Description of Mango Fruits, I

BY

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The extensive orchards of the Panamerican Agricultural College at Zamorano, Honduras contain, among a wide variety of interesting tropical and sub-tropical fruit and nut trees, a young eight year old mango orchard containing replicated blocks of fifteen different varieties of mango trees. As a preliminary step in a study of the adaptability of these different varieties to fresh and processed use, introductory yield studies were made of the size of these fruits, and their edible yield. Further studies on yield and quality will be begun during the summer and early fall of 1961, the next harvest season.

The information presented in the tables in this paper is purely quantitative; additional data as to sugar content and sugar acidity-ratio as well as fiber content will be necessary to present a more complete picture as to the relative desireability of the different varieties.

Some of the intangibles that determine consumer acceptability of fresh fruit are impossible to measure, and mango fruits are no exception. Thus we have Tolbert which combines acceptable quality and a fair edibility percentage. However its unusual apple shape and red blush make it extremely popular when it is available. Julie, a dwarf tree with small fruit and the lowest percentage of edible portion of the fruit is not particularly attractive and has no blush to distinguish it. Yet its delightful custard-like flesh and mild sweetness make it a favorite among mango lovers who have a chance to sample it.

Undoubtedly the largest size fruits are born by Davis Haden, which is of good quality whether eaten fresh or cooked. This extraordinarily large fruit, reaching a weight of three pounds or more would seem to be particularly well adapted to jelly-making and preserving because of its extremely high edibility percentage.

Preliminary trials at the Panamerican Agricultural College indicate that all of the fruits make excellent preserves, and all are adapted to freezing. Those with a slightly resinous flavor, when mixed with lemon juice during processing, become quite palatable.

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TABLE 1.—Comparison of thirteen varieties of mango growing at the Panamerican Agricultural College showing percentage of seed and skin, and total percentage of edible portion.

VARIETY	WEIGHT IN GRAMS [1] Total Fruit	Seed	Skin	% edible
Amini	235.7	38.9	58.7	74.7
Davis Haden	1004.4	81.7	153.1	76.7
Fairchild	413.3	51.6	61.6	72.7
Fascel	228.3	43.6	39.8	63.5
Haden	480.2	54.8	50.2	78.2
Irwin	447.9	38.5	67.8	76.3
Julie	315.4	44.7	73.2	62.7
Kent	642.4	73.4	126.8	68.9
Lippens	327.7	39.7	60.3	69.5
Sensation	413.3	42.3	77.2	73.6
Springfels	406.7	38.1	109.0	63.9
Tolbert	852.0	77.9	137.9	74.7
Zill	382.5	43.8	105.8	60.9

1. Average figures for ten fruits.

TABLE 2.—Dimensions in inches of fruits of thirteen varieties of mango growing at the Panamerican Agricultural College.

VARIETY	Width	Length	Thickness
Amini	3.13	3.38	2.86
Davis Haden	4.16	6.13	4.28
Fairchild	3.63	4.0	3.31
Fascell	2.91	3.69	2.51
Haden	3.64	4.38	3.45
Irwin	3.46	4.84	3.21
Julie	3.19	4.32	2.78
Kent	4.16	4.77	3.78
Lippens	3.14	4.08	4.18
Sensation	3.53	4.62	3.22
Springfels	4.06	6.46	4.68
Tolbert	3.73	3.46	3.46
Zill	3.53	4.32	3.23

