

## *Franklin Apple is Receiving Favorable Consumer Comment*

By FREEMAN S. HOWLETT and T. E. FOWLER

The introduction of a new apple variety is far from a final step in the breeding program which produced it. It is, however, a sign of progress for no apple can achieve the distinction of a name in place

of its original number without undergoing numerous trials. But years of testing are still required before the tree is propagated by nurseries and offered for sale as a commercial variety.



A young Franklin tree located in the Experiment Station orchard.

For 15 years the Franklin apple variety, introduced in 1938 by the Ohio Experiment Station, has been under continuous observation.

Fruit quality, flavor, and color and tree habits such as bearing, blooming and picking dates, annual or alternate tendency, productivity and pollination characteristics must all be carefully studied.

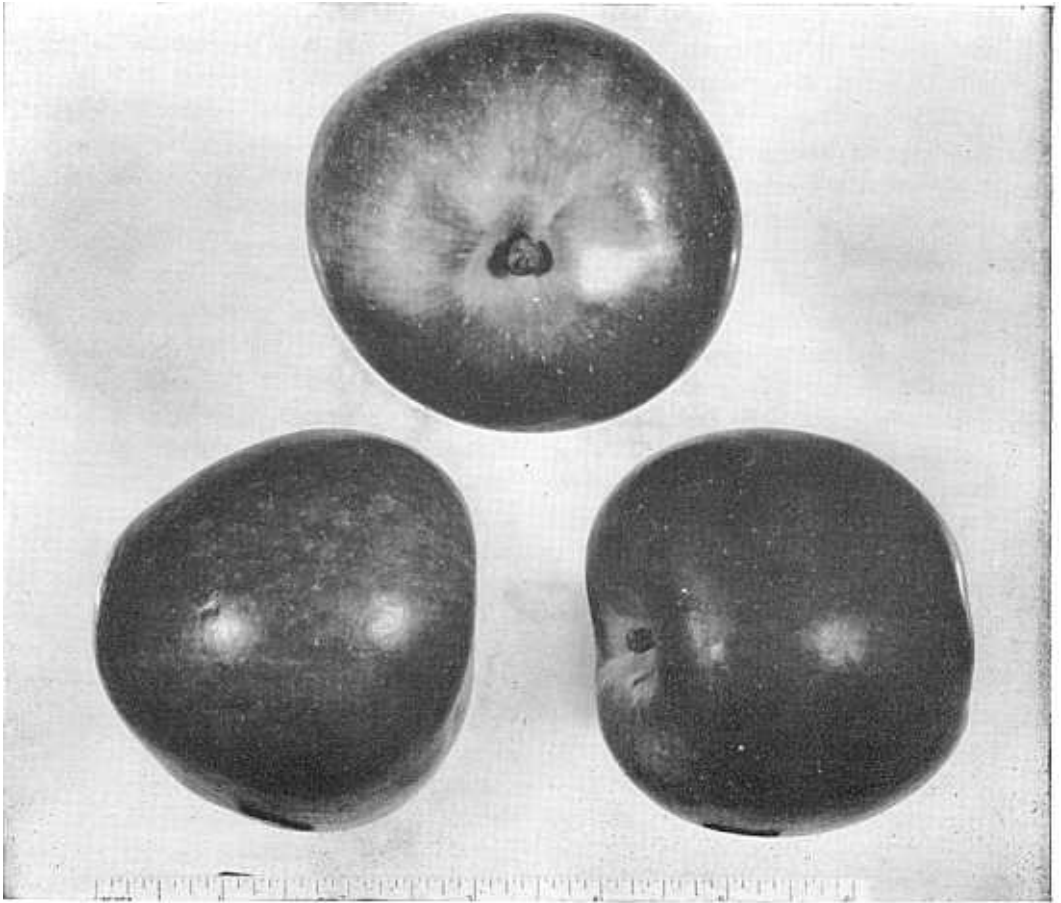
The tree that first flowered in 1936 was obtained by fertilizing McIntosh flowers with Delicious pollen. The resulting seedling was considered so promising that it was introduced shortly thereafter and named for Benjamin Franklin who initiated the export trade in apples. Young trees propagated on seedling stocks and planted in the Station orchard in 1940 have now been in bearing for several years. Trees also propagated on Malling semi-dwarfing stocks and planted in 1944 are now in production as well. In addition to data from these trees, reports of the behavior of this variety in other states are becoming available. As a result it is now possible to present detailed information on this new apple variety which in the past fifteen years has constantly shown increasing promise.

