

The Great Original Establishment, Prince's Linnaean Botanic Garden and Nurseries

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Abstract

The Prince Family Nursery was run by four generations of the Prince family. It is thought to be the first nursery in America and as time went on, it was often referred to as the “Old American Nursery”. Over the years, the Prince family separately and then jointly ran the nursery as, “The Great Original Establishment” and “Prince’s Linnaean Botanic Garden and Nurseries”. The latter being a nod to the Swedish biologist Carl Linnaeus and his system of binomial nomenclature. The Prince Family Nursery was one of the most important American sources for fruit plants and ornamental trees from around 1730 through the Civil War. In addition to supplying farmers and home gardeners, the Prince Nursery provided plant material to other nurseries as Americans moved into the middle and western parts of the continent. The Prince family members were also prolific writers on a myriad of horticultural topics, including viticulture, roses, tree fruit production, and even hard cider apples. How the Prince Nursery influenced early American horticulture will be discussed in this paper.

History and Patriarchal Lineage

Founded in 1737, the Prince Family Nursery operated for 130 years, until about 1865. It was the first major commercial nursery in the United States and imported plants from Europe, Asia, Australia, and the American “frontier”. The Prince Family Nursery also exported American plants abroad, bred fruit trees, grapes, and roses, and was a leader in perfecting nursery growing techniques. Many of the grafted apple, pear, and cherry trees that could be found in the early Northeastern orchards were produced by the Prince’s nursery. They also trained, and provided nursery stock to many of the early nurserymen that went on to start their own nurseries, such as the Lueling and Meek nurseries in Oregon (Green and Green 2003).

The nursery was located on the southeast side of Flushing Bay in Queens, New York which is on the far western part of Long Island, just south of and on the opposite side of the East River from Hunts Point in the Bronx. The location was prime real estate, combining excellent soils and microclimate, and the ability to ship goods and plants by water and land. In fact, the Prince family built railroad

lines, docks, and a bridge over the Flushing Creek to facilitate access to their business.

The Prince family was the first nursery to advertise ornamentals plants in America. At first they used poster-style broadsides and later with expansive catalogs full of botanical details and horticultural management instructions (Figures 1 and 2). In 1771, the nursery’s first broadside advertised 33 plum, 42 pear, 24 apple, and 12 nectarine cultivars. By 1827, the nursery contained more than a hundred species of Australian plants, and a year later it listed more than 600 roses.

Robert Prince (married to Mary Burgess) “founded” the Nursery in 1737. It is thought that he mostly collected plants for his own use. His son, William Prince Sr. (1725-1802) opened the Prince Family Nursery as a commercial venture in about 1765 (Woodhams 1999). (Note: William Prince and his son of the same name appeared to inconsistently use the senior and junior titles. When needed, I have added the suffixes to this manuscript to provide clarity.) The first known advertisement from the nursery appeared on 21 Sept 1767 and the first nursery catalog was published in 1771 (Jacoben and Williams 2009).

TO BE SOLD,
By WILLIAM PRINCE,
At *Flushing Landing*, on LONG-ISLAND, near *New-York*,
A large Collection, as follow, of
Fruit Trees and Shrubs.

English Cherries.

MANY Dulcis,
Black harts,
White harts,
Carnations,
Bleeding hearts,
Ox hearts,
Amber,
Red hearts,
Duke cherry,
Quaker cherry,
Double blossom cherry,
Squid harts,
Honey cherry,
Kensal cherry,
Mazone cherry,
Morella cherry.

Plum.

Green gage plums,
Yellow egg plums, as big as a hen's egg,
White sweet plum, bigger than a hen's egg,
Crispen plum, very large and fine,
Red imperial plum,
Catharine plum,
Cherry plum,
Machetta plum,
Large pear plum,
White imperial plum,
Dab d'or plum,
Apricot plum,
White bonum magnon plum,

Whitton plum,
Memorative plum,
Pecqueur d'or plum,
Fotheringham plum,
Red perdrigon,
Bingole plum,
White winter damson,
Large red sweet plum,
Large Holland plum,
Early sweet damson plum,
Red bonum magnon plum,
Wilden damson plum.