Fig. 1.—AMINI

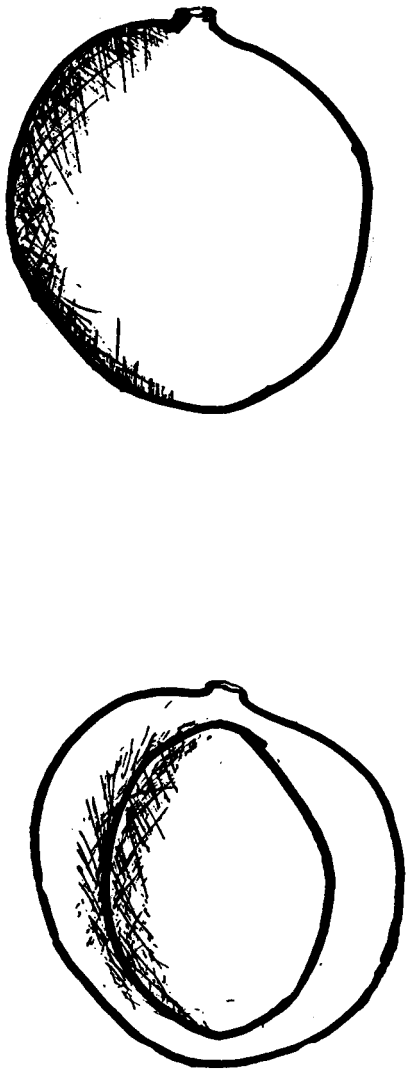

Fig. 2.—CARABAO

Fig.3.—COJON

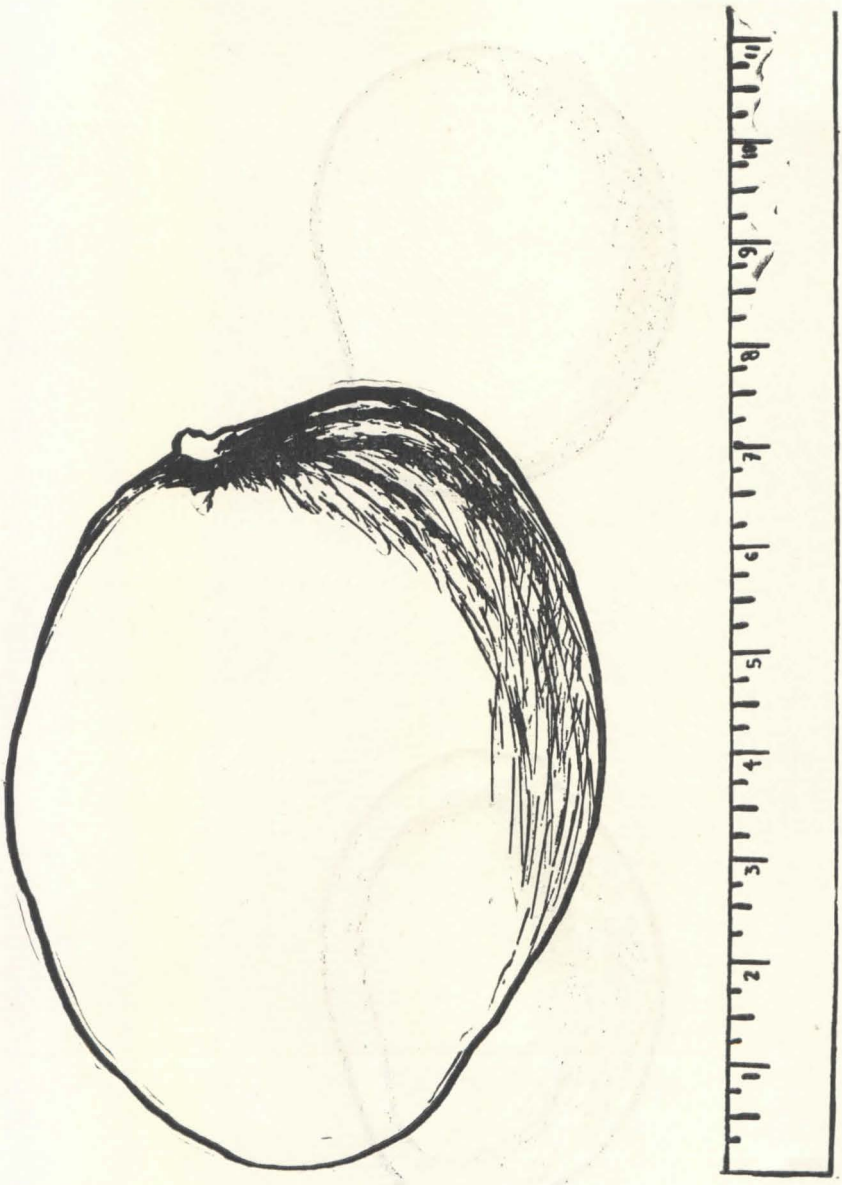

