

The following Apple and Peach papers were presented at the workshop sponsored by the American Pomological Society, July 1978 in Boston at the Annual Meeting held in conjunction with the American Society for Horticultural Science. (The Strawberry and Blueberry papers will be published in the next issue.)

Apple Cultivars Grown in Eastern United States

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U.S. Apple Production

Americans eat an average of about 220 pounds of fruit each year. Table 1 shows that about 26 pounds of this are apples. This averages about 1½ apple fruits per person per week.

Apples are grown commercially in more states than any other kind of fruit. Fig. 1 shows that apples are grown on a commercial scale in 35 of the 50 states (1). In descending order of importance, the top 6 apple growing states are Washington, New York, Michigan, California, Pennsylvania, and Virginia. In the 10-year period, 1968-1977, Washington annually produced an average of about 1.7 billion pounds of apples. This was about twice that produced by the second ranking state, New York.

During the decade, 1968-77, U.S. apple production was fairly steady, about 7 billion pounds annually (1), which is about 170 million bushels. Fig. 2 shows U.S. apple production 1968-77, and various periods from 1915-1964.

In the early 1900's, every farm orchard grew 25 or more apple cultivars. But today, in the 1970's, there are scarcely more than a dozen cultivars grown on a commercial scale in the entire country. Fig. 3 shows that the U.S. now produces only 13 cultivars in large volume (1). In descending order of importance, these are Delicious (about 2.3 billion pounds), Golden Delicious (1.2 billion), McIntosh, Rome Beauty, Jonathan, York Im-

perial, Stayman, Winesap, Cortland, Yellow Newtown, R. I. Greening, Northern Spy, and Gravenstein.

Delicious production has been almost double that of the second cultivar, Golden Delicious. Delicious accounts for 35 percent of the total U.S. apple crop. In the 4-year period, 1973-77, it rose from 29 to 35 percent; its importance is increasing.

The eastern and western regions of the U.S. each produce about 2.7 billion pounds of apples, while central U.S. grows about half this amount (1). Fig. 4 shows the production of apples in the 3 regions during the last decade.

Delicious is produced on a commercial scale in all 3 regions but production in the West (Fig. 5) is about 2½ times that in the East and about 6½ times Delicious production in central states.

Table 1. Per-capita fruit consumption in the U.S., 1976. (3)

	Pounds per person per year
Citrus	
Apples (1½ apples/person/week)	
Fresh	17.0
Canned	3.1
Canned juice	4.9
Frozen	.4
Dried	1.0
Other fruits	75.7
Total	221.9

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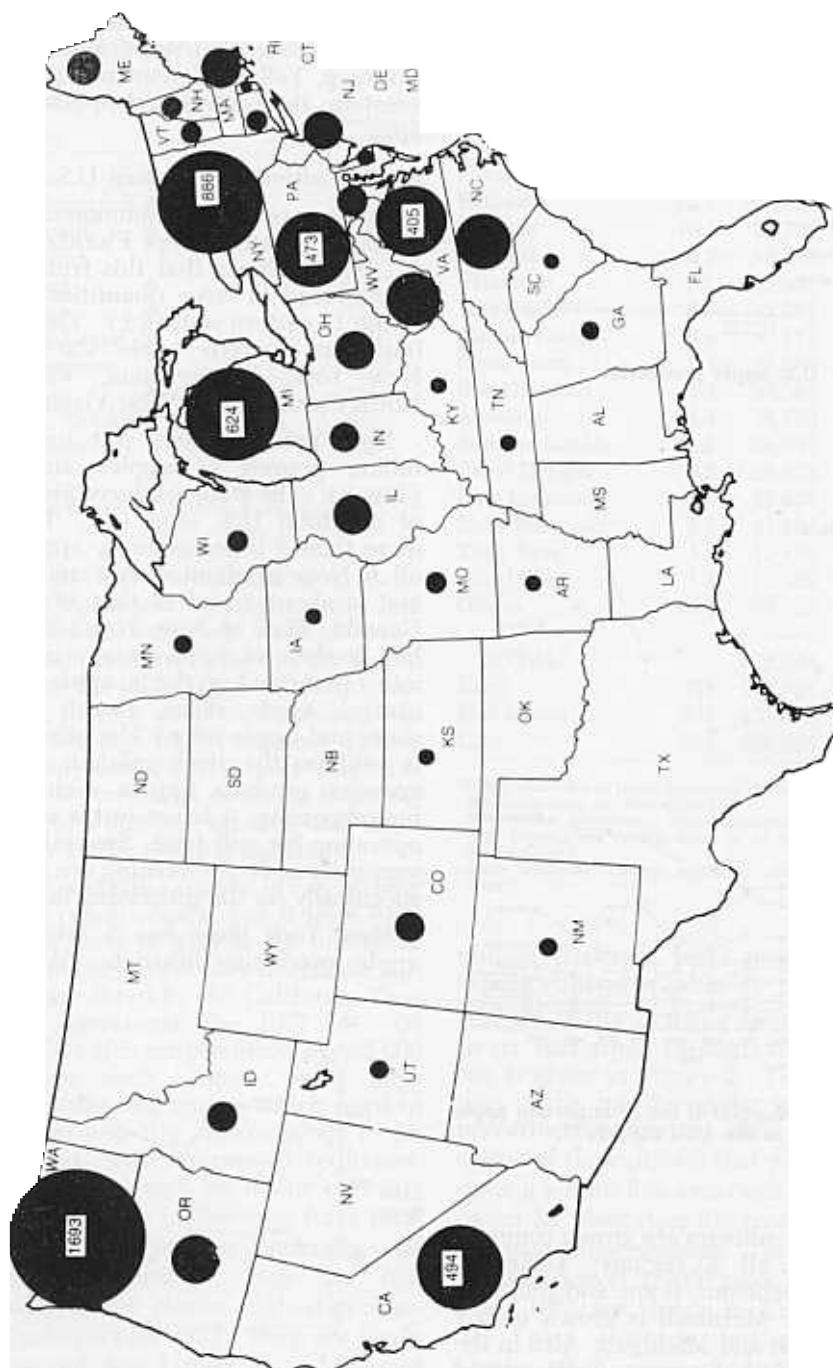


