpest frosts. Then came the blizzards of 1934, and it was no more. Of all the kinds which come to us from Europe, and there are perhaps 100, only three or four can long survive our north Atlantic climate, and those only in favored spots.

In our American Holly, the hardiest individuals of which will live north of Boston and Chicago, we have no such fine garden forms because nobody has taken the trouble to select and propagate them. The Europeans, you see, are not so much afflicted with the modern disease which might be called "accelerator toe". They stay at home long enough not only to grow beautiful trees and plants, but to create new and better varieties.

- Hollies From European Gardens -

Let us see what Hollies Europe has. Besides *Camelliaefolium*, there are a couple of dozen sorts with large leaves up to five inches long and three inches wide, or almost as big as your whole hand and fingers (if you haven't too large a hand). There are several with spineless leaves, like a laurel. *Ferox* is a variety in which spines clothe the upper surface of the leaf as well as its margin. Then there are varieties blotched or edged with paler green, gray, yellow, white, or combinations of these. In spite of a current fad for avoiding variegation, these Hollies have their place, in which they are exceedingly effective. Small-leaved and narrow-leaved kinds must also be mentioned, as well as others with leaves variously twisted and contorted, more curious than ornamental. There are some with orange or yellow berries, and, finally, there are weeping trees and dwarfs.

Why have we no such list from which to select? Our Holly, like the European, varies considerably in habit, in leaf-form, and in berry. Someone in New Jersey or Ohio may have an exceptionally fine tree with some outstanding characteristic for which it ought to be named and propagated. Or should it stand forgotten until chopped down to make way for a concrete road?

Several trees of American Holly with yellow berries have been discovered, and at least one of them propagated under the name *var. xanthocarpa*. But these trees vary, and some are much more ornamental than others. The best two or three of these should be given fanciful names or named for the owner or the place where they were found. Dutch Holly, Handsworth Holly, Oak Vale, Milkmaid, Silver Queen, Perry's Weeping, and Moonlight Holly are samples of the names used abroad. A title such as one of these should be given each tree that is propagated, for variety *xanthocarpa* might mean any one of several very different forms.

- Any Gardener Who Admires Holly Can Join the Hunt -

Who should hunt for the better Hollies, name them, and propagate? Anyone who likes Holly can hunt for them - a thousand of us if possible - and the finder should give the name. If the variety

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chosen has distinct character and real worth, it can be propagated and sold through a nursery.

The selection of wild trees must be carried out, of course, where trees do grow wild in great numbers. But anyone in the north, where nearly all the Holly has been chopped down, can grow seedlings, selecting from among them the most beautiful and the hardiest. In previous Radio Garden Club broadcasts I have told how to plant the seeds and raise young trees.

It is possible, with greenhouse facilities, to secure plants by rooting cuttings. There is much to be done, and if you have garden space, you may be the very person to do it. Suppose you decided to breed a Holly with an unusually large leaf. Such a variety, if it had other merits, might appear much more striking than one with leaves of average size. First, you could search parts of the Atlantic coast, the Mississippi valley or the mountains of the upper South, Virginia, Kentucky, Tennessee, and the Carolinas, selecting a few of the best specimens with largest leaves and comparing them for other qualities - above all, hardiness and ease of propagation.

You would then give the best one a name and propagate it by cuttings. Each cutting would produce a tree exactly like the original, and would be called by the name given the parent tree. No doubt a Holly of great beauty, with leaves four or five inches long, is waiting to be discovered and named. Perhaps you live within a few miles of it, and pass it in your walks - I hope you sometimes walk.

If you live too far north for wild Holly, or have no leisure for traveling, secure berries from one or two large-leaved trees and raise the seedlings, many of which will have large leaves. This is a work of years and for many hands.

- Hybridizing May Produce New and Handsome Hollies -

Even if you found the most ornamental Holly in America, with the largest leaves, you might still dream of one with leaves much larger. Colchicine is said to produce giant forms of some plants, and in the hands of an expert it might give results with Holly. Hybridizing is another method which anyone may practice, and while some of Europe's finest were selected as wild trees, others were bred in this manner. Pollen from the stamens of one species is placed on the pistils of a different species. If berries form, the seeds will produce hybrid trees. These hybrids, when they bloom, may again be cross-pollinated, when many combinations of the characters of the two original parent species should result.

