over again the control of insects and adjustment to the climatic conditions. Rooting of most varieties is much easier here than up North when methods are adapted to the particular requirements of the plants. I brought down the first Kurum Azaleas to the Apopka section in 1936. At that time it was believed we could not root these Azaleas so far South, as some who attempted to do so failed; but we soon learned how to do it and today millions of Kurum Azalea cuttings and plants are produced here. So far, variegated Peperomias have not been too successful; but they have been tried in several nurseries and soon a way will be found to grow them successfully. Several varieties of variegated Nephthytis are doing well. Dracaenas of the several varieties should be added to our collection of plants; not many are now grown, but they do well here with the exception of Dracaena Sanderii. This variety is in great demand, has not proved easy to grow. It must be very temperamental as to its cultural requirements.

Podocarpus Maki and Negii are two plants that are well adapted to dish garden plants. Their popularity is increasing, as their lasting quality is recognized. Many varieties of foliage plants in smaller amounts are grown and more will be added as they are found to be suitable for indoor decoration.

This branch of the nursery trade is becoming vital to the economy of Florida; therefore, we should make an organized effort to get more recognition by the Department of Agriculture in the way of experiment and research to promote better plant production; also the prevention of and methods of control of some of our most difficult plant diseases. I believe if it were put before the powers that be, that we need some assistance to solve some of our production problems, that they would give us favorable consideration.

THE DAYLILY IN FLORIDA

WYNDHAM HAYWARD
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The story of the modern Hemerocallis in Florida horticulture is an interesting and an honorable one as well as important and integral to the development of this remarkable plant in the past quarter century.

The Hemerocallis may be described as the Cinderella of the modern garden perennials, and its adaptation by man to garden use in hybrid form is a mere sixty years old. The first hybrids were introduced in England in the early 90's, starting with the well known variety Apricot, a creation of the late George Yeld.

Daylilies in Florida owe much to Dr. A. B. Stout, pioneer American hybridizer and research worker in the Hemerocallis, collector of wild types and introducer of the largest group of worthy garden varieties in America to date. Dr. Stout has recently been placed on the emeritus list at the New York Botanical Garden, where his daylily work goes back more than thirty years.

It was a newspaper article in the New York Times more than 20 years ago about Dr. Stout's "new rose-colored hybrid Hemerocallis" which attracted the horticultural attention of the writer to the group with the result that he has spent many happy hours on the Daylily tribe since that time, and has seen them grow to a place of foremost importance in Florida gardens.

As with so many other plants in Flor-

ida, the search back into the history of the Hemerocallis in Florida leads to those two famous pioneer horticulturists, now deceased, Dr. Henry Nehrling of Gotha and Theodore L. Mead of Oviedo. The writer has in his garden plants of Hemerocallis variety Kwanso, the double type, which came second hand from the Nehrling collection, and one of the prides of the hybrid Hemerocallis blooming season in the first spring days is always "Chrome Orange," a named variety originated by Mr. Mead, and obtained from him personally about sixteen years ago.

In Mr. Mead's autobiographical sketch published in the 1935 Herbertia, or yearbook of the former American Amaryllis Society, now the American Plant Life Society, he wrote:

"More than 10 years ago I entered the hybridizing of Hemerocallis or Daylilies, to see what could be done with them. I obtained crosses, growing numbers of seedlings, to blooming size. Out of these I have introduced only one variety, my 'Chrome Orange,' as outstanding. It is a handsome flower, of slightly different color than any other Hemerocallis that I have seen."

Mr. Mead added, with his usual acumen, "These daylilies are very easily grown in Florida and elsewhere, and are easy to hybridize, the difficulty being to originate new types of sufficient novelty or improved characters to make it worth while to introduce them." I think that most of the Florida Hemerocallis breeders today would say a loud 'amen' to that statement.

After "Chrome Orange," which may be dated anywhere between 1920 and 1930, the next daylily introduction of which the writer is aware in Florida is "Emily Hume," a beautiful rich yellow variety of quite different shade than Chrome Orange and with interesting and attractive pinching effect on the petals. This was described for the first time in 1934 in Dr. Stout's monograph on the genus, "Daylilies," page 55, where it is listed as a chance seedling of unknown parentage, named by Dr. H. Harold Hume in 1933 and distributed by him. It is still an outstanding and desirable variety for Florida.

Dr. Hume, as all Florida garden lovers know, is the dean of horticulture in the Sunshine State, and author of texts on citrus fruits, and gardening in general, besides having recently become emeritus after nearly half a century on the staffs of the Florida Experiment Station and the University of Florida College of Agriculture. He most recently served as dean of that college and provost of agriculture.