Fig. 4.—DAVIS HADEN

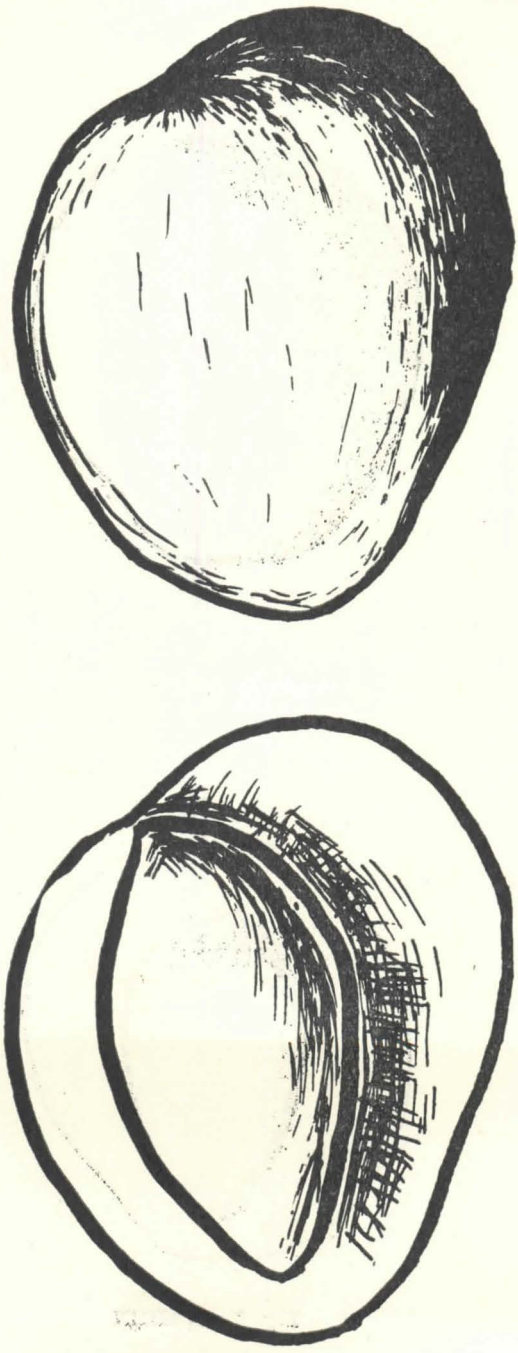

Fig. 5.—FASCELL

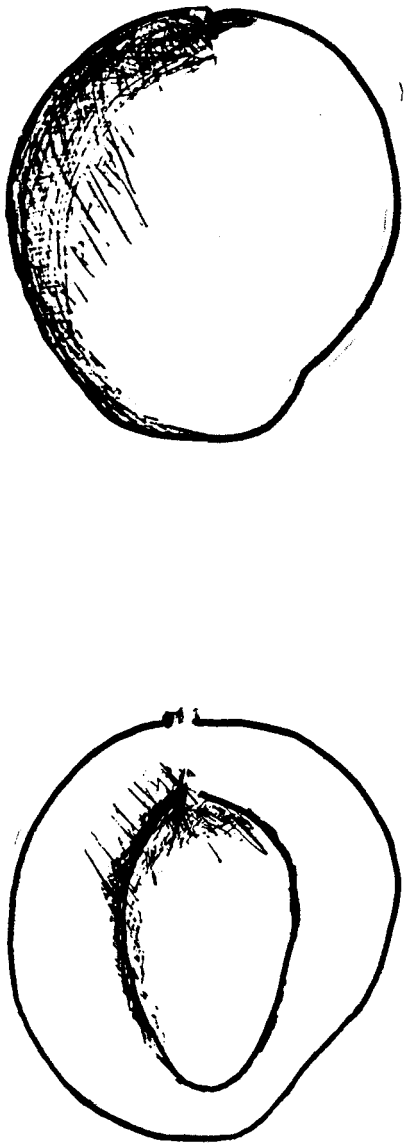