Apricots.

Large early apricot,
Large French Beudla apricot,
Orange apricot,
Machette apricot,
Blanche apricot,
Alger apricot,
Roman apricot,
Turkey apricot,
Small sweet apricot,
Large more pinkish peach apricot.

Nectarine.

Fairchild's early nectarine,
Large green chinghona nectarine,
Yellow nectarine,
Red Roman nectarine,
Yellow Roman nectarine,
Bingole nectarine,
Temple's nectarine,
Italian or Bourgeois nectarine,
Newington nectarine,
White nectarine,
Bingon nectarine.

Peaches.

Ta. sweet running peach,
White running peach,
Green running or early zain, ripe in July,
The rare ripe peach,
Old Newington peach,
New Newington peach,
Large early chinghona peach,

Large early peach,
Large red chinghona, weighs from 11 to 12 ounces,
Yellow chinghona, called the Carolina,
Canada, weighs a pound,
The white blossom peach,
Fine large French peach called mirabelle,
Fine red chinghona, equal to a pine apple for goodness,
English walth peach,
Large red stone peach, weighs from 10 to 12 ounces,
Large yellow chinghona, weighs 10 or 12 ounces, ripe October 1st,
Large white chinghona, weighs 14 oz. 25,
Large lemon chinghona,
Lemon peach,
English double blossom peach,
Large white chinghona peach,
Large yellow malagutone,
Large white stone peach,
White winter chinghona peach,
Blood peach,
Carolina chinghona peach,
Western Newington peach,
Burdock yellow chinghona,
Elizabeth peach,
Yellow Catharine peach,
Red cheek malagutone peach,
Large blood chinghona peach,
Large peach peach,
Great Catharine peach.

Pears.

Bergamot pear,
Catharine pear,
Vergil pear,
July pear,
Moultier Jean pear,
Amber pear,
French pear,
Winter Louis, a stone pear,
Early bergamot pear,
Choumoulet pear,
Rudell pear,
Early finger pear,
Moultier Jean pear,
L'ave de Joy pear,
Collier pear,
Swin's egg pear,
Crestin pear,
Spanish home cretence pear,
Large bell pear,
Crispen de cat's pear,
Summer bergamot pear,
Lent St. Germaine pear,
Bourgeois bergamot pear,
Winter bergamot pear,
Jungel pear,
Rouillon pear,
Cuisse-maitre pear,
Green Catharine pear,
Large winter pear, weighs near a pound,
Fat waltham,
Large summer baking pear,
The black pear of Worcester, or Parkin-ford waltham,
The blanch pear.

Apples.

Newtown pippin,
Ripon Spitzenberg,
Green
Large pippin, weighs a pound or more,
Large red and green sweet apple, ripe at
Old Newington, weighs a pound or more,
Large early apple, two or three weeks earlier than either running or bow apple.

Vandeville,
English codlin,
Red fireball,
Early juniper,
Newtown Spitzenberg,
Jockey greenings,
Golden pippin,
Huffingtons,
Golden rennets,
Luby-apple,
Worcester,
Yellow bell flower,
Swiss apple,
Rindeland greenings,
Large white flowering,
Bell flowers,
White pippin,
Late low apple,
Self no farther apple,
Virginia crab apple,
Holland pippin apple,
Quince apple,
Everlasting apple,
Newark pippin apple.

Mulberries.

Large black English, 15. 6.
Black American mulberry, 15. 6d.
White mulberry, 15. 6d.

Fig Trees, 2s. each.**Quince Trees, 1s. 6d.****Currants.**

Large red currant,
Large black currant,
Large white currant.

Grape Vines.

Madeira and Lisbon grapes, 15. each vine,
Large Syrian grape, 15.
American wild grapes, many sorts, 15. each.

