

## FRUIT VARIETIES AND HORTICULTURAL DIGEST

TABLE I. The circumference, weight of prunings and yield from Stayman Winesap and Jonathan apples on several Malling rootstocks during their first 15 years in a test orchard.

<i>Root-Stock</i>	<i>Average tree circumference (inches)</i>	<i>Average weight prunings (pounds)</i>	<i>Average number fruits</i>	<i>Average accumulated yield/tree (pounds)</i>
<i>Stayman Winesap</i>				
French Crab.				
M. I. ....	32.6	271.3	6044	2060
M. II. ....	27.6	227.7	7802	2635
M. V. ....	25.4	112.7	5692	1800
M. VI. ....	27.8	167.9	4736	1600
M. VII. ....	28.6	227.3	7428	2412
	25.3	154.5	5068	
<i>Jonathan</i>				
French Crab.				
M. I. ....	26.9	196.5	4785	1409
M. IV. ....	27.6	198.9	5771	1993
M. V. ....	24.5	156.2	3264	1003
M. VI. ....	27.2	144.3	4270	1274
M. VII. ....	27.8	196.3	4810	1440
	25.9	165.4	3861	1175

superior to those on any stock, including French Crab.

The record should also indicate a heavy loss of trees of Jonathan and Stayman Winesap on Malling IV and VI. Furthermore, the loss of trees of Stayman Winesap on Malling II has been disturbing. Generally speaking, trees of both varieties on Malling VII have proven distinctly more satisfactory than those of any other combination. This result is true of the 1941 planting as well.

In general, the data indicate that the total yield from both the semi-dwarf and standard trees has been proportional to their respective bearing surfaces. In view of this fact it would be expected that the acreage yield of trees on semi-dwarf and standard non-dwarfing stocks would be proportional to the respective number of trees to an acre. The growth attained by the trees on Malling VII in this experiment would suggest a planting distance of 25 feet by 25 feet. Since Ohio recommendations for trees on standard stocks is 30 feet by 30 feet, the difference in yield per acre between trees on these two types of stocks would obviously be less than would be the case were the differences in planting distances greater than recommended.

Malling VII, tested because it has a more pronounced dwarfing effect than any of the other types, appears to be the most desirable for commercial planting in Ohio. Actually, however, a rootstock more dwarfing than VII, but more vigorous than Malling IX, (the most dwarfing of the Mallings) would be preferable under Ohio conditions. It is hoped that in view of outstanding cultural improvement given such semi-dwarf trees, they will attain a longevity not evident when dwarf trees were recommended in this country 50 years ago.



### Fenton Apple

The new Fenton apple was ready for commercial picking in 1956 about August 18, as against August 14 in 1955 in LaPorte County, Indiana. The color and firmness of this variety continue to recommend it for planting north of Lafayette; but the fruit on two-year grafts at Bedford, Indiana did not carry enough color, and seemingly did not like the high temperatures prevalent in this area the first week in August.—C. L. Burkholder, *Purdue University, Lafayette, Ind.*