Fig. 6.—HADEN

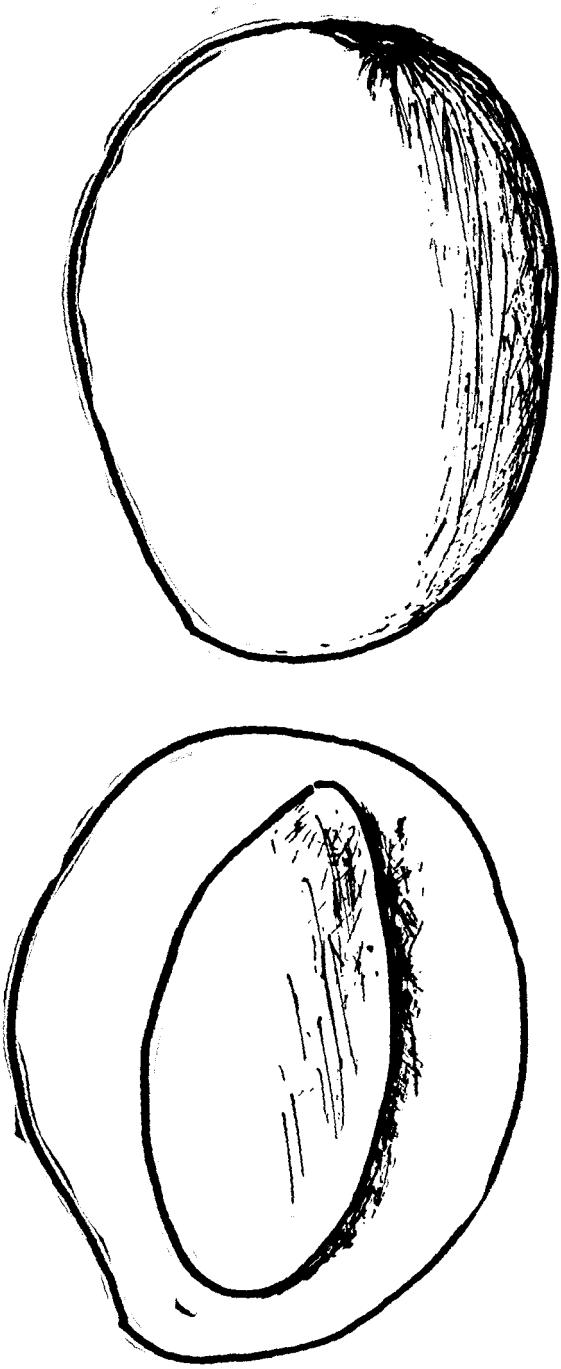

Fig. 7.—IRWIN

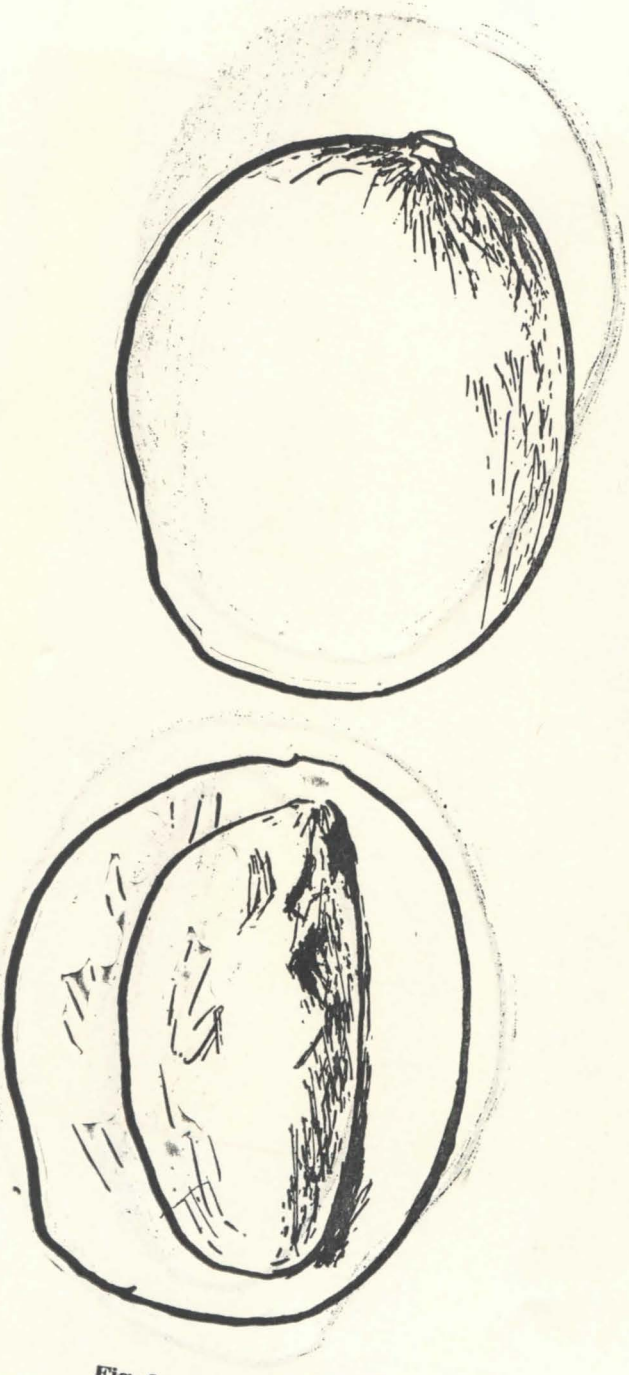

