Three new varieties have been submitted to the variety committee this year for registration and description.

"Norman" is the name of a new avocado variety submitted by the Florida East Coast Fertilizer Company. It is growing on the Hyams and Katzin property near Homestead, Florida. The tree grows rather tall, but has more tendency to spread than Lula or Taylor. The foliage is fairly dense. The fruit weighs between 16 and 19 ounces, is bright green, matures in January and can be classified with the Guatemalan race. The flavor of the fruit is good. The tree has yielded an average of about five bushels per year for the last six years, and appears to retain its foliage well even when carrying a fairly heavy crop. There is little tendency for the fruit to be borne in clusters. The shape of this fruit can be seen in figure 1.

Mr. L. K. Thompson of Bartow submitted a seedling loquat for registration under the name of "Fletcher." This fruit is shown in figure 2. The tree is a seedling about 30 years old in the yard of Mrs. George Fletcher in Bartow, Florida. It is now about 40 feet high. The value of this seedling is that the fruit has a firm flesh and tough skin that will hold up well for 2 weeks. The length is 1½ inches and the width 1½ inches. The shape is obovate and plump; skin color orange red, and the flesh is the same color as the skin. The flavor is fair to good, and the fruit is juicy. Up to five seeds are found in each fruit. The fruit is borne in open clusters with each fruit apart from the next one.

The committee has been asked to describe the Tommy Atkins mango (figure 3). This variety has been propagated for about ten years, but has never been described. The
Fig. 3. Tommy Atkins Mango

seedling was planted approximately 35 years ago, north of Ft. Lauderdale. The tree is a thrifty grower and good producer. The fruit is medium to large in size (16 to 25 oz.) and very highly colored. The ground color is orange yellow and the blush is bright red. Dots are large, numerous, and yellow green in color. The fruit is somewhat oblong with an inconspicuous nak. It matures fairly early in the season, usually shortly after Haden. The quality is fair to good. One of the main objections to this variety is that it is often moderately fibrous.

The committee hopes that interested growers and nurserymen will continue to be on the lookout for promising seedlings of all of our subtropical fruits. If they prove to be better than varieties now grown they should be submitted to the committee for description and registration.

"SOFT-NOSE," A PHYSIOLOGICAL DISORDER IN MANGO FRUITS

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A breakdown of the flesh on the ventral side and towards the apex in mango fruits while still on the tree has caused considerable loss to growers in Florida. The trouble, now commonly and rather descriptively called "soft-nose," apparently was first recognized as a definite disorder in fruit on the tree, rather than a result of mishandling at harvest, by growers in Palm Beach County about 1950. Soft-nose now has been reported from all mango growing areas of the state. The breakdown, or a similar one, has been reported in India (1). Investigations in Florida during the past four seasons have fairly well established the disorder to be physiological, but a remedy is unknown.

Soft-nose generally, if not always, starts on the tree. Unless already initiated at picking, typical or pronounced soft-nose apparently does not develop after the fruit is picked. Although not always discernible, an external symptom of soft-nose, particularly in Hadens, is a yellowing of the green skin in the area between the apex and the stigmal point. With some experience, one can also feel a lack of firmness in this area of affected fruits. Upon cutting, the flesh on the ventral side towards the apex of some soft-nose fruits merely appears to be over-ripe, while that around the shoulders and on the dorsal side is unripe (Fig. 1-F). This is the condition most frequently found in Hadens and evidently occurs mostly during ripening (as distinguished from maturity), which follows full maturity. Occasionally in Hadens, but more commonly in Kents for example, the over-ripe flesh surrounds a mass of yellowish to brown tissue which is of firmer texture than the surrounding affected tissue (Fig. 1-E) and is bitter to taste. In more advanced cases some of the tissue may become a spongy, grayish-black mass (Fig. 1-B, C & D), which in extreme cases may extend through most of the fruit (Fig. 1-A). The spongy condition was always associated with the over-ripe condition and perhaps results when the trouble is ini-

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