Fig. 1. Annual apple production by states, million pounds, 1968 - 1977 average.

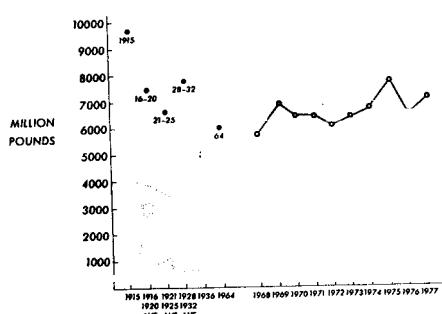


Fig. 2. U.S. apple production.

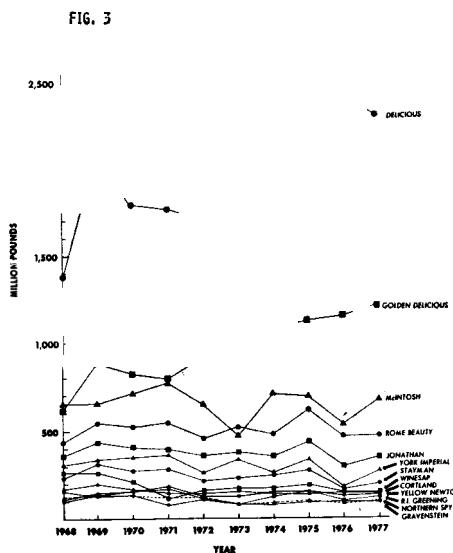


Fig. 3. Production of the 13 important apple varieties in the U.S. 1968-1977.

Only 4 cultivars are grown commercially in all 3 regions: Delicious, Golden Delicious, Rome and Jonathan (Fig. 5). McIntosh is grown mostly in the East and Michigan. Also in the East are York, Stayman, Cortland and Rhode Island Greening. In addition

to the 4 important cultivars grown in all 3 regions, the West also grows Winesap, Yellow Newtown, and Gravenstein; the central region, Northern Spy.

Apple Cultivars in Eastern U.S.

Apples are grown commercially in all eastern states except Florida (Fig. 1). Fig. 6 shows that this fruit crop is produced in large quantities in 16 of the 17 eastern states (1). The most important eastern apple states are New York, Pennsylvania, Virginia, North Carolina, and West Virginia.

New York produces just under a billion pounds of apples annually (Fig. 6). The state produces about $\frac{1}{7}$ of the total U.S. crop (1). This is more than 3 times as many apples as all 6 New England states combined and is about equal to that of all of Canada. Half of New York's 22 million bushels of apples are processed into 4 processed products, apple sauce, canned apple slices, frozen apple slices and apple juice. The other half is sold on the fresh market. Many growers produce apples exclusively for processing; it is not just a salvage operation for cull fruit. Several cultivars such as R. I. Greening are grown specifically for the processing markets.

New York State has 3 important apple producing districts: Western

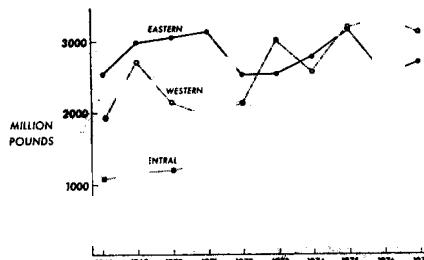


Fig. 4. Regional production of apples in the U.S. 1968-1977.