From the time the first fruits were sampled the seedling attracted attention because of the superior dessert quality of the attractive fruits. What is more important they have continued to show a uniform excellence season after season, a record which even the standard

varieties cannot always duplicate. In fact, no seedling produced in the Ohio breeding program which was begun 35 years ago has excelled Franklin in this respect.

The flesh of this apple is faintly yellow, differing in this respect from other McIntosh seedlings, but it has the fine-grained delicate texture of this parent. It is mild, moderately juicy, not quite as sweet as Delicious but with rather more character than McIntosh. In fact, it is just about what you might expect of a McIntosh-Delicious cross, the flavor being intermediate between the two. In addition, the delicate and pleasing aroma of the variety is possibly more apparent than in any other apple variety.

In appearance the fruits would seem to excel both parents, as they are grown at Wooster. They have a brilliant red overcolor that resembles Delicious but is distinctly brighter. On the more intensely colored side the overcolor is almost solid but overlaid with indistinct streaks of carmine. On the almost equally attractive but less brilliant side this streaking becomes more distinct over a golden yellow undercolor. This yellow is a definite improvement over most other McIntosh seedlings whose green undercolor gives them a dull unattractive appearance at harvest. The variety also has a very distinctive bloom. It is hard to imagine a more attractive apple particularly with respect to color pattern.



The attractive fruits of the Franklin make it an excellent variety for displaying.

The fruits are medium in size, oblong in shape but do not show the pronounced points which develop at the basin end of Delicious. Franklin is broad, smooth ribbed with a truncate or flattened shoulder.

Franklin is most notable perhaps for its fresh dessert quality which is at its best from late October to late December. It has, however, made a very satisfactory culinary record

as well. Sauce made from these apples is considered outstanding. Confirmation of Ohio reports is indicated in the results of tests made at the New Hampshire Experiment Station. Out of 39 kinds tested, including such standard commercial varieties as Baldwin, Cortland, Gravenstein, Golden Delicious, Lodi, Northern Spy and Wealthy, Franklin was one of the two varieties which ranked first in sauce produc-

tion. Although satisfactory for pies this variety does not excel in this respect.

It is important to realize that Franklin is definitely a fall and early winter variety. In a very short period after harvest they are ready for fresh consumption. Stayman Winesap and Jonathan, for instance, are much slower in attaining optimum eating quality. Franklin will continue in good condition through January if kept in storage at from 32° to 36° F. They have, however, developed this unfavorable characteristic; the fruits when removed from storage in January, though still very firm and perfectly edible, will nevertheless tend to scald. This result is unexpected—rather interesting as well—since this tendency is usually characteristic of fruits having a green undercolor. Another idiosyncrasy is the fact that the mature fruits, the fruits harvested last, are equally susceptible. So far it is impossible to say whether this storage defect is in any way connected with the pronounced aroma of the apple but in any case this limitation must be noted.

### Blooming Dates

The original tree planted in 1929 flowered for the first time in 1936. Seven years elapsed before young trees propagated on standard stocks and planted in 1940 flowered and bore fruit.

The date of bloom is important in view of the frost hazard. As indicated in Table 1 the blooming period of Franklin generally coincides with that of Delicious and Jonathan, being slightly later than McIntosh and Stayman Winesap. Thus, according to the data taken over a 15-year period it may be considered as mid-season in blooming habit.

Obviously considerable time must elapse before the most successful picking date can be definitely ascertained. Several pickings have been made each year to determine the preferable time, and Table 1 indicates a date approximately 17 days later than its McIntosh parent and a week earlier than Delicious. In fact, at Wooster that date has been found to be a little later than that of Jonathan.