Fig. 8.—JULIE

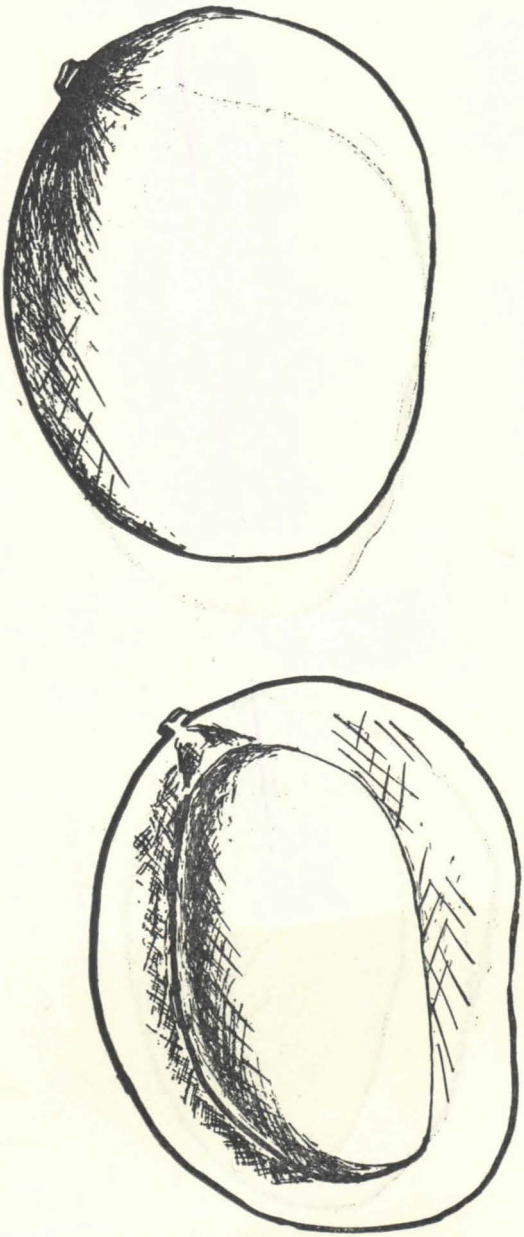

Fig. 9.—KENT

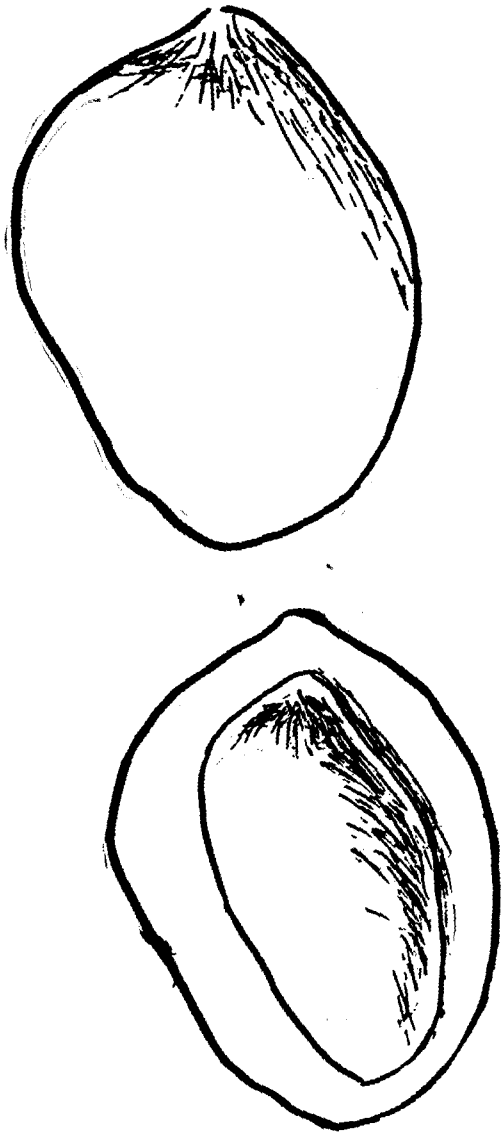