Under Dr. Hume's enthusiastic interest and conscientious scientific attention, Daylilies began the latest era of their whirlwind development in Florida, in 1930 with the establishment under his watchful attention of the first daylily display garden at the University of Florida. Through Dr. Stout's kindness he received full cooperation of the New York Botanical Garden, in the matter of numerous plants of species and hybrid varieties donated for the display garden. This may have been one of the first display gardens in the United States for daylilies outside of New York City.

At that time Dr. Stout sent around a hundred plants to the new University of Florida garden. In succeeding years, the active direction of the University of Florida's Hemerocallis project has been in the hands of another well known and most capable scientist and horticultural specialist, Prof. John V. Watkins, currently associate professor of horticulture at the College of Agriculture. Prof. Watkins' project is entitled "Selective Breeding in Hemerocallis," and has led to publication of various articles in popular and scientific publications and to the latest state bulletin on Daylilies in

Florida, Circular 88, dated March 1949, in which he has modestly failed to give full credit to the University's share in Florida daylily development.

The University of Florida daylily project has now been in progress for 15 years, and will be continued indefinitely. Eight varieties have been released by the State to nurserymen, including such popular and worthwhile kinds as Swan, Mrs. John J. Tigert, Welaka, Tamiami, Allapattah, Kanapaha and a miniature duo, Jack and Jill.

All of these names are familiar and significant to the Hemerocallis fancier in Florida and the nation at large.

At least one Florida nursery firm has grown and offered for sale various Hemerocallis for some 30 years, the Glen St. Mary firm in Northeast Florida. It has contributed largely to the popularity and interest in this fine group. A number of Jacksonville Garden Club leaders, including Mrs. W. E. MacArthur, and Mrs. J. H. Churchwell, also P. D. Shoemaker, nurseryman, have actively promoted the daylily in the past 20 years in that part of Florida along with many other horticultural favorites.

An interesting factor in Hemerocallis culture in Florida is the success which the so-called "evergreen" types have achieved over the deciduous varieties. Most of the species are deciduous, there being only a dozen or more recognized species. Of these only a single one, H. aurantiaca, believed to be a native of Japan, is truly evergreen.

Hemerocallis aurantiaca is thus probably the most important species for Florida, and doubtless figures in the ancestry of most of the evergreen varieties of daylilies which have proved successful in Florida. It is a handsome fulvous-dusted orange variety, with graceful foliage which remains pleasantly green all winter in Florida and has imparted this character to its progeny and subsequent generations of descendants. This evergreen factor has proved desirable from the point of view of attractive appearance in the sub-tropical garden, providing pleasing clumps or fountains of greenery in the border or background during the winter months when no flowers are produced.

No hard and fast rule may be laid down for the behavior of evergreen and deciduous daylilies in Florida. Of the deciduous varieties, only a few may be said to be satisfactory for Florida gardens. Most of them are not satisfactory, although some of them will survive for many seasons. The recommendation may be made safely that Florida garden lovers plant 90 percent evergreen varieties, as more successful in gardening experience in sub-tropical climates, than the deciduous varieties.

This is extremely important as the Florida daylily beginner will find when he unwisely purchases a dozen highly touted varieties from some northern grower, only to find that 10 or 11 of them are deciduous, and die back with the first touch of cold weather in November, leaving his garden space bare or nearly so all winter long, and in addition the flowering result is not up to expectations in the spring. For most deciduous daylilies have the tendency to produce short, weak flower stems and poor, unsatisfactory flowers in Florida under ordinary conditions. Some of the leading popular varieties of Northern hybridizers, as Sass's Hesperus, Stout's Dominion, and Nesmith's Sweetbriar, while notable successes in the Northern states, are almost complete failures in Florida. Franklin B. Mead's Hyperion is another sensational daylily from the North, which, due to its deciduous character, is a distinct "flop" in Florida.

This behavior has created the exceptional situation that exists for Daylily hybridizers in Florida, the need for a

complete strain of Florida-produced and Florida-grown hybrids suitable for the sub-tropical gardens of the peninsular state, but also adapted to warm climates all over the world, and in most cases to the entire United States.

Actually, a few of the evergreen varieties produced and introduced by Florida hybridizers have proved slightly tender in severe winters in the North, but the great majority of evergreen and all of the deciduous varieties which have come from the hybridizing hands of Florida plantsmen (and women) have done famously through all the 48 states and Canada.

Truly, different daylilies behave differently in various parts of the country, but that makes all the more important the testing and trial work of the University of Florida's College of Agriculture and other growers in the state who have given of their time and attention in the breeding of new daylilies for Florida and America.

The first and second National Daylily Shows in the United States were held in Orlando, Florida, at the Mead Botanical Garden. Previously daylily flowers had been shown and received awards at the annual shows of the former American Amaryllis Society, now the American Plant Life Society, an organization started in Orlando in 1933 with four members and with headquarters currently in California.