Gooseberries.

Great amber,
Large yellow oval,
Green gooseberry, 9d. each.

Raspberries.

White raspberries,
English raspberries,
American raspberries, 3d. each,
Large Canada raspberries, 6d.

Strawberries.

Large honey or strawberries, 15. per doz.
Cultivated strawberries, 15. doz.
Red wood strawberries, 4d. doz.
Holland Strawberry, very large, fine flavoured, and great bearers, 25. per doz.

Roses.

M-6 Provence rose, 15.
Yellow rose, 15. 6d.
Rosa Mundi, 25.
Large Provence rose, 15. 6d.
The monthly rose, 25.
The red damask rose, 15.
The white damask rose, 15.
Flemish, 15.
Double rose, 25.
Chapman rose, 25.
Double rose, 25.
American wild rose, many sorts, 6d.

Evergreen Trees and Shrubs.

Red Virgin's cedar, 15. 6d.
Weinmuth's pine, 15. 6d.

Black spruce fir, 15. 6d.
Hemlock spruce fir, 15. 6d.
The Knobridge laurel, 25.
Large fir tree, 15. 6d.
The ball of Girard fir, 25.
Pitch pine, 15. 6d.
Jesey pine, 15. 6d.
Virginia pine, 15. 6d. each.

Timber Trees and flowering Shrubs.

American white oak, 15.
American black oak, 15.
Large New England white oak, 15.
Pin oak, 15.
Scarlet oak, 15.
English pasture flower, 25.
Oleander, with red flowers, 25.
American white thorn, 6d.
Scarlet maple, 15.
Sugar maple, 15. 6d.
Fring tree, or Venetian litch, 25.
Sumac tree, 25. 6d.
Yale of China, 25.
Benjamin tree, 15. 6d.
Scarlet flowering holly chestnut tree, 25.
Andromeda, 15. 6d.
Moonberry or Italian poplar, 25. 6d.
Bladder tree, 6d.
Monthly honey suckle, 6d.
Late white American honey suckle, 15. 6d.
25. at acacia, with red flowers, 25.
Carolina holly bean tree, with purple flowers, 25.
Oreobates d'acacia, with white flowers, 15.
15. each vine, with yellow flowers, 15. 6d.
The tender-bone, or lime tree, 15. 6d.
Liquid amber tree, 15. 6d.
American medlar, 15. 6d.
Weeping willow, 15. 6d.
The sweet-scented shrub from Carolina, 25. 6d.

The alpe tree, 15. 6d.
Catalpa flower tree, 15. 6d.
Good heart dog wood, 15. 6d.
White dog-wood, 15. 6d.
Hard shell almond, 15. 6d.
Sweet almond, 15. 6d. each,
Magnolia, 45.
Tulip tree, 25.
Snow-ball tree, 15.
Ballard tamarisk tree, 15.
Locust tree, 9d.
Nutton tree of Virginia, 15.
Blue lilac, 15.
The ballon Peru, 15. 6d.
White lilac, 15. 6d.
Springer, 15. 6d.
Standing American honey-suckle, 15. 6d.
Candle-berry myrtle, 9d.
Sugar birch, 15.
Sassafras, 15.
Poplar, 25.
Canadian bird cherry, 15.
Yellow willow, 9d.
Double flowering almond, 25.
Cassia alipica, 15. 6d.
The ballon willow, 15. 6d.
Madrera nut, 25.
Large black walnut, 15.
Round black walnut, 15.
White walnut, many sorts, 15. 6d.
Full buds, 15. 6d.
White alder frutex, 15.
Purple alder frutex, 15.
Double tube rose holly, 15.

All the above are transplanted and grafted Fruit Trees, and if wanted for Exportation will be carefully packed in Boxes, Cases, or Barrels, to be sent with the greatest safety by Express, the West-India or South-American Orders left at Mr. HUGH GAINES'S, Stationer, 22, Lancaster-Row, New-York, will be immediately attended to, and the Trees delivered at New-York, any Time they are wanted.