Three tender or semi-hardy Holly species sometimes bear leaves up to eight inches or more in length -- *Ilex platyphylla* (perado var. *platyphylla*), from southern Europe, *I. latifolia* from Japan, and *I. insignis* from the Himalayas. Leaves from this last have measured nine and one-half inches long. Could we hybridize the American Holly with one of these, borrowing the leaf-size for a superb hardy variety? Who knows? All three are extremely rare in America.

Ilex latifolia can be grown in the vicinity of New York, and with some protection may possibly flower here. The other two are plainly for the south only. But pollen could be sent north in a letter simply by enclosing a handful of the small flowers. That pollen, touched to the pistils of a large-leaved American Holly, might produce seedlings of fabulous beauty -- or it might accomplish nothing whatever. We will not know until the experiment has been tried -- perhaps not until it has been tried many times under different conditions.

Hume, working in Florida, has already given us hybrids between the Dahoon, a southern, spineless Holly, and our hardy American species. Two of these have been named and distributed as East Palatka and Hume No. 2. It may be that this hybrid can accept pollen of other species more readily than American Holly itself, which has already refused my attempts to cross it with the European *Ilex aquifolium*, the Chinese *I. Pernyi*, and the Japanese *I. Sugeroki*. Can it be that our Holly has been listening to political speeches on isolation?

- Give Careful Study to Leaf and Berry Color -

Size of leaf is only one of a great many characters to look for in selecting and breeding Holly. Leaf-color is even more important, the deep green being preferred to a pale or yellowish green, and since the color may be an inherited character of any tree, or may simply depend on the soil in which it grows, a choice cannot be made quickly. There is also much variation in berry color, from deep crimson to vermilion, pale red, orange, ocher and yellow, and in berry size, which ranges from about $3/16$ to $3/8$ of an inch in diameter. Thorough search might bring $1/2$ -inch or even $5/8$ -inch berries. Leaves of unusual shape often justify the naming of a variety. We want an unusually dense Holly, a weeping form, a dwarf. Finally, there is always room for the grace of habit which depends on no one character, but on manner of branching, position of the leaf on the twig, and other features which, though difficult to analyze, will be recognized at a glance by the experienced gardener for forms of unusual beauty.

If 50 among from those of you who are reading this talk will make it a point to watch for fine and unusual American Hollies, horticulture will soon be the richer for your work. After a previous Radio Garden Club broadcast I received many letters from admirers of the Holly, and even cuttings from favorite trees, leading me to hope that this persecuted tree will soon return triumphant as a leading favorite in the woodland and on the lawn.

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ADVANCE PROGRAMS

Friday, December 23 - "Christmas Eve in the Garden" - Mrs. F. A. H. Anger, radio chairman, Federated Garden Clubs of New York State.

Monday, December 26 - "Folklore of Holly and Mistletoe" - Gertrude Henderson, Hastings-On-Hudson, N. Y. Program of the Federated Garden Clubs of New York State.

These broadcasts will be given at 1:15 p. m. Eastern Standard Time over WOR and other stations of the Mutual Broadcasting System.

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Working in cooperation with the Agricultural Extension Service of Rutgers University in broadcasting these 15-minute programs every Monday and Friday afternoon are the following organizations: the Brooklyn Botanic Garden, the Garden Club of New Jersey, the Federation of Garden Clubs of Bergen County, N. J., and the Federated Garden Clubs of New York State, Inc.

The Radio Garden Club, through the cooperation of staff members and facilities of the Extension Service, New Jersey College of Agriculture and Experiment Station, and of various County Agricultural Extension Services, offers assistance in meeting individual garden problems. Requests for information on the cultivation of flowers, shrubs and lawns, the control of insect pests and plant diseases, the fertilization of garden soils and other garden topics of interest will be answered either over the air or by mail. Send inquiries to local county agricultural agents (in New Jersey there are agents in all counties except Hudson) or to the Extension Service, College of Agriculture, New Brunswick, N. J.

H. J. Baker,
Director.