

THE INCREDIBLE LYCHEE COMES OF AGE— FLORIDA LYCHEE GROWER'S ASSOCIATION

ARTHUR M. HILL, JR.

Vero Beach

At the call of Chairman of organizational executive committee, Mr. Earl Wirt, Jr., the Lychee growers of the State of Florida met November 5, 1953, at 2:00 p.m., at the Sereno Hotel in St. Petersburg. Judge Ware of Clearwater, chairman of the constitution and by-law committee, presented suggested charter and by-laws which were adopted by the Lychee growers at this meeting, thus forming the Florida Lychee Grower's Association, P. O. Box 888, Winter Haven, Florida. The Board of Directors elected were: Col. W. R. Grove, Jr., Laurel; C. E. Ware, Clearwater; Arthur M. Hill, Jr., Vero Beach; Earl Wirt, Jr., Babson Park; Col. Grey Trevalyan, De Soto City; Henry A. Simpson, Geneva; and John Lynch, Miami. Officers were Col. W. R. Grove, Jr., President; C. E. Ware, Vice President; and Gordon Palmer, Sarasota, Secretary-treasurer.

Thus the Lychee of China came of age in Florida in the United States. The history of efforts to establish the Lychee as a commercial crop in Florida dates back approximately 75 years. Even the records of the Florida State Horticultural Society have records of papers over 37 years ago. Thus generations of work, hope and endeavor were fulfilled.

The Florida Lychee Grower's Association, a cooperative chartered under the laws of the State of Florida, and operated under the Capper-Volstead Act of the United States, started its career by marketing, during this past mar-

keting season (June-July) 9,162 pounds of fresh Lychee fruit for its grower members at a price, net to the grower of 69 cents per pound. This one act answers the last question very important to commercial production of fruit: the how, where and for what price can I sell the fruit?

The Florida Lychee Grower's Association is further authorized by its by-laws and charter to carry on research in cultivation, production, and methods of marketing fruit, and this past season gave 300 pounds of fruit to Dr. Stahl, of the University of Miami, to further study problems in marketing and processing Lychees. A grower who belongs to this association is a member of a team of common interest to help each other with their problems by united effort and cooperation.

My wife, Margaret, and I have for twelve years been interested in Lychees. Thirty five years ago, at Vero Beach, my father and mother planted a Lychee tree, an original Brewster layer introduction. It is still growing vigorously and bearing fine crops. For ten years I have planted, experimented and worked with Lychees, taking blocks of trees and going to the extreme of trying to kill them to find out facts about them, such as critical temperature, fertilizer needs, soils, and production. Two years ago, my information convinced me that they were not just charming temperamental door-yard pets, but can be grown successfully and profitably under commercial orchard practices. We will be pleased to have any one interested come visit us at Vero Beach and see our plantings.

SOLANUM HYPORHODIUM OR COCONA

J. J. OCHSE

University of Miami

Coral Gables

In technical Publication No. 24 of the Inter-American Institute of Agricultural Sciences in Turrialba, Costa Rica,* Mr. J. L. Fennell, introduced *Solanum hyporhodium*, the cocona of the upper Amazon, as a fruit plant that

might have acquisition to warm climate horticulture.

Fennel in his above named publication does not know to what extent the cocona may have reached the gardens of the outside world and describes for that reason the cocona as a desirable new fruit as follows:

"The ovoid fruits, which are suggestive of large red or yellow apples, are held in compact clusters close to the trunk and branches. The plants are heavily produc-

* "Cocona"—A desirable new fruit. Foreign Agriculture 12 (8): 181-182. 1948.

tive oftentimes being loaded down with from 40 to 60, or more, pounds of fruit. About 7 months are required from planting to first harvest. Ripening may then continue for several months.

"Upon reaching maturity, cocona fruits turn from the earlier bright-yellow to deep-red or burnt-orange color and are then most attractive. At this stage the peachlike fuzz which is typical of this tribe of edible large-berried fruits of the genus *Solanum* is easily brushed off, leaving a clear and blemish-free skin.

"The flesh and inner pulp is of a pale-cream color throughout, a fact which readily distinguishes this fruit from its two nearest relatives, the naranjilla and lulita, the pulp of which is a translucent green color.

"Although the flavor of uncooked coconas is agreeable, the pulp is distinctly acid, and

they are not recommended for eating out of hand. When peeled as an apple and used entire for making preserves, pies, and sauces, the product might be compared with that of apricot, pineapple, or gooseberry."

The cocona plant grows to a height of 4-5 feet and should be planted 5-6 feet apart in the field.

Planted this year for the first time at the Botany Department of the University of Miami, the plant has shown some expectations for the future.

The fruit set was definitely not abundant, but seed is available in small quantities to try out the plant in some other parts of the State of Florida with a little more distinct difference in day and night temperature as in Miami during the summer.

The cocona is susceptible to nematodes, which is particularly the case in alkaline soils.

OBSERVATIONS OF FLORAL BIOLOGY AND FRUIT-SETTING IN LYCHEE VARIETIES

MARGARET J. MUSTARD
University of Miami
Coral Gables, Florida

SU-YING LIU¹
University of Michigan
Ann Arbor, Michigan

ROY O. NELSON
University of Miami
Coral Gables, Florida

The lychee, *Litchi chinensis* Sonn; is a native of South China where it has been cultivated for centuries. It is a comparatively recent introduction in Florida, having fruited for the first time in this area in 1883(2). Although cultivated on a relatively small scale in Florida, it is rapidly gaining popularity as a luxury fruit.

A search through the available literature on the lychee reveals considerable information dealing with the cultivation and utilization of this fruit but little information regarding its floral biology other than that presented by Khan (3) and Groff and Liu (1).

¹The information presented here by Su-Ying Liu is a portion of the material which she has prepared as a Doctoral dissertation at the University of Michigan. The dissertation will be published elsewhere in its entirety at a future date.

Investigators at the University of Michigan and at the University of Miami recognized the need for this information and unknown to each other undertook similar investigations. When the situation became known to those doing the research work, it was decided to combine the findings into a single paper. The observations by Liu were made on trees grown in the late Col. Wm. R. Grove's Lychee Orchards in Laurel, Florida and those by Mustard and Nelson on trees located in Dade County. Although this collaboration has resulted in some duplication of data, it is felt that such duplication is warranted as it shows that the observations made hold true under somewhat different cultural and climatic conditions.

FLOWER TYPES

The individual flowers of the lychee are born in profusion in panicles (Fig. 1). Observations made at Laurel show that the lateral and terminal panicles vary considerably in size (Table 1). The terminal inflorescences on one tree of the Brewster variety were found to average 45.7 cm. in length by 40.6 cm. in width, but in the Sweet Cliff variety the dimensions were 16.5 by 17.7 cm. The average length of