

*Yellow:* Mrs. B. F. Bonner, Dauntless, Golden Moth, High Noon, Cellini, Easter Morn, Herkimer Johnson, Princess, Arla, Patricia, Camelot, Honey Mist, Heloise, Wau Bun, Soudan, Taruga, Capistrano, Blond Butterfly, Lucile, Madge Vaughn, Ruth Bayless, Susan Wynn, Miami Moon.

*Orange:* Naranja, Swan, Play Boy, Babette, Queen of Gonzales, Painted Lady, Odessa.

*Pink and Rose:* Show Girl, Georgia, Salmon Sheen, Aurora, Paul Ihrig, Marcia, Rose Gem, Surf Side.

*Eyed:* Caballero, Annie Oakley, Sequin, Cathedral Towers, Madam Butterfly, Dorothea.

*Bicolor:* Royal Lady, Cornell, Athlone, Pied Piper, Mamie Lake.

*Crimson and Scarlet:* Blanche Hooker, Scarlet Sunset, Jack, Red Bird, Ruby Supreme, Tamiami, Garnet Robe, Ming Toy, Jody, Lochenvar, Kanahapa, Man o' War, Kadie Bird, Tyrol.

*Lavender and Purple:* Lilac Time, Niobe, Purple Mist, Sweet Alice, Amherst, Concordia, Ganymede, Pansy Purple.

*Pastel:* Prima Donna, Brocade, Nantahalla, Aurora.

*Dark Red:* Raven, Genga Din, Midnight Velvet, Nevermore.

*Brown:* Brackel, Cluny Brown.

## THE PALM SOCIETY

DENT SMITH

*President, The Palm Society*

Daytona Beach

The subject of The Palm Society would be a very boring one if I were to talk about the details of an organization, so I shall try to keep those details to a minimum. The palms themselves are more important and much more interesting. The Society is of no significance except as its activities relate to the palms. It is not a social organization in any sense, but rather a group of people trying to learn more about the palm flora of the world—a subject in which ignorance still outweighs the body of acquired knowledge. This knowledge has progressed only out of its dark age into a sort of medieval state where it still falls short of being either satisfactorily advanced or complete.

The history of the Society is a brief one. In November, 1955, about a dozen persons working with the palms agreed that it would be a good thing to form a society dedicated to all phases of interest in that family of plants, whether scientific, cultural, æsthetic or utilitarian. In the ensuing twelve months the membership has steadily grown to the number of 218 members in the United States and 21 other lands, so that the Society begins to take on an international character. This is as it should be, for the palms circle the globe and

know nothing of international boundaries. Both here and abroad the Society functions entirely by means of its publications.

How many kinds of palms inhabit the Earth is not known. After the turn of the century the number was estimated to be one thousand. The number has had to be revised upward many times. One guess today is 5,000 or more, but it is a guess. Science is aware of several thousand species, belonging to several hundred genera. Among these great numbers will be found enormous differences in form and growth habits. Some palms have subterranean trunks only, some have creeping or prostrate trunks, and others erect straight shafts that are among the tallest to be found in nature. One species of the Andean wax palms, genus *Ceroxylon*, reaches 200 or more feet in height, and before the Sequoias and all the eucalypts were known, was believed to be the tallest living thing on the planet. Another kind of palm, by contrast, becomes fully adult at a height of only eight inches. The rattan palms and their allies grow as vines for hundreds of feet into and over tall trees. The Nipa palm grows profusely in the brackish water of tidelands, while other kinds grow in fresh-water swamps, others on sand dunes or rocks, others in the niches and cracks of cliffs, and still others in a further great variety of situations. Many palms are caespitose or stoloniferous, growing in clumps that range from small to immense. Not everyone realizes that a good proportion

of the palms is unfriendly to animals, including man; a great many kinds are armed with fearful spines in some or nearly all of their parts, a fact that does not aid in collecting them. Palms are shrubs or vines or trees, and some of them are also freaks. *Colpothrinax Wrightii* has a monstrous swelling in the middle of its stem, like the body of an anaconda that has swallowed a deer; palms of the genus *Iriartea* have their trunks perched up on huge stilt-roots many feet above the ground. The kinds of palms already seem almost infinite in their differences, and there is often much variation within a single species, as in *Chamaerops*; but some areas of the world have not been thoroughly explored, and there are still large areas not yet explored for palms at all.

This recitation of simplicities is by way of pointing to the vastness of the field. The difficulties that face the student would make a subject in itself. Too many of our cultivated palms, even, remain to be classified or identified. Some of the commoner palm genera are "imperfectly understood"—a phrase frequently recurring in the literature. The nomenclature is still, in numerous cases, either in a state of disagreement or of change; but this is hardly to be wondered at, for the business of obtaining good herbarium material is often attended by frightful obstacles, especially when it comes to collecting huge palms in remote places and the spiny climbers in nearly impenetrable jungles. The taxonomist is also up against poor and incomplete old specimens in herbaria both here and abroad, so that his findings can be no better than the material he has to work with. In the *Palmaceae*, systematic botany and taxonomy still have a long way to go.

