Defects of Stanley Prune in Idaho

LEIF VERNER*
Moscow, Idaho

In 1955 the occurrence of lopsidedness in Stanley prunes (Figure 1) was observed in many plantings of that variety in the irrigated fruit districts of Idaho and Washington. It was seen also under dry-land conditions at Moscow, Idaho. In a four-year-old, six-acre block at Emmett, Idaho, an estimated 65 percent of the fruit was deformed and the crop was a total loss, as neither the local packing house nor the local cannery would accept the fruit because of the severe cullage that would have been necessary.

In lopsidedness, the malformation of one cheek of the fruit also commonly involves the adjacent portion of the pit and occasionally the kernel.

This deformity was also observed in many Idaho orchards in 1956 and 1957, but in no instance was it so extensive as to render the crop unprofitable to harvest. It did, however, in both years account for considerable cullage in grading and packing operations. The crop from one Idaho orchard in 1957 had a total cullage of 18 percent, the bulk of which was due to lopsided prunes.

In 1955 several reports were received (1) stating that very late in the season many of the lopsided fruits filled out in the malformed cheek, but by that time the fruit was dropping badly and was too soft to ship. This observation has not been verified by the author.

Apparently, this condition has not been observed generally in eastern states where many Stanley prunes are grown. According to Watson (2) it has not been observed at Geneva, New York, where the variety was originated. Johnston (3) states that he has not observed it in Michigan, and he quotes the field man for the Michigan Fruit Canners, who handle large quantities of fruit, as saying that he has not observed it. Tompkins (4) reports having seen it in Michigan but states that the percent affected has been small. According to Dickson (5), however, it occurs frequently in Ontario, Canada, and is regarded as a weakness of Stanley. Growers, he states, are advised to remove malformed fruits when thinning is practiced.

Several of the writers cited above have suggested that lopsidedness might be a result of unfavorable weather during some critical stage in development of the fruit. It is, indeed, difficult to conceive of any causative factor other than weather that would have such a widespread influence at one time as to affect trees over so great an area as was involved in the Pacific Northwest in 1955. Yet, it must be recognized also that a tendency towards lopsidedness must be inherent in Stanley, since the condition often is marked in Stanley when little or none

Fig. 1. **Different degrees and types of lopsidedness in Stanley prune. The prune in the lower left corner is of normal shape.**

*Professor of Horticulture, University of Idaho.

of it occurs in other varieties grown with it.

Another fruit defect that has been observed in Stanley in Idaho is open sutures, as illustrated in Figure 2.

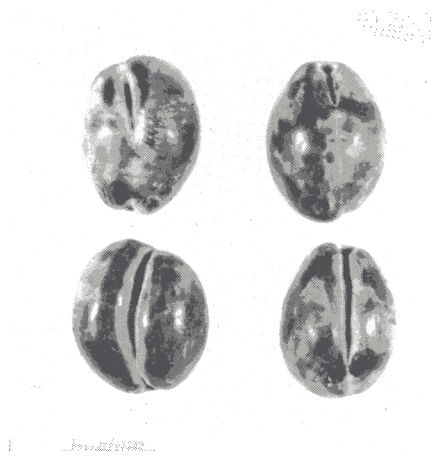

Fig. 2. **Open sutures in Stanley prunes.**

These have been observed in many orchards in the last three years, but usually in such small amounts as to be of little consequence. However, in one five-acre block in 1957 a random sampling of fruit just before harvest showed that an average of 21 percent of the prunes had open sutures. Among individual trees the incidence varied from 18 to 27 percent. Seventy percent of the openings were localized at the stem end, 20 percent at the apex, and 10 percent included the full length of the suture. This orchard had been under sprinkler irrigation, which could conceivably have been a factor in the high incidence of open sutures.

REFERENCES CITED

All of the references cited are based on personal correspondence as follows:

1. Joe J. Locati, Walla Walla, Washington, November 1955.
2. John Watson, Geneva, New York, September 1955.
3. Stanley Johnston, South Haven, Michigan, October 1955.
4. Lyle E. Tompkins, Hart, Michigan, October 1955.
5. G. H. Dickson, Ontario, Canada, February 1957.

Peach Trends in Michigan

Elberta now makes up about 39 percent of the peach plantings in Michigan, as contrasted with 85 percent in 1924, and continues to decline. Halehaven is also declining, whereas Redhaven and Fairhaven are increasing. Because it is firm-fleshed and ships well, Kalhaven is gaining favor. Redskin has better color than Elberta, but because it blossoms very early, must be planted only on frost-free sites.

There is considerable interest in the new Sunhaven, which matures ten days before Redhaven. Richhaven is attracting attention. It ripens three days before Halehaven, but is superior in fruit characteristics. Richhaven is suitable for canning, but its flesh may not be firm enough for commercial freezing.

Michigan processors are interested in clingstone varieties for canning. One variety, Ambergem, has proved satisfactory. Efforts are being made to find other varieties for canning.—*Stanley Johnston, South Haven Exp. Sta., South Haven, Mich.*

C. L. Calahan, of the University of Vermont reports that growers in Vermont have made sizable plantings of apples on hardy rootstocks this year. There is a great interest in Robusta No. 5 as a hardy stock. The scion varieties most commonly being planted on hardy stocks are the red sports of McIntosh and Delicious.