The Price of the Fruit Trees is One Shilling and Six Pence each.

NEW-YORK, October, 1793. — Printed by HUGH GAINES, at the *Edin. Hammer-Square*.

Figure 1. A broadside advertisement for the Prince nursery from 1793.

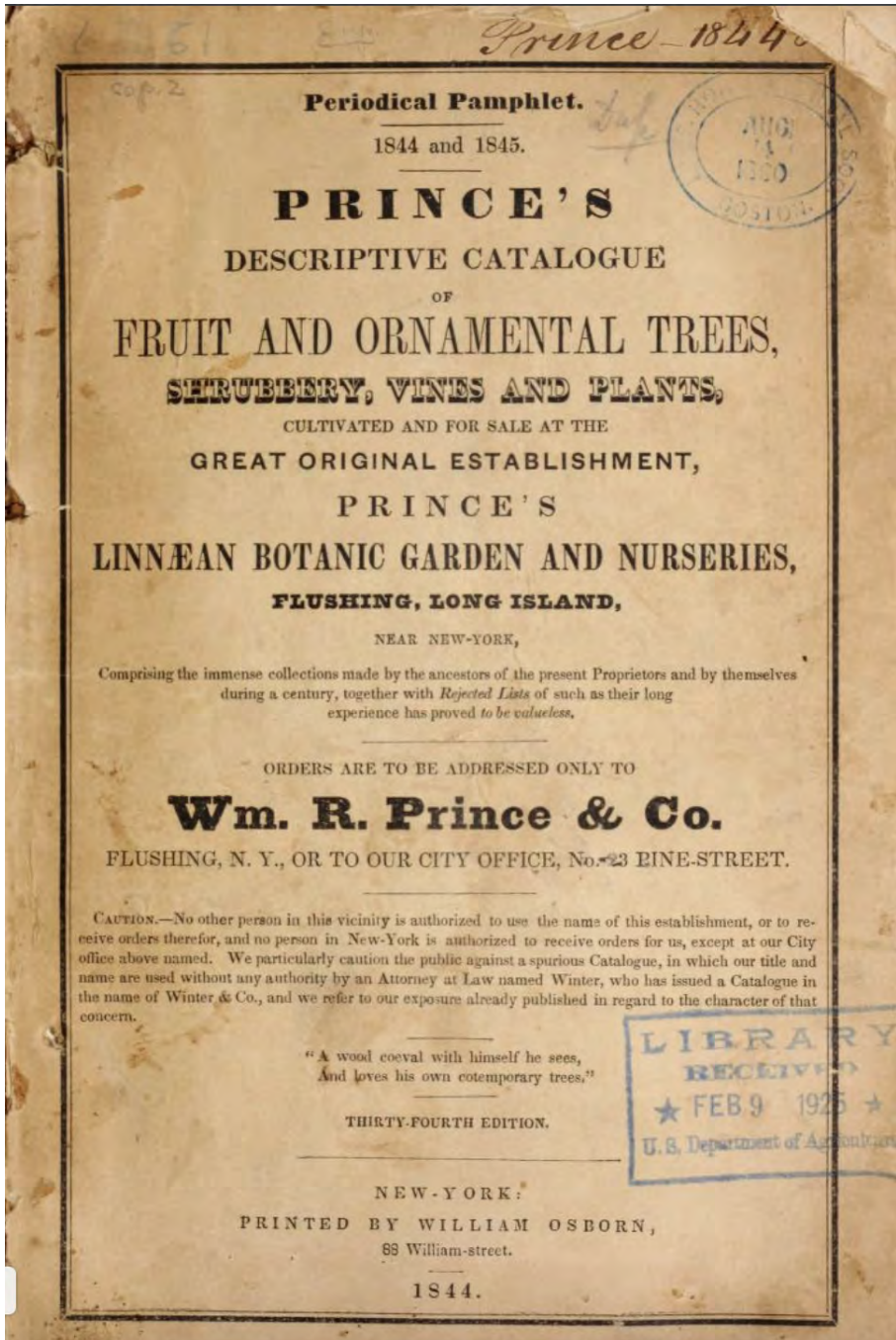


Figure 2. The 1844 cover of the Prince's Descriptive Catalogue of Fruit and Ornamental Trees, Shrubbery, Vines and Plants.

