

JULIA F. MORTON (1912-1996)



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President, Florida State Horticultural Society, 1979**

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FSHS Proceedings Editor's Note: Julia Morton, our Society President, 1979, and her husband, Kendal Paul Morton, deceased, of The Morton Collectanea on The University of Miami campus, were two of our most loyal members and supporters over the years. Since 1946, Julia Morton has published numerous horticulturally related papers and books (some famous), many in our proceedings. Both she and Kendal Morton have been a great loss to the Society. Repeated here is a rather complete history of Julia Morton, recently published in Economic Botany, 51(2) 99-106. 1997.

Julia Frances McHugh Morton was the victim in a serious automobile accident on September 10, 1996. She was heading home from her regular work day at her office, the Morton Collectanea on the University of Miami campus, when the accident occurred. Julia never recovered consciousness from the crash. With her death, the world lost one of the pioneers

in economic botany, who for exactly fifty years was a major contributor to the relatively new field of ethno-botany.

Julia was born April 25, 1912 in Middlebury, Vermont. When she was fifteen her mother and sister died and her brother took her to New York City to live. She worked for several years as a commercial artist, and it was there she met and married Kendal Paul Morton, a Canadian. Together they sought to produce an encyclopedia of information on food, medicinal, and other useful plants. Their collection of data, assembled as copies or clippings from any source available, was filed as single sheets under appropriate topics in file cabinets. The collection was called a collectanea and soon became known academically as The Morton Collectanea.

With the outbreak of World War II Kendal and Julia returned to Canada, where Kendal was to enter the service and edit a military camp newspaper. He failed a physical examination because of a heart murmur and chose to move to the Bahamas rather than face civilian life in wartime Canada or the U.S. Their botanical files were placed in storage except for entries on tropical fruits, which would be useful in Nassau. By

adding to the files and by learning more about tropical fruits, the Mortons prepared the manuscript for their first publication, "Fifty Tropical Fruits of Nassau." Julia proved to be an excellent photographer and used the talent in nearly all of her publications. At the end of the war the Mortons accepted an invitation to work at the Subtropical Experimental Station in Homestead, Florida, where they were aided by association with George Rühle and Bruce Ledin. Collaboration with Dr. Ledin produced the manuscript for the book *400 Plants of South Florida*. Perhaps it was this publication that led to their association with the University of Miami in Coral Gables. With the approval of President Bowman Ashe and the cooperation of Prof. Taylor Alexander, all of the Collectanea files were assembled on the new campus in a wartime temporary building. In this new spacious location the Collectanea grew in size and in usefulness. Students were available to help with the selection and organization of material, and there was room for visiting scholars, who had free access to the material. The Mortons' interest also became divided, with one portion devoted to poisonous plants and the other remaining on useful plants, edible and ornamental. A suggestion that her photographs of plants would make interesting and useful posters led to the production of two wall charts of "Plants Poisonous to People," one showing plants that primarily cause internal poisoning, and the other, plants that are primarily causes of skin and respiratory irritation. It is no exaggeration to say these are currently in use in classrooms and hospitals in many tropical countries. In the Miami area inquiries about toxic plants were directed to Julia by letter, by telephone, or in person. The Poison Control Center referred most plant poison calls to her. In temperate areas it is possible for a qualified individual to ask the proper questions and receive descriptive details permitting the plant to be identified by telephone. In tropical areas, including Miami, the abundance of potentially poisonous plants makes this difficult. If there were any question, Julia Morton commonly told the caller to bring the plant and the child to her office, where a nearby hospital was available if professional medical treatment was necessary. She did not offer medical advice and said she preferred to be overly cautious rather than to be sorry for a wrong identification. When her husband began to have breathing difficulties, Julia developed an interest in airborne toxins. She led a campaign against species of *Schinus* and *Melaceuca quinquenervia*, whose pollen caused asthmatic difficulties, and especially against tobacco and smoking. One of her publications in 1968 concerned "Some ornamental plants excreting respiratory irritants." Kendal Morton spent his last years in a wheelchair breathing from portable oxygen cylinders and died in 1964 of emphysema. Late reprints of Julia's book on "Plants Poisonous to People" carry a dedication to Kendal Morton and three associates as "Victims of tobacco, a poisonous plant." A short time later Julia turned her attention to esophageal cancer, exploring the possibility that diet and especially consumption of bush tea might be responsible. She investigated the use of rooibos tea (*Aspalanthus linearis*) in South Africa, *Krameria* tea in Curaçao and Venezuela, and teas of *Ilex* and *Quercus* in the southeastern United States. She put forth the suggestion that high tannin content might be the causative agent and attempted unsuccessfully to associate this with drinking of red wines.

Using her knowledge of plants that are edible and those that are poisonous, Julia compiled data for, *Wild Plants for Sur-*

vival in South Florida (1961). The material was acknowledged as drawn for the U.S. Air Force Jungle Survival Training Program conducted in Florida during World War II and from various military survival handbooks. "Wild Plants" proved to be popular and went through five reprintings. In 1968 Julia made a trip to Viet Nam, examining the training of troops for survival experience. The Navy had issued at the end of World War II a set of "playing cards" illustrating edible and poisonous plants of the Pacific tropics. Julia updated that training aid upon her return, wrote reports on the "selected flora and fauna of the Mekong area relating to survival," and contributed to *Survival-Keyed Vegetation Map of the Mekong*.

Julia Morton's most significant publications on medicinal and poisonous plants are: *Plants Poisonous to People in Florida and other Warm Areas* (1977, 1982), *Major Medicinal Plants: Botany, Culture and Uses* (1977), *Atlas of Medicinal Plants of Middle America*, a volume of 1400 pages issued in 1987, and *Fruits of Warm Climates* (1987).

Beginning in 1954 Julia Morton wrote articles on individual plants of interest to Florida. These ranged from the Cape gooseberry and kiwano to the red mangrove and the water chestnut. The articles were often rewritten for different journals, and some were translated into Spanish. *Exotic Plants*, a small edition of *500 Plants of South Florida*, was issued in the Golden Book series and eventually translated into French and German editions. All of Julia Morton's writings are strongly based on the collections of the Morton Collectanea. She cites multiple articles which were easily compiled from the Collectanea files but are difficult to check with normal library procedures. It seems that in some cases the bibliography given is longer than the article. The greatest question at present is the future of the Collectanea. Regrettably, no staff member of the University of Miami is available to carry on the use of this resource. A major grant and effort would be required to computerize existing files. With the death of Julia Morton we recognize the end of a significant career and contribution in economic botany.

Julia Morton did not attend college but in 1973 was awarded a Doctor of Science degree *honoris causa* by Florida State University. In recent years she has had the title of Research Professor of Biology at the University of Miami. She gave special lectures to various classes at the University of Miami, Broward Community College, Miami-Dade Community College, and at local hospitals. She participated in the continuing education program at Miami and in the Elderhostel program. She belonged to many professional societies and served as officer in several including Sigma Xi, Society for Economic Botany, Linnaean Society of London, American Society of Pharmacognosy, American Association for the Advancement of Science, Association for Tropical Biology, Florida State Horticultural Society, and Fairchild Tropical Garden. Dr. Morton was an honorary member of many south Florida garden clubs, the Florida Native Plant Society, and the Rochester (NY) Academy of Science. She was particularly proud when in 1978, she was selected as the first recipient of the annual Distinguished Economic Botanist award by the Society for Economic Botany and, then again, in 1993 when she became the nominee for the year and the fourth woman ever selected for the Florida Agricultural Hall of Fame.