

**Before Biotech There Was Burbank**

*By Stewart Truelsen*

If you've ever eaten an Idaho baked potato, gazed on the beauty of a Shasta daisy or rejoiced when the seed catalogs arrived in the mail before spring, you owe a debt of gratitude to a plant genius, Luther Burbank.

The agriculturalist or serious gardener should know who Burbank was — the breeder of the Russet Burbank potato and some 800 new strains and varieties of plants —but most school children today aren't learning about him, and public recognition of him is slipping away. In his time, the late 19<sup>th</sup> and early 20<sup>th</sup> centuries, Burbank became as famous as Henry Ford or Thomas Edison.

Burbank's work is noteworthy in today's world of biotechnology, and a new biography, *The Garden of Invention*, by author Jane S. Smith, may help restore interest in his life. Smith described Burbank as the "rock star of the garden," whose place in the history of living plants is "between Mother Nature and Monsanto."

"There are not many agricultural celebrities," observed Smith, and she is certainly right about that. Celebrity status today is more often bestowed on those critical of modern farming and the nation's food supply. That was certainly not the case with Burbank. He expanded the range of plants "that became the meal, the ornamental garden, and the bouquet," wrote Smith, and he did it, "...at a time when the vast majority of people agreed that improving on nature was, in fact, a very good thing to do."

Luther Burbank's plant breeding career spanned 55 years, and his body of work was immense. He developed 113 varieties of prunes and plums alone, 20 of which are still important today. Although he was raised in Massachusetts and bred the Burbank potato there, he was known as "The Wizard of Santa Rosa." It was in California that he established his nursery, greenhouse and experimental farm.

An extremely busy person, Burbank had little time for public appearances, but he relented to explain the creed he lived by to a church audience. "What a joy life is when you have made a close working relationship with Nature, helping her to produce for the benefit of mankind..." He went on to talk about flowers and fruits never seen before and grains of "enormously increased productiveness" that could feed the world's untold millions for all time to come.

Burbank of course did not have the tools of modern biotechnology at his disposal.

His form of plant engineering relied on cross-pollination, grafting, hybridization, keen observation and careful selection. He also wasn't able to patent any of his plants. He died a few years before the Plant Patent Act of 1930, the first legislation in the world that treated growing things as intellectual property.

In 1995, more than 100 years after Burbank developed his potato, Monsanto introduced a Russet Burbank potato enhanced through biotechnology to repel the damaging Colorado potato beetle. No doubt Burbank would have embraced biotechnology as a logical and valuable progression of his own work.