Fig. 10.—LIPPENS

Fig. 11.—SENSATION

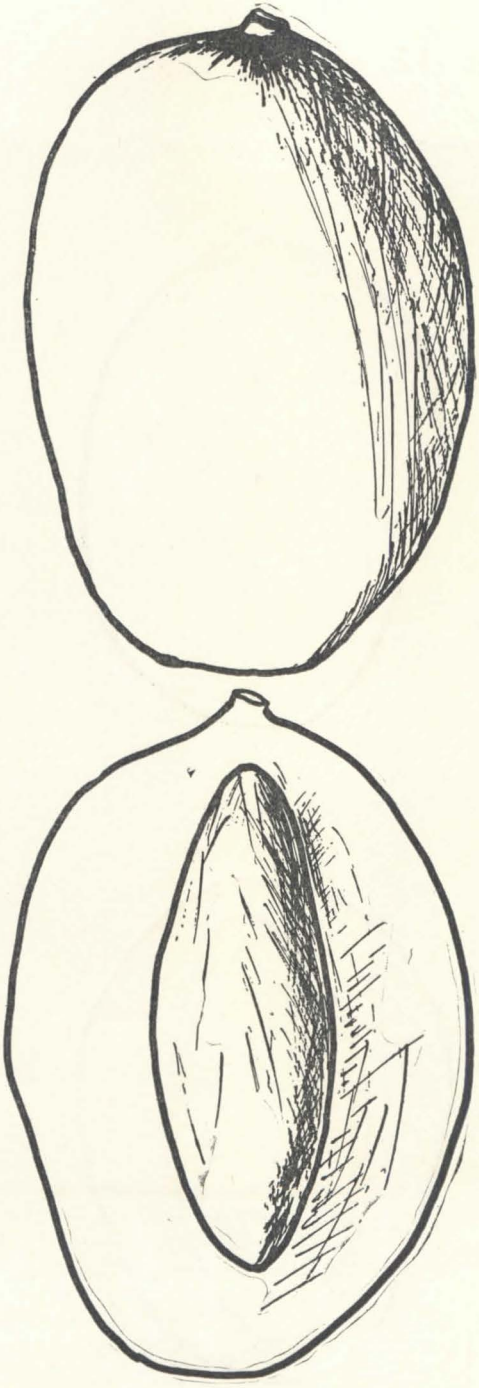

Fig. 12.—SPRINGFELS

