GROWTH AND FIBER PRODUCTION OF KENAF, 
HIBISCUS CANNABINUS L., AS AFFECTED BY 
PLANT SPACING IN EL SALVADOR

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Kenaf, Hibiscus cannabinus L., was introduced into Central America a number of years ago as a source of soft fiber. The plant was being grown on a small scale by a few farmers at the beginning of the second world war when the Board of Economic Warfare of the U.S. Government became interested in the plant as a substitute for jute. It seemed imperative to have another source of soft fiber in the event that a shortage occurred. Production of the seed and fiber was encouraged by that office in several Central American Republics by making contracts with the growers for all of the crop produced. At that time very little definite information was available concerning the methods of production of the crop in Central America. Experimental investigations were started in August of 1943 to determine the best spacing of kenaf plants for fiber production and this paper presents the results obtained.

LITERATURE REVIEW

Kenaf, since its introduction, has been referred to as "roselle", Hibiscus sabdariffa var. altissima, in Central America but was correctly identified by Crane and Acuff (2) in 1945. The work of Choussy (1) refers to this plant as roselle, and this error in nomenclature may have caused some confusion with respect to literature references.

General recommendations for the spacing of kenaf for production of fiber have been given. Horst (6), in his work in Java, reported that the usual planting distance was 12 X 2.8 inches. A spacing of 6 X 6 inches has been suggested by van Gorkom (5), Michotte (7), Dekker (4), and Zegers Reyser (8). Van Gorkom stated further that spacings may be varied somewhat, but that a distance of 4 X 4 inches is too close. It seems to be generally agreed that the proper distance of planting is primarily dependent upon the fertility of the soil.

Crane, et al. (3) in recent work in Cuba obtained 3,338, 2,572, and 2,025 pounds of fiber per acre from plants grown in 8-, 16-, and 24-inch rows, respectively. The average number of plants per square foot were 9.5, 4.6, and 3.1, respectively.

EXPERIMENTAL METHODS

Investigations with kenaf were initiated in 1943 at La Ceiba, El Salvador, the former location of the Agricultural Experiment Station. The soil was not very satisfactory for experimental work so that everything was transferred in 1944 to San Andres, the present location of the Agricultural Experiment Station.

The study consisted of four spacings in randomized block arrangements. The

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3Figures in parenthesis refer to “Literature Cited”, p. 982.