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The 'Smokehouse' Apple

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Few of the many thousands of seedling apple cultivars that once existed in the U.S. survive today. Many of these cultivars did not have high quality fruit or were not good for storage and shipping. Others were only well adapted to the region where they were first found. Over time, better cultivars replaced them. However, some cultivars of apple were so well liked within their region that they can still be found there today. One such apple is 'Smokehouse' which is still grown in commercial orchards in southeast Pennsylvania.

'Smokehouse' received its name because the seedling was found growing near a smokehouse in Lancaster County, Pennsylvania. The exact date of its discovery is not known, but it was reportedly propagated for years before receiving attention from Ashbridge about 1837 (27). It is believed to be a seedling of the old cultivar 'Vandevere'. 'Smokehouse' apples are medium to large sized and are fairly uniformly shaped. Ripe fruit may have a red overcolor or reddish blush but frequently lack a distinctive color being mostly greenish-yellow at maturity. The flavor is described as pleasantly sweet with low acidity. The tree is susceptible to scab but is generally a vigorous grower that bears young. It is known for reliable cropping, alternating heavy crops with moderate ones. The fruit hangs well on the tree.

During the mid-1800's fruit culture was recognized as an excellent source of income for farmers. At the second session of the American Pomological Society (APS) in 1852, H. F. French of Exeter, NH reported "many towns...have received more money in exchange for their surplus product of apples than for any other article raised upon their farms"(1). While discussing cultivar selection, he noted that apple cultivars were not equally adapted to all regions and that those planted should be based upon the success of each cultivar in each locality. At that meeting 'Smokehouse' was added to the list developed by the society of promising apple cultivars (2). Dr. Eshleman of Pennsylvania stated that "Smokehouse...is excellent for cooking and it will keep until April. If I were confined to one variety it should be the Smokehouse". Some members noted that the tree was "very crooked in growing". Mr. Corson of Pennsylvania claimed to have known the cultivar for 48 years and stated that it is a constant bearer in the section of the country where it originated, and that no one should start an orchard without it.

'Smokehouse' was again discussed at the APS meeting in 1854. There was a move to place the cultivar on the list of recommended cultivars (3). While the 'Smokehouse' was described as an excellent cultivar, the lack of name recognition kept the members from approving the motion. At this meeting the 'York Imperial' was in the report from Pennsylvania on seedling fruits. It was described as "very suitable for the table at evening entertainments...flavor, pleasant and agreeably saccharine; quality at least good, to many tastes very good."

Reporting on apples at the APS meeting in 1856, John Diehl of Delaware listed 'Smokehouse' with preferred fall cultivars (4). It was described as "coming more into favor as it becomes known" and while the tree was a straggling grower the fruit is "fine for either dessert or kitchen". In the report from Pennsylvania by Thomas James of Philadelphia for the same year, the 'Smokehouse' was described as the most valuable for all purposes of the autumn apples (5). He went on to note that it was a dependable bearer, good for cooking in

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autumn and continuing in use until spring since it kept well and was also good for eating. James remarked that many farmers should plant 25% of new orchards to 'Smokehouse'. His personal preference, for market purposes, would be seven-eighths, if not all, 'Smokehouse'. He stated "Apart from its productiveness, it will command one-fourth to one-third more in the market than other kinds."

In the Pennsylvania report at the APS meeting of 1858 the recommended cultivar selection for new orchards was as follows: for an orchard of 100 trees of six cultivars – 25% 'Smokehouse'; for an orchard of 100 trees of 12 cultivars – 20% 'Smokehouse'; and for an orchard of 1000 trees for market – 50% 'Smokehouse' (6). By this time the 'Smokehouse' was being widely planted as evidenced by its inclusion on the list of cultivars for planting in the northern sections of the southern U.S. (7). It was not, however, recommended for many northern states.

'Smokehouse' is still on the list of "Apples recommended as promising well" in the Proceedings of the APS in 1860 (8). Jonathan C. Baldwin of West Chester, Pennsylvania, stated of 'Smokehouse' "This we consider the best apple in eastern Pennsylvania, for both cooking and the table. It has no superior."

By 1862 'Smokehouse' was on the APS list of apples that were highly recommended for early winter and market (most desirable) uses in the following states: Delaware, District of Columbia, Maryland, and eastern Pennsylvania (9). In the 1864 Catalog of Fruits from the APS, northern Ohio and central and western Pennsylvania were added to the list of states where 'Smokehouse' was highly recommended (10).

'Smokehouse' had been added to the recommended cultivars of apples for 6 additional states (Michigan, Virginia, Iowa, South Carolina, Alabama, and Louisiana) by 1875 (11). However, 'York Imperial' was becoming a more favored cultivar for planting by this time and had even replaced 'Smokehouse' in some growers' opinions. The report from New York notes that 'York' and 'Smith's Cider' will replace other winter cultivars. The report from Virginia stated that the 'York' continued to grow in public favor and that "...its excellent bearing and keeping properties entitle it to be classed among the most valuable sorts for the Piedmont and valley districts of this state".

