

## Luther Burbank

(born March 7, 1849, Lancaster, Massachusetts, U.S.—died April 11, 1926, Santa Rosa, California), American plant breeder whose prodigious production of useful varieties of fruits, flowers, vegetables, and grasses encouraged the development of plant breeding into a modern science.

Reared on a farm, Burbank received little more than a high school education, but he was profoundly influenced by the books of Charles Darwin, especially “The Variation of Animals and Plants Under Domestication” (1868). At the age of 21 he purchased a 7-hectare (17-acre) tract near Lunenburg, Massachusetts, and began a 55-year plant-breeding career that almost immediately saw the development of the Burbank, or Idaho, potato. Selling the rights to the potato for \$150 to use as travel fare to California, he settled in Santa Rosa, where he established a nursery garden, a greenhouse, and experimental farms that were to become famous throughout the world.

Burbank’s breeding methods effected multiple crosses of foreign and native strains and produced seedlings that were grafted onto fully developed plants for a relatively quick appraisal of hybrid characteristics. At all stages of the process, he demonstrated an ability for extremely keen observation and the immediate recognition of desirable characteristics, which enabled him to select useful varieties. Indeed, he took the apparent “molding effect” he exercised on his plants as evidence for the inheritance of acquired characteristics, despite the publication of Gregor Mendel’s principles of heredity in 1901 and the subsequent creation of the science of genetics.

Burbank developed more than 800 new strains and varieties of plants, including 113 varieties of plums, 20 of which are still commercially important, especially in California and South Africa; 10 commercial varieties of berries; and more than 50 varieties of lilies. He wrote *Luther Burbank: His Methods and Discoveries and Their Practical Application*, 12 vol. (1914–15); *How Plants Are Trained to Work for Man*, 8 vol. (1921); and a series of descriptive catalogs, *New Creations in Fruits and Flowers* (1893–1901). With Wilbur Hall he wrote an autobiography, *Harvest of the Years* (1927).

### Cite

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"Luther Burbank." *Britannica School*. Encyclopædia Britannica, Inc., 2014. Web. 25 Nov. 2014. <<http://school.eb.com/levels/high/article/18117>>.