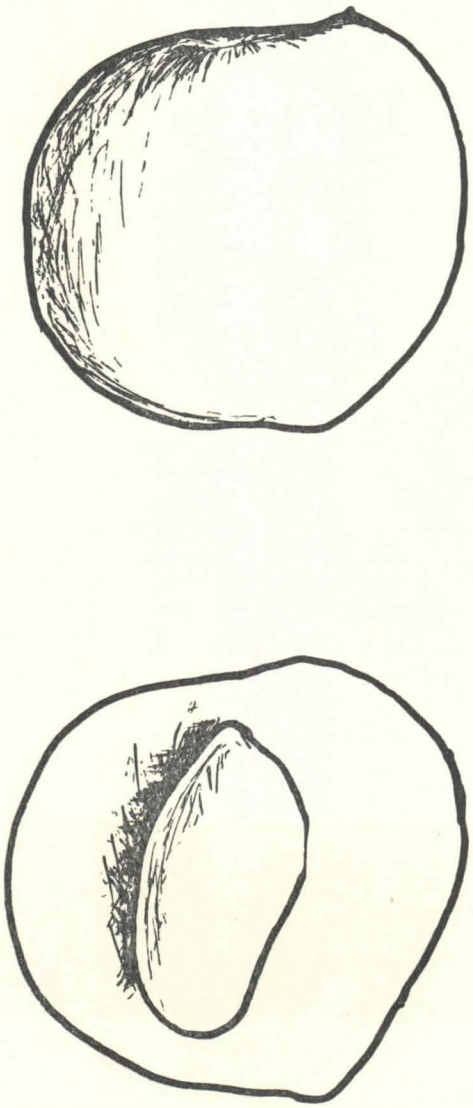

Fig. 13.—TOLBERT

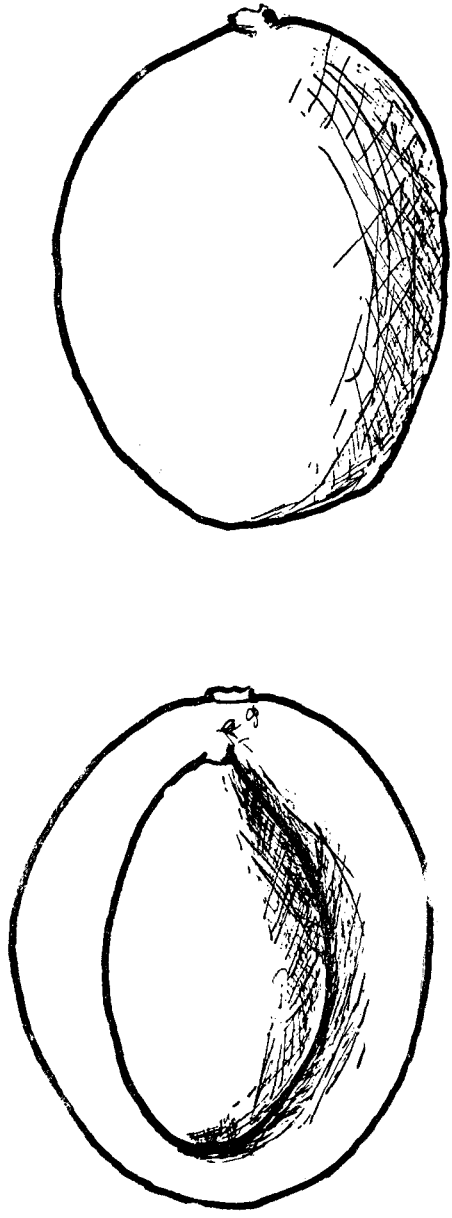

Fig. 14.—ZILL