In subsequent years Paul Allen developed a special affection for the palms along with his other major plant love - the orchids. Under the kindly aegis of a new employer, the United Fruit Company, he studied the flora - including the palms - of Costa Rica, Honduras and El Salvador. During this time several new palms were named by him - primarily in the genera Roystonea and Cryosophila. In the fifties a new young Society devoted to these Principes of plants was formed. Paul Allen served The Palm Society as charter member, Director, and member of its Editorial Board.

For all those things and more, it is especially appropriate that this Garden

- devoted as it is to palms and to tropical plants in general - should elect to honor one who epitomized in his own life's work what the Fairchild Tropical Garden itself attempts so successfully to do. In awarding the Robert H. Montgomery Palm Medal posthumously to Paul Hamilton Allen it is particularly fitting that his wife Dorothy - his loyal and able helpmate, and talented botanical artist as well - has found it possible to come here from St. Louis to receive it. I hope that this belated presentation will demonstrate in a small way the sincere appreciation and affection many of us have had for Paul Allen and for the outstanding contribution that he made during his lifetime to botany and to horticulture.

## Paul Allen — Palm Collector and Student

HAROLD E. MOORE, JR.

Few groups of plants are less amenable to usual collecting techniques or frustrate the plant collector more than do the palms. Thus most early, and some late, explorers were usually content to collect fragments of leaves with a few flowers and fruits, and to ignore such important parts as leaf-sheaths, inflorescence bracts and inflorescences themselves. Not so Paul Allen, whose long correspondence with Dr. L. H. Bailey and native admiration for and understanding of palms gave him a splendid background for collecting and studying palms. As a consequence, his specimens, augmented by notes and photographs, approach the ideal, and his persistence in collecting as many stages of flower and fruit for individual species over a wide area provided the means for understanding Central American and Colombian palms much better than they had previously been understood.

I do not have a complete listing of all

the palms collected by Paul Allen, but as Dr. Hodge has pointed out elsewhere (p. 41), his collections enriched the number of palms known for Panama and Costa Rica by a large percentage. Though Paul wrote only two formal articles on palms, his major contribution was through extensive correspondence and detailed information provided for the use of L. H. Bailey and the writer. From his collections have come the first representatives of six species which bear his name-Attalea Allenii H. E. Moore, Bactris Alleniana L. H. Bailey, Chamaedorea Allenii L. H. Bailey, Geonoma Allenii L. H. Bailey, Prestoea Allenii H. E. Moore, Sabal Allenii L. H. Bailey. In addition to those named in his honor, his specimens have brought the following species to scientific attention for the first time: Aiphanes fuscopubens L. H. Bailey, Acrocomia panamensis L. H. Bailey, Bactris aureodrupa L. H. Bailey, B. Bailevana H. E. Moore, B. devia H. E. Moore, B. divisicupula L. H. Bailey, B. duplex H. E. Moore, B. fuscospina L. H. Bailey, B. militaris H. E. Moore, B. oraria L. H. Bailey, B. paula L. H. Bailey, Chamaedorea coclensis L. H. Bailey, C. falcaria L. H. Bailey\*, C. lucidifrons L. H. Bailey, C. Woodsoniana L. H. Bailey, Hyospathe concinna H. E. Moore, and Synechanthus panamensis H. E. Moore.

Paul's detailed consideration of palms in the rain forests of the Golfo Dulce, reprinted in this issue, speaks for his familiarity with the group as do several paragraphs from a letter to Bailey published in an appreciation by Wilson Popence in *Ceiba* 10: 1-14, 1964. His other writings show an equal grasp of palms.

Distribution and variation in Roystonea, Ceiba 3: 1-18, 1952, in which Roystonea Dunlapiana P. H. Allen and R. regia var. hondurensis P. H. Allen were described.

Two new fan palms from Central America, Ceiba 3: 173-178, 1953, with Cryosophila Guagara P. H. Allen and C. Williamsii P. H. Allen described as new, together with a key to species.

My own association with Paul stemmed from identification of collections with attendant correspondence, and further developed during a period of joint field study in 1953 at Palmar, Costa Rica, while he was working on his book, The Rain Forests of the Golfo Dulce. There I had my first experience with such rain forest genera as Iriartea, Socratea, Welfia, and the undergrowth palms peculiar to that region under the tutelage of a master observer and collector.

I well recall one day which characterizes Paul's devotion and concentration. Crossing the river to Palmar Norte on the morning of March 12th, we headed for the high mountain slopes on the trail to El Cedral and Maiz, on which grow some perplexing palms. The day was hot, though once in the forest proper above the second-growth of the lower slopes, the force of the sun was greatly lessened. Nonethless, it was the sort of day I attempt to describe to friends and colleagues (and income tax collectors!) of temperate regions who jocularly or seriously comment on the "vacations" field botanists enjoy; for climbing from near sea level to 3,000 feet with pack, plant presses, axes and photographic equipment, even when shared with assistants, tends at length to make routine university work seem vacation indeed. On this particular day it was two very weary botanists who returned to collapse into the river after having reached Hyospathe Lehmannii and as yet unidentified Chamaedorea. It was also on this day that the photograph of Geonoma congesta reproduced as fig. 39 was made. The full drama of the photo is not apparent, however. Paul was an excellent photographer and shot not "from the hip" but from a tripod on well prepared positions. The clump photographed was in a reasonably open spot by the trail, but to get the whole meant clearing well off the trail to set up the tripod. While an assistant and I cleared about the palm, Paul cut a path to an appropriate distance, selected a site for the camera, and squatted to cut undergrowth as close to the ground as possible with low sweeping strokes of his machete. Suddenly the peace was broken by a shout, a crash of brush, a final whack of the machete and silence while Paul wiped his face and recovered from the realization that he had been

<sup>\*</sup>Chamaedorea falcaria has since proved to have been assigned to the wrong genus and is a species of Hyospathe; Geonoma Allenii must now be assigned to Calyptrogyne, probably as a synonym of C. brachystachys.

stooping by and "fanning" with his blade a well concealed terciopelo (Bothrops atrox, also known as barba amarilla or fer-de-lance), one of the most dreaded snakes of the Americas.

This and other days of collecting from Palmar, the joy of late afternoon tea with Paul and Dorothy, spiced by

34. Erythea salvadorensis. Photo P. Allen.

their interest in and conversation about all things pertaining to their adopted countries, have left an indelible impression so that even today, studying palm specimens collected by Paul H. Allen brings home the realization that we are deprived of much more than a talented palm collector and student.



35. Cryosophila Williamsii at Lake Yojoa Photo P. Allen.

## Palms in Middle America

PAUL H. ALLEN

Palms form a characteristic and sometimes conspicuous element in the vegetation of most tropical countries. This is certainly true of Mexico and Central America, wherever clearings and cultivation, or lack of rainfall have not eliminated them from the scene. Genera and species increase in number and complexity as one travels southward in the Americas, reflecting the more favorable environment of the rain forest habitat and the physical approach to the

great Amazonian hylaea that serves as a distributional center for the family, in the Western Hemisphere.

Middle American lands show an infinite variety, holding within themselves all the vast range of climatic zones and plant associations of a continent. Northern and eastern slopes of the central cordillera are, with minor exceptions, relatively rich and fertile, with great tracts of nearly unbroken forest crisscrossed by short, but often precipitous