The strong local demand for 'Smokehouse' was still noted in Engle's report to the Pennsylvania Fruit Grower's Society in 1878 (12). Discussing 'Smokehouse', he noted "I know of no apple that is more sought for in its season where it is known, and it will become popular whenever it can be obtained in perfection." In discussing apples for export, Engle listed 'Smith's Cider' and 'York Imperial' as the two most promising cultivars. Regarding 'Smokehouse', he stated "if its season could be extended a month or two it would rank among the most promising for export." But with the continued development of the export market, 'Smokehouse' was beginning to fall out of favor with growers.

By 1880 major problems were being reported with 'Smokehouse'. During a discussion of winter apples at the annual meeting of the Pennsylvania Fruit Growers Society it was reported that 'Smokehouse', 'Spy' and 'Rhode Island Greening' apples were dropping early in the fall. (13) 'York Imperial' was again cited as a promising cultivar or as a "good keeper". One member noted that he could formerly keep 'Smokehouse' apples until February, but that they were now rotting on the tree. During the discussion of apples at the 1881 meeting, problems with 'Smokehouse' and other previously reliable cultivars were again noted by several growers (14). A warm, dry season was mentioned as a possible cause but it was noted that 'York Imperial' and 'Smith's Cider' were two cultivars that still did well in spite of the weather conditions.

At the 1882 meeting 'York Imperial' and 'Smith's Cider' were again mentioned as reliable cultivars for hot, dry seasons (15). One grower described 'York Imperial' as "never-fail". The weather pattern for the previous few summers was described as "too hot and too dry to perfect the fruit". The importance of soil moisture was highlighted by the description of a successful crop of 'Smokehouse' grown in a low area with

adequate water 2 to 3 feet below the soil surface. The poor performance of 'Smokehouse' over this time most likely was responsible for its ultimate replacement by the better-performing 'York'.

A report from Pennsylvania by H. M. Engle at the 1885 APS meeting contained the following statement: "Among the many apples grown in our State, few are universally popular. Smokehouse, Winter Rambo, Fallawater, Newton Pippin and others, once so generally popular, are no longer held in the same estimation as fall and early winter apples. York Imperial and Smith's Cider are the most popular winter apples in eastern Pennsylvania" (16). 'Smokehouse' was no longer dominant in the area where it originated.

E. Satterthwaite gave a report entitled "History and Present Condition of Fruit Growing in Pennsylvania" at the Pennsylvania Fruit Grower's Society meeting in 1886 (17). He noted the changes in production practices and marketing of fruit in the state over time. In particular he noted the impact of available transportation on local fruit production and profitability. Local orchardists were now competing for markets with growers from more favorable growing locations who were able to transport their crops to new markets at a reasonable expense. Therefore, fruit culture could no longer be depended upon to provide a favorable income for all farmers.

Also at the 1886 meeting, it was noted that there was difficulty in creating a recommended list of apple cultivars for the entire state (18). While 'Smokehouse' still appeared on the list of "popular varieties" of apple, the recommendation was made to divide the state into four districts – eastern, central, northern and western, and develop lists for each of these sections. By 1888 a fruit list was developed for Pennsylvania but rather than designating regions, cultivar preference and favored use (market vs. family use) was reported by county (19). 'Smokehouse' was the favored autumn cultivar for both uses in the southeast section of the state.

At the 1891 Pennsylvania Fruit Grower's Society meeting, Cyrus T. Fox reported that the season of 1890 was "one of the most disastrous that the fruit growers of Pennsylvania ever experienced" due to weather conditions (20). He observed that cultivars of apple did better in the regions of the state where they originated than did other cultivars brought into these areas. He noted that this showed the importance of paying greater attention to the planting of cultivars adapted to soil and locality.

In 1894 Cyrus noted the expansion of the export market and that growers who properly managed their crop stood to make a good profit (21). A bulletin by George Powell of New York was cited at the 1897 Pennsylvania Fruit Grower's Society meeting as stating that "soft summer varieties of apple will not ship well" and that "red apples will sell better than green". 'Smokehouse', being regionally adapted with poor red color and questionable storage ability, was not suitable for the export market (22). 'Smokehouse' was still appearing on lists of the best cultivars of apple to grow in Pennsylvania in 1903 (24) and 1904 (25) but had lost its place by 1906 (26).

Fortunately for 'Smokehouse', it retained its strong local appeal. In a report entitled "Fruit Culture for Profit" Gabriel Heister from Harrisburg, Pennsylvania stated: "When my Summer Rambo apples are ripe it is not worthwhile to offer any other variety. The same is true with Smokehouse apple and Bartlett pear; everyone in our markets know these varieties and will take nothing else while they are in sight" (23).

Ultimately, 'Smokehouse' did not prove to be a productive cultivar throughout the east. The main areas of production were limited to southeastern Pennsylvania, New Jersey, northern Maryland and Delaware. Beach (27) wrote in 1905 that the 'Smokehouse' generally was not known among New York fruit growers although there was some limited cultivation. Today, commercial production of 'Smokehouse' is limited to Lancaster County and the immediate surrounding vicinity in southeast Pennsylvania. There is still a limited but strong local demand for the cultivar and many growers maintain a portion of the orchards in 'Smokehouse'.