This catalog featured the transatlantic sales of apple trees to England, which must have been quite a feat that they wanted to brag about considering English apple production was very much so established at the time with their own nurseries. Plus, it would have been extremely challenging to keep even dormant trees alive during the long journey. The Prince Family Nursery was the first to commercially grow pecan (*Carya illinoensis*) trees, showing an early domestication of a species with a center of origin in the Mississippi Valley, Texas, and Northern Mexico (Cornett 2004). In 1772, William Prince Sr. planted 30 pecan nuts from which he grew 10 plants (eight of these he sold in England). William Sr. is thought to be one of the first people in America to sell budded or grafted plants and to develop new varieties that were adapted to the local climate and soil.

William Prince Sr. had two sons, Benjamin and William Jr., who split up the business into two nurseries (Woodhams 1999). Benjamin Prince operated the Old American Nursery which he eventually sold to William Jr.

William Prince Jr. (1766-1842) operated the Linnaean Botanic Garden and Nursery (Woodhams 1999). Like his father, he imported foreign trees and plants, especially from Australia, as well as developed new varieties. Under William Jr.'s direction, many of the shrubs and flowers from the Lewis and Clark expeditions (1803-1806) were sent to the Prince's nursery for propagation and distribution. The nursery catalogs produced from 1815 to 1850 are ranked among the most important horticultural publications in the U.S. during that time. William Prince Jr. was also a founder of the New York Horticultural Society (1818). He used his book, *A Treatise on Horticulture* (1828), to synthesize many of the lessons he learned as a nurseryman, horticulturalist, and plant explorer (Prince 1828).

William Robert Prince (1795-1869) was the son of William Prince Jr. (Woodhams 1999). As a young man he went on plant-collecting expeditions in the Eastern U.S., fur-

ther expanding the Nursery's expansive list of plant species and varieties. In particular, William Robert devoted his life to grape culture and the improvement and distribution of native grapes. Like many others at the time, William Robert speculated on developing a silk industry in North America. He imported mulberries (*Morus mulicaulis*) and built a coconery. Unfortunately, this gamble did not pay off, resulting in the loss of his fortune and the already mortgaged Linnaean Botanic Garden and Nurseries, which ended up under the control of Gabriel Winter, William Robert's brother-in-law.

But this wasn't the end of William Robert's career. In 1849, he traveled westward and to Mexico in 1851 in pursuit of new species. Eventually, he regained control of the nursery, which he passed on to his sons, William (III) and LeBaron Bradford Prince, whose careers ultimately distanced them from the nursery business. By this time, the nursery had expanded to 113 acres (Jacoben and Williams 2009). William Robert's sons sold the nursery shortly after the Civil War ended. After attending Columbia Law School, LeBaron Bradford served in the New York State assembly and senate. He was later appointed by President Rutherford B. Hayes as a justice in the territory of New Mexico and then went on to be the Governor of New Mexico from 1889-1893. he returned to Flushing in 1920 to oversee family and professional affairs, and died there in 1922 (TimesLedger 2004). According to an article in the Queens Chronicle, "L. Bradford Prince founded the Flushing Historical Society in 1903. When its last president died in 1980 the Flushing Historical Society was discontinued, and much of the Prince nursery and estate artifacts have been lost" (Marzlock 2008). The article goes on to say, "the Prince Nurseries closed after the death of L. Bradford Prince's father, the third William Prince, in 1869. Most of the property was sold off, except for the homestead, which remained the residence of Charlotte Prince Henry, sister of the fourth William Prince, until her death in 1926."

