## FRIDAY MORNING SESSION

## December 7, 1962

The session convened at 9:35 o'clock, President Snyder presiding.

PRESIDENT SNYDER: Gentlemen, if you will take seats we will get started. We have a rather full program this morning.

Last Wednesday evening the Membership Committee met and elected 12 new members, and if those members are present I would like for them to stand when I call their name.

Floyd K. Armfelt — Ohio C — Jr.
Ray A. Baugher — Ohio C
Dr. L. P. Benjamin — Ontario, NC — Jr.
Paul E. Case — Pennsylvania C
Leon N. Cox — Tennessee C
Earl Cully — Illinois C
Wm. S. Cumming — Manitoba NC
Glynn Hobbs — Tennessee C
Frank Krall — Wisconsin NC
Wolfang Matzke — Austria NC
G. B. Smith — New Zealand C
John B. Wight — Georgia C

This morning we have the Speaker — Exhibitor Symposium. It has been arranged under the direction of Dr. Jim Kelley of Kentucky and Don J. Hillenmeyer. They have a rather full program, and without further ado I will turn it over to the Moderator — Don J. Hillenmeyer, Hill and Pat Farms, Lexington, Kentucky.

MODERATOR HILLENMEYER: In the last News Letter that came out, they put out an extra call for help, that we were a little short of speakers. We had a good response to that last request and we have some additional speakers, other than what you will find on your program. The speakers will come in the order they are on your program and then we will add the others at the end. They are interesting speakers I can assure you.

Our first speaker today is Professor Joseph C. McDaniels, University of Illinois, who will speak on New Cultivars in Two American Hardy Hydrangeas. Professor McDaniel.

## NEW CULTIVARS IN TWO AMERICAN HARDY HYDRANGEAS

Joseph C. McDaniel University of Illinois Urbana

Hydrangea arborescens and H. quercifolia, two of the American hardy species most widely cultivated, are remarkable for going so many years without the introduction of new cultivar forms. Until the recent introduction of the clone named 'Annabelle,' there had

been no really improved cultivar of arborescens introduced to the nursery trade since E. G. Hill brought out 'Snowhill' in 1906. With quercifolia the situation has been even more static. It has been in cultivation in this country and abroad for more than 160 years, with largely vegetative propagation but also with much collection of seedlings from woods in the southeastern states. (It is found sparingly to Louisiana, north as far as Hardin and Wayne counties in Tennessee, and south into Florida, but Georgia and particularly Alabama have the most native H. quercifolia.) Yet there seems never to have been a named cultivar form in the trade up to now. My father and I have now registered the very showy flowered form developed by him in Alabama, I have cutting increase of it under way, and as soon as sufficient stock is built up it will be introduced as H. quercifolia 'Harmony.'

H. arborescens 'Annabelle,' which appears to be the best form of its species yet found, is a native of the woods in Union County, Illinois, where the mother of the late Hubbard Kirkpatrick, and an aunt, Miss Amy R. Kirkpatrick, found it in 1910 and brought it to the yard of their home on Chestnut Street, Anna, Illinois, where a clump of it still grows.

It is probably fortunate that they found it when they did, and brought it to cultivation before Hill's introduction of 1906 at Richmond, Indiana, had become known at Anna. As Mr. Kirkpatrick related its history to me shortly before he died a year and a half ago, his mother was horseback riding along a wooded trail in the hills near Anna when she saw the original plant in flower. When she returned home she asked her sister-in-law, "Have you ever seen a wild Hydrangea with a snowball bloom?" Amy never had, but she was interested, so the two of them went back to the woods, collected the little plant,



Figure 1. Hydrangea arborescens 'Annabelle' growing at Urbana, Illinois.

and transplanted it to town, where it grew. If it had been a year or two later, they probably would already have seen a 'snowhill' bush in flower, and have passed by the plant in the woods which had not yet reached its full splendor. But they saved it, passed out starts to their neighbors, and soon it was all around town.

The Kirkpatricks wrote to the Burpee Seed Company at Philadelphia, asking if a snowball variety of the wild hydrangea was known to them. Burpee replied, with information on the then-recent introduction of 'Snowhill,' which had been brought to private gardens from its original source near Yellow Springs, Ohio, before Mr. Hill took it up commercially a few years earlier. Thus the Kirkpatrick selection went 50 years more without a name or a commercial sponsor. The people around Anna appreciated it, though, and it got scattered to other Illinois towns, reaching Urbana, so far as I can trace the records, about 1935. I saw it here in 1960, traced it back to Anna, named and registered it, and have already interested several nurseries in it. The first one to catalogue it, in 1962, was probably our member Albert B. Ferguson of the Linn County Nurseries, Center Point. Iowa. The Louis Gerardi Nursery, O'Fallon, Illinois, is another source for 'Annabelle' liners. It is as easy as any H. arborescens to propagate, either from dormant wood or greenwood leafy cuttings.