Literature Cited

1. Anon. 1852. Rept. Commissioner of Patents, Agric. Proc. Amer. Pomol. Soc. pp. 23-28.
2. Anon. 1852. Rept. Commissioner of Patents, Agric. Proc. Amer. Pomol. Soc. pp. 41-41.
3. Anon. 1854. Rept. Commissioner of Patents, Agric. Proc. Amer. Pomol. Soc. pp. 77-84.
4. Anon. 1856. Rept. of the Office of Patents. pp. 372-373.
5. Anon. 1856. Rept. of the Office of Patents. p. 355.
6. Anon. 1858. Rept. of the Office of Patents. pp. 418-419.
7. Anon. 1858. Rept. of the Office of Patents. p. 378.
8. Anon. 1860. Apples Recommended as Promising Well. Proc. Amer. Pomol. Soc. pp. 44-48.
9. Anon. 1862. Catalog of Fruits – Apples. Proc. Amer. Pomol. Soc. pp. 51-63.
10. Anon. 1864. Catalog of Fruits – Apples. Proc. Amer. Pomol. Soc. pp. 5-17.
11. Anon. 1875. Catalog of Fruits – Apples. Proc. Amer. Pomol. Soc. pp. 122-133.
12. Anon. 1878. Pennsylvania Apples for Export. Rept. Penn. Fruit Growers Soc. Rept. PA Dept. of Agriculture. pp. 577-579.
13. Anon. 1880. Rept. Penn. Fruit Growers Soc. Rept. PA Dept. of Agriculture. pp. 62-63.
14. Anon. 1881. Report of Committee on Orcharding. Rept. Penn. Fruit Growers Soc. Rept. PA Dept. of Agriculture. pp. 10-11.
15. Anon. 1882. Rept. Penn. Fruit Growers Soc. Rept. PA Dept. of Agriculture. p. 10.
16. Anon. 1885. Proc. Amer. Pomol. Soc. p. 147.
17. Anon. 1886. History and Present Condition of Fruit Growing in Pennsylvania. Rept. Penn. Fruit Growers Soc. Rept. PA Dept. of Agriculture. pp. 106-111.
18. Anon. 1886. Report of the General Fruit Committee. Rept. Penn. Fruit Growers Soc. Rept. PA Dept. of Agriculture. pp. 50-51.
19. Anon. 1888. Report of the Committee on Fruit and Fruit Culture. Rept. Penn. Fruit Growers Soc. Rept. PA Dept. of Agriculture. pp. 67-79.
20. Anon. 1891. Rept. Penn. Fruit Growers Soc. Rept. PA Dept. of Agriculture. pp. 27-28.
21. Anon. 1894. Fruit Interests of Pennsylvania. Rept. Penn. Fruit Growers Soc. Rept. PA Dept. of Agriculture. pp. 237-240.
22. Anon. 1897. Rept. Penn. Fruit Growers Soc. Rept. PA Dept. of Agriculture, Vol. 1. pp. 27-28.
23. Anon. 1899. Fruit Culture for Profit. Rept. Penn. Fruit Growers Soc. Rept. PA Dept. of Agriculture, Part 1. pp. 207-211.
24. Anon. 1903. Report of the General Fruit Committee. Rept. Penn. Fruit Growers Soc. Rept. PA Dept. of Agriculture. pp. 775-776.
25. Anon. 1904. Report of the General Fruit Committee. Rept. Penn. Fruit Growers Soc. Rept. PA Dept. of Agriculture. pp. 500-502.
26. Anon. 1906. Report of the General Fruit Committee. Rept. Penn. Fruit Growers Soc. Rept. PA Dept. of Agriculture. pp. 488-490.
27. Beach, S.A. 1905. The Apples of New York, Vol. 1. Rept. New York Agr. Expt. Sta. for 1903.

Effects of Different Ground Management Systems in a Young Apple Orchard

Herbicides (both contact and residual),and mulches of woven polypropylene (plastic) and straw were compared for eight years in a newly established Bramley/M.9 apple orchard in Kent, UK. Contact herbicide provided the poorest weed control followed by residual herbicide. Weeds were minimal under plastic and straw mulches. Nitrate concentration in the soil solution was lowest under straw mulch and contact herbicide treated plots. Straw mulch increased K concentration in the surface soil as well as in the leaves. Leaf N concentration was lowest in trees under the contact herbicide treatment. Trees with straw mulch produced the most shoot growth; trees with the contact herbicide produced the least. These results were ascribed to moisture conservation under the straw mulch. Yields varied little among treatments in individual years, but after six years yields were greatest for the straw mulch treatment. Fruit quality effects from treatments were minimal. From Hipps, N.A., M.J. Davies, and D.S. Johnson. 2004. J. Hort. Sci. Biotech. 79: 610-618.