Many unusual trees and shrubs flourished on the property and throughout Flushing well into the 20th century. In her book, *Old Time Gardens Newly Set Forth*, published in 1901, Alice Morse Earle describes the “oldest Chinese magnolias” and the “finest Cedar of Lebanon in the United States” still standing in the forlorn and forgotten garden at the Prince homestead (Earle 1901). By 1935, much of the Prince’s estate property was neglected and overgrown (Marzlock 2008).

Today, the area is heavily urbanized. Citi Field, the Mets home stadium, is just a few blocks to the west from where the Prince family must have had large nursery fields and associated structures. Nonetheless, remnants of the Prince family legacy remain, including Prince Street, which is where the family home was located, and a series of streets just south of the headquarters named after plants (Walsh 2009). The Queens Botanical Garden is a few blocks south of the former Prince Family Nursery.

Notable plant introductions

Among the most important tree and fruit introductions include, the Lombardy poplar (*Populus nigra* ‘Italica’) imported by William Prince Sr., the ‘Washington’ plum bred by William Prince Sr., the ‘Isabella’ grape cultivated by William Prince Jr., and white mulberries imported by William Robert (Woodhams 1999). The Prince family were known for large-scale production of their plants, and in 1798 they advertised 10,000 Lombardy poplars for sale, each 10-17 feet tall (Wood 1994). ‘Isabella’ is most likely a *Vitis lubrusca* × *Vitis vinifera* hybrid, but it is unclear where or by whom that cross was made. It is famously blamed for being the source of Grape phylloxera (*Daktulosphaira vitifoliae*) into Europe in the late 1800’s. I did not find any records that specifically named the Prince nurseries for introducing phylloxera and their operation had been shuttered by the time phylloxera devastated French *V. vinifera* vineyards.

In 1790, William Prince planted the pits

of twenty-five quarts of ‘Green Gage’ plums, which produced trees yielding “fruits of every color”. Out of them came the ‘Imperial Gage’, which was later taken to England under the name of ‘Denniston’s Superb’. Also produced were the ‘Red Gage’, ‘Prince’s Gage’, and the ‘Washington’ plum. The plum was considered significant for its ability to be dried and kept for long periods, an important quality attribute in the era before refrigeration. In the Plums of New York, U.P. Hedrick stated, “to William Prince and William Robert Prince, ... belong the credit of having given plum-growing its greatest impetus in America” (Hedrick et al. 1911). And, while not pomological, the “Chinese Potato” (*Dioscorea polysta*) (more commonly called the Chinese Yam) is among the many plants brought to America by the Princes. A perennial climbing vine native to China and East Asia, its edible tubers are cultivated largely in Asia and sometimes used in alternative medicine. This species of yam is unique, in that the tubers can be eaten raw. It was proposed as a crop that could be produced in mass quantities to feed the hungry, but that seems never to have come to be.

Interactions with Historic Figures

By the time of the Revolutionary War, The Prince Family Nursery was already well known to both the English and the American colonists. Unfortunately, some nursery plants were deemed valuable commodities for purposes that were not their original destiny, such as the 10,000 grafted cherry trees that had to be sold for barrel manufacturing during the war. However, the fame of and the resources within the nursery offered some security to the Prince family such as when British General Lord Howe ordered his troops to protect the Prince Garden and Nursery from military battles.

After the war, then President George Washington visited the nursery in 1789 along with future president John Adams and Continental Congress president John Jay (Jacoben and Williams 2009). Unfortunately,

Washington was disappointed and reportedly stated, “these gardens, except in the number of young fruit trees, did not answer my expectations. These shrubs were trifling and the flowers not numerous.” Perhaps, this was because he visited the nursery during the winter when it would not have been as impressive.

