



The Burbank Thornless, Fruit-Bearing Cactus



UPPER—ORIGINAL DESERT THORNY CACTUS
LOWER—A DESERT CACTUS IN BLOOM

IT WAS Luther Burbank's theory, at the outset, that the original cactus of the desert was smooth, and that the spines were an acquired characteristic.

In fact, he has gone so far as to say that practically every desert plant is either spiny, or bitter, or poisonous—an acquired armor against destruction by wild animals.

As proof of this theory, Mr. Burbank discovered that the baby cactus seedling as it first shows its thorny head above the soil possesses, for a few days, two perfectly smooth flat leaves—with no suggestion of a spine.

These smooth leaves are rudimentary, dropping off in a few days or a few weeks—the re-

minder of ages ago before the cactus was forced to grow spines.

Sixteen years or more ago, while testing the availability of a great number of proposed forage plants, Luther Burbank was greatly impressed with the apparent possibilities of the cactus—which from its well-known vigor and rapidity of growth, easy multiplication, and universal adaptability to desert and other conditions, to drought, flood, heat, cold, rich or arid soil—placed the cactus in a sphere by itself not only as a forage plant, but as a fruit-bearing plant.

As a forage plant the cactus is now being fed successfully to cows, hogs and poultry, showing a wonderful improvement over even alfalfa feeding.

In fact, in a recent State test, cows which on alfalfa produced 38 pounds of milk showed an increase to nearly 60 pounds when fed on cactus, an average increase of 22 pounds per day.

The fruit of the cactus has a flavor varying between the raspberry and the pineapple, is delicious served raw, either with or without cream, and can be used for producing the most economical possible jams and preserves.

Thus the improved spineless cactus surpasses even alfalfa in feeding qualities and equals the best of small fruits in furnishing an appetizing food for human beings.

But where alfalfa produces from five to ten tons per acre,

cactus has shown its ability to produce from 50 to 100 tons or more per acre for forage, while the fruiting cactus on good soils has been found to produce more than 150,000 pounds of delicious fruit to the acre.

Mr. Burbank does not claim that spineless cactus is new. In fact, he states distinctly that this is the original form in which cactus was to be found ages ago, and that even through the ages there have been some forms of cactus which have remained absolutely spineless.

But these spineless forms were so small and so unproductive as to be almost valueless.

What he did was to take the large, rapid-growing desert form back through evolution until he

reproduced it in spineless form and fixed this characteristic so that it reproduces this form automatically.

The cactus grows like a dense grove and will thrive from the Carolinas clear around the coast of the United States to Puget Sound. It likes a mild climate and can withstand drought for as long as ten years. It grows as well on the desert as its spiny forefathers grew and produces amazing results upon worn-out farm lands, where nothing else will grow.

Already thousands of acres have been planted to this new forage and fruit crop not only in the United States, but in almost every foreign country, Australia, perhaps, being in the lead.



UPPER—BURBANK SPINELESS FORAGE VARIETY
LOWER—AN ORNAMENTAL VARIETY