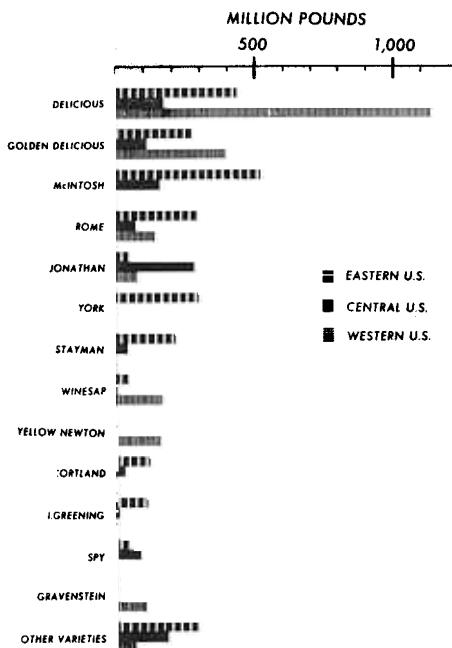


Fig. 5. Important apple cultivars grown in 3 regions of U.S.

New York (near the southern shore of Lake Ontario), Hudson Valley (between New York City and Albany), and the Champlain Valley. Large quantities of apples are also grown in central New York.

McIntosh is by far the most important cultivar grown in New York (4), about 280 million pounds (Fig. 7). Its production is more than $2\frac{1}{2}$ times that of the second leading cultivar, R. I. Greening. McIntosh is sold both on the fresh and processing markets. New York State produces 11 cultivars on a commercial scale (Fig. 7).

Fig. 8 shows cultivars which are being planted into new orchards in New York. In descending order of importance, new orchards consist of Delicious, McIntosh, Idared, Rome, Empire and 15 other cultivars (4).

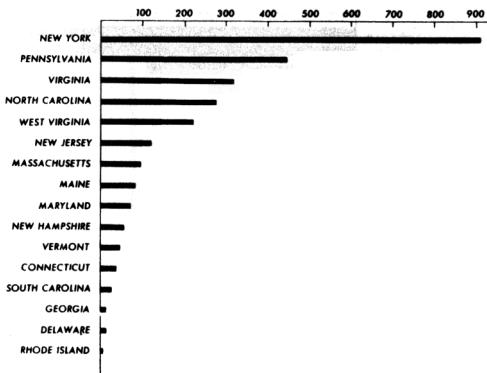


Fig. 6. Apple production in eastern states by varieties.

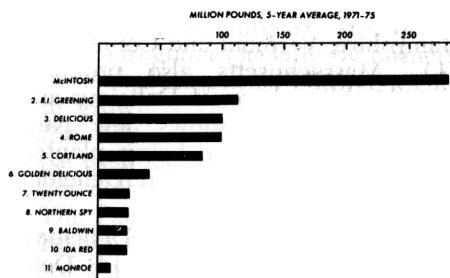


Fig. 7. New York apple production by varieties.

Pennsylvania's leading cultivars are York, Golden Delicious, Delicious, Stayman and Rome (1).

Virginia's most important cultivars are Delicious, York, Golden Delicious, and Stayman (1).

North Carolina's important cultivars are Delicious, Rome and Golden Delicious. West Virginia produces York, Golden Delicious, Delicious, Rome and Stayman (1).

New England is "McIntosh Country"; from 20 to 60 million pounds are grown in 5 of the 6 New England states: Massachusetts, Maine, New

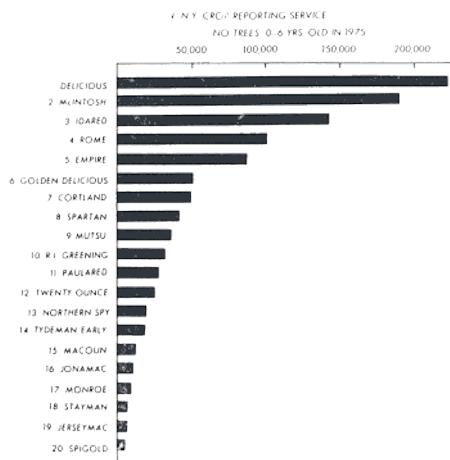


Fig. 8. New apple plantings in New York by varieties.

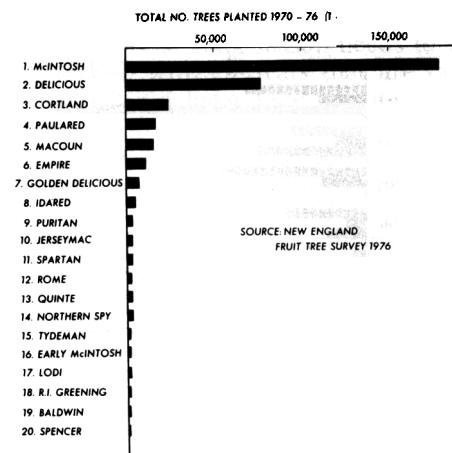


Fig. 9. New apple plantings in New England by varieties 1970-1976.

Hampshire, Vermont and Connecticut (1). Massachusetts also produces considerable volume of Delicious and Cortland. Fig. 9 shows new New England orchards are being planted mainly with McIntosh and Delicious (2).

New Jersey produces Delicious, Rome and Stayman; Maryland: Delicious, York, Golden Delicious and Stayman; South Carolina and Georgia: Delicious (1).

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I certify that the statements made by me above are correct and complete. Loren D. Tukey, Business Manager, September 30, 1978.