By 1828, the Prince Nursery offered 140 different kinds of plums for sale. William Sr.’s introductions of the ‘Green Gage’ and other plums proved to be quite noteworthy in America. So much so that William (IV) Henry (1765–1837), duke of Clarence, a son of England’s King George the Third, visited the nursery in order to thank and congratulate William Sr. on his studies of the plum (Jacoben and Williams 2009).

Thomas Jefferson, often thought of as one of America’s most important early horticulturalists, though no mention of him should be done without pointing out his complicit and complicated relationship with slaves and slavery, purchased many plants from the Princes. While at the home of William Jr., Jefferson left a note requesting “all you have” of sugar maples and bush cranberries (*Viburnum trilobum*) as well as three balsam poplars, six Venetian “sumachs” (*Cotinus obovatus*), and twelve “Bursé” (*Beurré Gris*) pears (Cornett 2004). Later that year, Jefferson would receive sixty sugar maple trees, Prince’s entire stock, which were subsequently planted “in a grove” below the Second Roundabout on the northeast slope of Monticello mountain. This became Jefferson’s experiment in sugar production at Monticello. While a commercial sugar industry never took hold in Virginia, Jefferson continued to advocate for the sugar maple suggesting that every farmer should “have a sugar orchard, as well as an apple orchard”.

Cornett (2004) also mentions that, Jefferson had taken a copy of Prince’s catalog and obviously had studied it thoroughly, for the following month, when in Philadelphia, he wrote an enormous addendum to his original order and expanded his fruit order to include: ‘Brignole’ plums, apricots, Red and Yellow

Roman nectarines, ‘Green Nutmeg’ peaches, ‘Yellow October’ and ‘Lemon Clingstone’ peaches, and ‘Spitzenburg’ apples, as well as Madeira walnuts (*Juglans regia*) and filberts. ‘Spitzenburg’ become one of Jefferson’s favorite apples (<https://www.monticello.org/house-gardens/in-bloom-at-monticello/esopus-spitzenburg-apple/>).

Books

In addition to the descriptive catalogs, the Prince family, particularly William Jr. and William Robert, were prolific writers on a number of horticultural topics, as follows:

- 1828: William Jr. published *A Short Treatise on Horticulture*

Intended to be a supplement to the nursery’s catalogues, focused on describing several varieties of fruits, ornamental trees and shrubs

- 1830: William Jr. and William Robert published *A Treatise on the Vine*

The first good book on viticulture in America

- 1831: William Robert published *A Pomological Manual*

Contained full and accurate descriptions of the known varieties of all hardy tree fruits, except the apple

- 1846: William Robert published *A Manual of Roses*

Considered to be the first good book printed on the rose in America

Hard Cider Production

In William Jr.’s 1828 horticultural treatise, he stated that cider apples grown in America are better than those from England or France because the climate is “warmer and dryer” allowing the apples to mature to a greater sugar content (Prince 1828). Furthermore, he recommended that ciders farmers, “should select only the choicest of both countries [sic. England and France], for “in this way he will be sure, even if some of them do not fully realize his expectations, at least no part of his collection can fall very far short of it.” Indeed, this has been substantiated by my own

research program and his recommendations are not far from my own.

In William Robert's *Treatis on the Vine*, he seemingly takes a lesson from apple selection for cider production and applies it to grape cultivar selection. "Sweet and luscious grapes yield in general but inferior wines, from the same causes that apple of a similar character afford cider of the least excellence. But they are useful nevertheless for a variety of purposes. Very sweet, luscious, and high flavoured varieties are suitable for what is termed essence grapes, in order to be mixed with others less sweet and high flavoured in making wine, as they substitute the saccharine quality, and impart an artificial flavour,

which easily approximates, being so nearly allied by natural affinity." (Prince 1830). At that time in America, cider production was much more common than wine production, thus the analogy would have likely been understood by his readers. However, the opposite is probably true today, and, in fact, many cider producers are learning how to mix apples so that they afford cider the most excellence.