The former American Amaryllis Society took the Hemerocallis under its wing early in its existence, the first articles on this phase of their widespread interests appearing in Herbertia, the society's yearbook, back in 1935, because of the Daylily's natural close relationship botanically and phylogenetically with the Amaryllids. Kew's Dr. J. Hutchinson, author of the fundamental text, "The Families of Flowering Plants," London, 1934, wrote under "Tribe 8, Hemerocallideae, . . . further development to . . . Amaryllidaceae." as evidence of the highest authority's recognition of this relationship.

Dr. Hamilton P. Traub, plant scientist now with the United States Department of Agriculture at Beltsville, Md., was one of the four founders and has been a prime mover in the former American Amaryllis Society to this time. He has been editor of all the 15 issues of Herbertia and the succeeding Plant Life publications. His interest was as much that of a real "dirt gardener" as that of a laboratory scientist and numerous articles and research experiments in breeding and propagation have been forthcoming from him, some of them published and described in "Herbertia" through the years. He was on the staff of the USDA laboratories in Orlando at that time.

As indication of the significant place in Hemerocallis annals which the yearbooks Herbertia have taken in the national daylily picture it may be mentioned that the same 1935 (Vol. II)) of Herbertia, carried an article by Dr. Stout on "The Species of Daylilies." The writer can claim something of prophecy for his own phrase in a review of Dr. Stout's book, "Daylilies," in that volume as follows: "He (Dr. Stout) has enriched horticultural literature with an interesting and useful treatment of the genus which leaves us with the hope that even greater things are to be forthcoming before many years in the field of fine Hybrid Hemerocallis."

This has definitely come to pass in the succeeding years in which Dr. Traub, Prof. Watkins, Ralph W. Wheeler of Winter Park, Mrs. Bright Taylor of Ocala, the writer and others have introduced many dozens of named varieties of Florida origin, some of which have reached the heights of na-

tional Daylily popularity and many others are certainly adding importantly to the rich horticultural heritage of Florida and other American gardeners.

Dr. Traub published the first article on vegetative propagation of Hemerocallis, in the 1936 Herbertia (Vol. III), his work being an adaptation of Ida Luyten's Dutch studies in the propagation of Hybrid Amaryllis by cuttage. Two special daylily numbers of Herbertia have been issued by the American Plant Life Society, the first in 1941 being already a classic text in the field.

In passing it may be of interest to recall that in Herbertia's account of the first national daylily show held in Orlando, April 18-19, 1940, outstanding daylilies on view included Prof. Watkins' Mrs. John J. Tigert, Prof. E. L. Lord's Hector, R. W. Wheeler's Ruby Supreme, Wyndham Hayward's Emperor Jones, Dr. Traub's La Tulipe, and Dr. Stout's Patricia and Dauntless, the latter two grown and exhibited by the writer.

Mr. Wheeler, a distinguished Florida daylily hybridizer, and rated among top American breeders at this time, has a long succession of fine daylily varieties to his credit introduced over the past 10 years. Among these are such nationally known and recognized varieties as "Amherst," "Naranja," Haile Selassie, Duncan, Bobolink, Raven, Hazel Sawyer, etc., besides his remarkable Ruby Supreme, a daylily that rated 17th nationally in a recent Hemerocallis popularity poll.

The writer introduced for Dr. Traub one of his outstanding seedlings early in the 1940's, "Duchess of Windsor," which has subsequently become a national favorite. Others of his breeding which are widely grown and appreciated are Indian Chief, Mayor Starzynski, George Kelso, Dr. Stout, Gen. MacArthur, Peony Red, etc. He is continuing his daylily breeding in Beltsville, Md., and some of his varieties have been introduced to the trade by the United States Department of Agriculture in recent years.

Mrs. Taylor, a sincere and gifted daylily hybridizer, who has given something of a woman's sympathy and charm to her daylily creations, has had a hybridizing and display garden at Ocala for a number of years which annually attracts many visitors. Among her delightful varieties are Prima Donna, Rubaiyat, Gunga Din, etc.

HORTICULTURAL RESEARCH WITH CAMELLIAS

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The camellia is grown extensively throughout the South and on the Pacific Coast and, to varying degrees, in other parts of the United States. Its popularity in these areas, though not in numbers of plants, ranks along with azaleas, roses, and other favored flowering shrubs. Planting stock is produced by commercial nurseries in large quantities under a multiplicity of variety names. On the other hand, camellias offer opportunities for amateurs to propagate certain favored plants by cutting and grafting methods.

Camellia references in the literature dates back 250 years or more and they were listed in nursery catalogs 150 years ago, yet there has not been a great amount of research conducted with it. One great problem that has existed over the years has been that of the correct nomenclature and the spell-