The yield records of each of the six trees placed in the Station or-

**TABLE 1.—Comparison of Blooming and Picking Dates of Franklin and Several Commercial Apple Varieties. 1936-49. Wooster, Ohio**

| Variety         | Average blooming date | Average picking date |
|-----------------|-----------------------|----------------------|
| Franklin        | May 2—5               | September 28         |
| Delicious       | May 1—5               | October 5            |
| McIntosh        | Apr. 29—May 4         | September 11         |
| Jonathan        | May 1—5               | September 24         |
| Stayman Winesap | Apr. 30—May 5         | October 20           |
| Rome Beauty     | May 2—7               | October 22           |

**TABLE 2.—Yield of Franklin Apple Trees, Orchard B. Row 49, Trees Planted in 1940. In Bushels**

| Year  | Tree No. |      |   |   |   |   | Average<br>per tree |
|-------|----------|------|---|---|---|---|---------------------|
|       | 1        | 2    | 3 | 4 | 5 | 6 |                     |
| 1947  | 1.8      | 2.8  |   |   |   |   | 1.4                 |
| 1948* | 0.2      | 0.1  |   |   |   |   | 0.2                 |
| 1949  | 4.8      | 5.3  |   |   |   |   | 3.7                 |
| 1950  | 5.7      | 3.1  |   |   |   |   | 5.1                 |
| 1951  | 9.4      | 11.6 |   |   |   |   | 6.7                 |

\*Poor weather conditions for pollination in 1948 decreased yield of most varieties including Franklin.

chard in 1940 are given in Table 2. The yields definitely exceed those for comparable trees of the identical age of Delicious and McIntosh.

No factor is more important from a growth production angle than the bearing habit. Widespread trial must, of course, substantiate the preliminary evidence but the trees planted in Wooster have definitely been bearing annually. In fact, it would seem safe to say that from all reports now available alternation is certainly not a pronounced habit and that the variety appears to be annual-bearing.

#### Few Seeds

The exceptionally low seed content of the fruits is also a characteristic deserving comment and ultimately further study. Ordinarily at least 4 or 5 seeds are essential for the production of mature fruits, but this apple may have 1 or 2 or a scattering of seed coats and perhaps 1 seed and still produce mature fruits.

As for pollination requirements, Franklin may be fertilized both by Delicious and McIntosh. Jonathan

also was effective in tests made in 1949 and on the other hand Franklin will serve as a pollinizer for Jonathan. Further tests must be carried out in order to determine its value for Delicious although preliminary trials indicate satisfactory results.

The sins of one parent at least have been visited upon the children. The fruits of Franklin like those of McIntosh, and in fact all McIntosh seedlings, are susceptible to apple scab. The usual spray program is, however, fully as effective in controlling the disease with this variety as with McIntosh.

It must also be noted that care in pruning is essential, for the fruit is borne, again as with McIntosh, on the inside of the tree. Thus in order to obtain the excellent coloring which is characteristic of this variety the trees must be kept well thinned out.

It has been interesting also to note the favorable consumer reaction to Franklin apples. Experience so far is necessarily limited, but customers in local markets, usually

more or less indifferent in the matter of variety, returned to demand Franklin apples as previously purchased. This variety, then, would seem to offer promise to roadside markets or in a locality where a producer-retail outlet is available. Like McIntosh, Franklin requires careful handling and is possibly no more suited than that variety for wholesale distribution. It is however, fully as firm as McIntosh, the skin is slightly thicker and the relatively short stem decreases the hazard of packing. In general appearance it is the more attractive of the two.

A Swedish critic from the agricultural station at Akarp recently accused Americans of an exclusive

interest in the exterior quality of fruits, the bright red skin which is generally discarded. He is right in his estimate of the American preference for red apples. It is a factor which apparently must be taken into account in our breeding programs. But for real success the apple must satisfy not only the first whim of the public but the final estimate of the customer and producers. Franklin is a handsome apple and in most respects it does handsomely as well. Time will tell its future place among American apple varieties, but certainly it deserves a trial.—Reprinted from Ohio Farm and Home Research, Vol. 37, No. 274, Jan.-Feb., 1952. Ohio Agri. Expt. Station, Wooster, O.

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## *Colby, a Hardy Persian Walnut for the Central States*

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When the Reverend Paul C. Crath of Toronto imported walnut seeds and scions from his native Ukraine region and adjacent areas of Poland in the 1920s, he started a chain of propagation and selection which promises to establish the Persian walnut (*Juglans regia*) as a commonly grown nut in southern Ontario and the north central states. The best of his importations, and seedlings from them, are fruiting in such states as Wisconsin, Iowa,

Illinois and Missouri, showing in many cases a degree of hardiness which must reverse the conclusion of an older generation of pomologists that Persian or "English" walnuts were too tender for successful cultivation in most of the middle west.

The time has now arrived when there are enough fruiting trees of the "Crath Carpathian" walnut seedlings in many states that comparisons can be made and the more