Perrine and Florida Tree Cotton

By T. RALPH ROBINSON

The so-called "tree cotton" that for years past has grown in a wild state along the coastal keys of Florida, has come into considerable publicity of late. This is because with the discovery of the pink-boll worm in 1932 on the lower Florida keys, it was realized that these perennial cotton plants furnished ideal hosts for the dissemination of an insect pest that might in time threaten the cotton industry of the South. Accordingly, steps were promptly taken (June 1, 1932) to eradicate this type of cotton, and the work has been relentlessly pushed by the Federal Bureau of Entomology for about fifteen years, the State Inspectors cooperating in every possible way.

Anvone who has seen the tangled thickets in remote places where these cotton plants seem most apt to thrive will appreciate what a task has been undertaken. Florida, however, has proven a battleground for completely eradicating two major plant pests fully as dangerous. Reference is here made to the eradication of citrus canker (a bacterial disease) and the Mediterranean fruit fly-campaigns that set new world records for such seemingly hopeless battles. We may, therefore, feel justified in predicting ultimate success in this latest fight, though it may take still more years of painstaking labor. It should be kept in mind that the real object of the campaign is the eradication of the pink boll worm. With the destruction of field cotton, averaging a million plants a year for the past 17 years, the pink boll worm may find itself completely cut off from a breeding place; at least it will hardly constitute the menace that it once appeared. Just at present the work is suspended for lack of funds. But whence came the cotton seemingly growing wild that offered such a convenient breeding ground for the dangerous pink boll worm? Recently there has come to light, through the researches of Mr. Gaines Wilson of Miami, a letter dating back over a hundred years that appeared at first glance to throw light on this question.

Dr. Henry Perrine received in 1838 from Congress a grant of land in extreme south Florida for the introduction and testing of tropical plants. He had promptly established a nursery on Indian Key lying off of Lower Matacumbe. The Seminole Indian War then in progress prevented his occupying the mainland area included in the grant, but he managed to start some plantings on adjacent keys, chiefly on Matacumbe. Among the two hundred or more species and varieties of plants he had planned to propogate for testing, cotton appears to have been one. The story as regards cotton is so well told in the letter herewith reproduced that it hardly needs further com-

ment. As all students of south Florida history know, Perrine's untimely death in the Indian Key Messacre of August 7, 1840, put a tragic end to his ambitious and carefully planned horticultural development of South Florida.

It would be interesting to know what report came back to Perrine from Dr. Ralph Glover regarding the merits of the two samples of cotton transmitted with his letter of '12th June 1839 5 P.M." No doubt this report was contained in the chest of records and seeds that went up in flames when Perrine was murdered and his house set on fire.

One item brought out in the postscript to Dr. Perrine's letter is the apparent fact that he had a "large cargo of living plants" in the Bahamas ready to bring to Florida. This is the first intimation the writer has seen that in addition to his introductions from Yucatan (where he had been serving as U. S. Consul) he had gone to the Bahamas for some of his tropical plant material.1

As to the spread of wild cotton along the Florida coasts present-day records indicate that wild cotton plants may be found (or were before the work of eradication began) as far north on the East Coast as an island opposite the town of Grant, about 12 miles south of Melbourne; on the West Coast the farthest north reported is a small island out in the Gulf from Hudson about 15 miles north of Tarpon Springs.

Fortunately before the eradication of Florida's wild cotton was undertaken a careful study of these cottons had been made. Dr. O. F. Cook,2 the cotton expert of the U.S. Department of Agriculture, made this survey, the results of which seem completely to absolve Dr. Perrine from all responsibility in the spread of wild or perennial cotton along the Florida coasts.

Dr. Cook distinguished four species of truly wild cotton in Florida, quite different from the upland cottons grown commercially and also different from each other. He regards these primitive cottons as native wild species, a part of the tropical flora that South Florida shares with Cuba, the Bahamas, and the islands to the south. Dr. Perrine was too good a botanist and practical agricultural expert to have wasted his efforts in bringing to Florida such unpromising material for commercial culture.

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An account of Perrine's life and work was prepared and published by the present writer, this being entitled, "Henry Perrine, Pioneer Horticulturist of Florida." This was first published in the *Proceedings* of the Florida State Horticultural Society for 1937, pp. 78-82; reprinted in *Tequesta*, Vol. 1, No. 2, Aug. 1942.

2 O. F. Cook, "How Shall We Know Plants?", *Journal of Heredity* XXVI, No. 1,