In the same year I rediscovered 'Annabelle,' I registered another *H. arborescens* clone, widely grown around Champaign-Urbana and superior to 'Snowhill' in landscape value, as the 'Champaign' cultivar. I have since seen this clone or form at many other places, clear back to Wysox, Pennsylvania, whence John Carey, before 1840, collected the specimens upon which Torrey and Gray, in their Flora



Figure 2. H. arborescens sterilis ('Champaign'). This old clump was photographed in August, 1961, at Wysox, Pennsylvania, and is believed to be part of the original clone of this form, which John Carey collected in Wysox before 1840, and upon which John Torrey and Asa Gray founded their var. sterilis...

of North America, based their *H. arborescens* var. sterilis. It agrees with their description, except for having many non-sterile, seed-producing flowers, principally in the interior of the flowerhead, where the showy so-called "sterile" flowers (actually staminate in function) tend to obscure them, particularly in pressed specimens. I believe that the old variety sterilis, far from being probably lost to cultivation, as Sargent and later authors would have it, has survived all this time at Wysox and elsewhere, and is still very much with us. I have seen it recently, under the *H. arborescens grandiflora* (or 'Snowhill') label in at least two Illinois nurseries.

The leaves differ, as well as the flowerhead shape, in each of these H. arborescens cultivars, and I believe each has originated independently of the other two, as a mutant with many more showy flowers than the normal wild type. 'Annabelle' makes the largest, most symmetrical heads; 'Snowhill' has the largest individual florets and the most floppy heads; sterilis ('Champaign') is the tallest growing and actually the least nearly sterile of the three. All of them produce viable seeds which self-sow occasionally. They may be cultured to give a high proportion of seedlings with flowerheads of the showy type. I am using 'Annabelle' in crossing with an extremely short stemmed arborescens clone (also from Anna) to select for a more compact white "snowball" hydrangea.



Figure 3. H. quercifolia 'Harmony' showing second flowering in Alabama, July, 1962.

H. quercifolia also has mutated once, and only once, so far as any records show, to a form with nearly all showy flowers, whose heads are even more dense than those of the well-known H. paniculata var. grandiflora ("Peegee"). This occurred in the 1890's in early cultivation around an apple orchard that my grandfather had on his farm in northern Alabama, in part of the range where H. quercifolia (locally called "seven bark") is most plentiful in the rocky woods. My

father, then a young boy, first propagated the "double" quercifolia by layered offsets on the family farm. He moved, the plants were neglected, and thought lost, but I rediscovered three old clumps of this clone still surviving in the area recently. It has been possible to increase it more rapidly by greenwood cuttings, treated with Hormodin No. 3, both in a well aerated mist bed and under plastic. Semisoft wood will root in a few weeks under these treatments, anytime from mid-spring to as late as October in the greenhouse. June is the preferred month in Alabama. We are multiplying this *H quercifolia* 'Harmony' now, and hope to introduce it about 1965. Besides having more showy flowering, this plant seems typical of native *H. quercifolia* in its north Alabama range. Fall color is red

'Harmony' bears only an occasional perfect flower, and has not been known to ripen any seed. Its pollen, though, appears normal under a microscope, and could probably be used in breeding.

MODERATOR HILLENMEYER: Professor McDaniel, did you have someone you wanted to say a few words?

PROFESSOR McDANIEL: Mrs. Stone of the Brooklyn Garden has been breeding magnolias for nine years now and she has some crosses that are almost flowering. I will turn it over to her.

MRS. DORIS M. STONE (Hastings-on-Hudson, N.Y.): Thank you very much. We have been breeding magnolias in Brooklyn for about eight years and we have tried to do some crossing between the Asiatic and the native American ones and so far we have got some quite promising crosses with using Magnolia acuminata as the female parent. We used the acuminata with the liliflora and there is one tree that we are really watching that is quite interesting. It has very interesting color. It has some of the yellow of the acuminata a sort of greenish-yellow with some of the purple of the white variety—nigra. We have a dusty pink color which is really quite attractive but as my boss, Mr. Avery, says, we must watch it and watch it for some time before we can say.

We have had quite a lot of apomictic seedlings. I didn't really know until I got into doing work that there was so much of it. One try I worked on for years and then realized that all my seedlings were apomictic. I found it was very successful and had lots of fruit. We wasted lots of time.

I really don't have anything more to say except we do have 1,000 hybrids growing in Westchester County, which is 50 miles north of Brooklyn and the temperatures are quite low, no watering system, so anything that survives there is very hardy, and this particular specimen that we are looking at, is up in Westchester area and it has survived. We are really pleased since we are looking for hardiness chiefly and dwarfness also. Unfortunately, this one is growing quite strongly. It is now about nine feet high, which disturbs us somewhat.

I don't think, Professor McDaniel, I have anything else more to say, unless anyone has any questions later. Thanks very much.