By 1844, the Prince Descriptive Catalog listed 25 apple cultivars for cider production (Figure 3). Among these are some well-known English selections, including 'Hagloe Crab' and 'White Styre'. American cider apple cultivars included, 'Harrison' and 'Vir-

CIDER APPLES.

Name.	Color.	Form.	Size.	Quality.	Season when at maturity.	Remarks.
*291 Black, or Virginia Red Streak	st.		2	2	Autumn	V. P. An esteemed Southern variety.
*292 Buck's County Salisbury			2		Dec. Feb.	V. P. A Pennsylvania variety.
*293 Campfield Newark sweeting	r. y.	oblate	2	1	Sep. Jan.	V. P. Firm, sweet and rich.
*294 Cann	p. g. r.	conical	2	1	Autumn	V. P. Much esteemed in New-Jersey.
295 Coccagee	y.	ovate	2	1	Oct.	V. P. Highly esteemed.
*296 Cooper's russet	y. p.	oblong	3	1	Nov. Mar.	V. P. Used also for cooking.
297 Downton Downton Golden Pippin Knight's Golden Pippin	y.	roundish	3	2	Oct. Jan.	V. P. Good for dessert, but too diminutive.
298 Foxley	y.	oval	3	1	Sep. Oct.	V. P.
299 Golden Harvey	rus. y.	roundish	3	1	Oct. May	V. P. Exceedingly rich.
300 Grange	y.	roundish	3	2	Sep. Feb.	V. P. Good for dessert, but too diminutive.
*301 Granniwinkle	d. r.	oblong	2	1	Nov.	V. P. Rich and very sweet.
302 Hagloe Crab	y. r.		3	1	Autumn	A small English variety.
*303 Harrison Harrison's Newark	y.	oblong	3	1	Nov. Ap.	V. P. One of the most esteemed.
*304 Herefordshire Red Streak English Red Streak	st. r. y.	ovate	2	2	Nov. Ap.	Firm, dry and rich, much esteemed for kitchen.
*305 House, or Grey-house	g. r.	oval	3	1	Oct. Jan.	V. P. Good also for table.
*306 Poveson	d. r.	flat	3	1	Sep. Oct.	Flesh dry and sweet.
307 Red Sweeting	r.	oblate	2	2	Autumn	V. P. Used to mix with others.
*308 Roane's White Crab	y. b.	round	3	1	Sep. Jan.	Rich and musky.
309 Siberian Bitter-Sweet	y.	ovate	3	1	Sep.	V. P. Greatly esteemed.
310 ——— Harvey	g. r.	globular	3	1	Nov. Mar.	V. P. Highly esteemed.
*311 Virginia Crab Hughes' Virginia Crab	r. y.	globular	3	1	Oct. Mar.	V. P. An esteemed Southern variety.
*312 Taliaferro	st. w. r.	flat	2	1	Sep.	V. P. Fine Southern variety.
313 Transparent Zurich	p. y.	conical	2		Sep. Oct.	V. P. A Swiss variety.
*314 Wetherill's White Sweeting	p. v.	roundish	2		Sep.	V. P. A sweet variety, used also for dessert.
315 White Styre	p. y. w.	roundish	3	1	Oct. Jan.	L. Esteemed old English variety.

Figure 3. List of cider apples in Prince's Descriptive Catalog, 1844.

ginia Crab/Hughes' Virginia Crab' which are both part of a new wave of orchard plantings supporting the current expansion of the U.S. cider sector.

Impacts on American horticulture

The Princes' impact on American horticulture was extensive. They made hundreds of plant introductions from Europe, Asia, and Australia and also bred many new varieties. They produced plants for the Eastern US, especially the tree fruit orchards in New York, and provided plants to nurseries on the Western "frontier". They developed grafting techniques and trained others in nursery production. The catalogs and books that they produced and wrote were among the most important guides to horticultural techniques in the late 18th and early 19th centuries.

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