In Florida and elsewhere in the United States, confusion of species is not only widespread but universal in the genera *Chamaedorea*, *Thrinax*, *Coccothrinax*, *Acrocomia* and *Butia*. It exists more or less in several other genera of introduced palms, *e. g.*, *Areca*, *Arenga*, *Phoenix*, *etc.*, though most of the difficulties in *Phoenix* seem to stem from probable hybridization. Confusion is compounded, in the trade, by the very natural habit of clinging tenaciously to old binomials that have long since been superseded, as in the classic example of *Cocos plumosa* instead of the modern acceptance, *Arecastrum Roman-*

*zoffianum*; and in generic names, *Areca* for *Chrysalidocarpus*.

I trust that I have made the need for a palm society fairly apparent. Other matters not yet mentioned also prompted the idea. There is the great difficulty of finding English texts that throw light into dark corners. Many monographs and other technical treatments are out of print and hard to come by. Published information on the culture of palms is scant and fragmentary. There is no accurate up-to-date check-list of the palms cultivated in the United States. To the amazement of beginning collectors, there is no such thing as a book containing brief descriptions of several hundred different palms, together with simple cultural directions. All of these facts, taken together, are what prompted the idea of founding the Society in the first place. In the plainest terms, we wished to learn the names of the palms, their growth habits, their adaptability to different soils and climates, their botanical characters, and in fact everything else worth knowing about them. The general public assumes that all these things are common knowledge already, and would be astonished to learn that just the reverse is true.

Which brings me back to The Palm Society. It does not exist in order that a group of people may admire the palms in concert. Anyone may admire them and sing their praises without being a member of anything. Nor does it exist because of what we know. It exists because of what we do not know. Its activities, apart from the main one of attempting to acquire more knowledge, do not extend to physical experimentation with palms, the handling of seed, the preservation of palm stands, or propaganda for planting public roads and parks. All these activities are proper ones for the individual members, and desirable though some of them may be, the Society is not organized in such a manner as to engage in them. On the contrary, it has its hands full with the business of finding out what the palms are, how to propagate and grow them, where they may be successfully grown, and what palms are now being grown where.

Forgetting for the moment the tremendous utilitarian and economic value of the palms, the family is one of the largest and noblest in the plant world, well deserving of Linnaeus's

term: *Principes*, the princes of the vegetable kingdom. It is so big that the study constitutes a challenge to the imagination. It is so big that, for a long time, much will remain to be learned and to be conquered. It is so big, so difficult and so important that, I must admit,

we have been rather late in making a start with a palm society. But it could never be *too* late, short of another century or longer; for in the meantime there is work to be done, knowledge to be gained and satisfaction to be had from making even a dent in ignorance.

## COMPARISON OF 'HAPPINESS' ROSE PRODUCTION ON FOUR ROOTSTOCKS

S. E. MCFADDEN, JR.

*Department of Ornamental Horticulture*

*University of Florida*

Gainesville

The long-stemmed red flowers of the Hybrid Tea rose variety 'Happiness' are marketed as one of the choice cut-flowers of the florist trade. With improvements in cultural methods and materials in recent years, the possibility has developed of growing 'Happiness' and other select rose varieties out-of-doors in Florida to supply commercial cut-flower markets; this possibility is being explored in several localities throughout the state.

This investigation is an attempt to determine the influence of rootstock differences on the quantity and quality of flowers produced by the 'Happiness' rose. While flower yield data from this experiment will not be completed until December of this year, this report of data obtained thus far is presented to point out an apparent superiority of *Rosa fortuneana* stock which has appeared in the test comparison with three other stocks—*R. multiflora*, *R. odorata*, and var. 'Dr. Huey'.

### PLANT MATERIALS AND METHOD OF CULTIVATION

Each of the plants included in the test was propagated by graftage (October 1954) of a 'Happiness' bud on container-grown stock which had been produced by rooting stem cuttings (May 1954). Four specimen plants on each of the four stocks were selected for testing. These were equally divided for planting in two field locations—replicates I and II.

Soil conditions differ in respect to the depth of the top sand layer at the two locations. The

deeper sand layer of replicate II location has seemingly furnished a more adequate drainage and aeration. Soil was similarly prepared for each of the two replicates one month before planting (February 1955) by mixing a four inch layer of Florida peat and superphosphate (4 lbs./100 sq. ft. bed area) with the top 12 inches of native soil. Both locations furnish full daily sunlight. The plants were arranged in a single east-west row and were spaced 4 feet apart in each replicate. A three-wire trellis over the row was provided to support taller cane growth and anchorage for the plants when high velocity winds occur. Two organic mulch treatments were included in each replicate—pine sawdust and tung-nut hulls. These were added to the surface of the bed soon after the plants were established, forming two to four inch layers. Beds were curbed with cypress boards treated with a wood preservative.

The attempt has been made to keep other cultural treatments uniform. A weekly spray application of the fungicide captan has kept the foliage free of blackspot during the two year period of this test. Insecticides have been added to the fungicidal spray solution at times when they were needed. Soluble nutrient materials have been included with the fungicide at eight week intervals to supplement four ground applications of 6-6-6 fertilizer (2 lbs./100 sq. ft. bed area) furnished during each year. Irrigation was supplied during periods of low rainfall.

During the spring and summer seasons of 1955, flower buds were removed as they formed, or cut with short stems, to encourage vegetative growth. The flowering season 1955 ended during the third week of December; plants were pruned during January 1956 to