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The Burbank Cactus
Forage and Fruit
Bulletin
Season 1915

Announcement

To the stock-raiser the feed supply is the one great consideration. A nutritious forage yielding in quantity, easy of culture, cheap to raise and handle, adapted to poor land as well as good, and producing an unfailing crop each year, is the desire of every progressive stockman. The Burbank Forage Cactus possesses these qualities to such a degree that it has been declared by those familiar with its value the most valuable forage known.

In addition to the Forage varieties the Burbank Fruiting Cactus produces a great abundance of delicious fruit, comparable with peaches or other deciduous fruits. The Burbank Fruiting Cactus offers an entirely new field for the fruit grower and it may be confidently anticipated that growing the Burbank Cactus Fruit or Pear will open a very profitable field for the orchardist.

The requests for Burbank Cactus which we have been receiving from all sections of the country are the best evidences of the constantly increasing desire for this new and improved forage. This demand is not based on sentiment but exists because planting Burbank Cactus is profitable.

Luther Burbank is constantly at work upon the improvement of cactus both in yield and in quality. It is the function of The Luther Burbank Company to take over these new improved varieties for further propagation and test, preparatory to introduction. Particular attention is called to the two absolutely new and improved varieties described in this Bulletin for the first time available. For many years it has been the desire of Luther Burbank to produce a Combined Forage and Fruiting Cactus, which would make cactus doubly valuable. This has been finally achieved with the production of the Burbank "ABUNDANT" Cactus for the first time described and offered in this Bulletin. Another desire was the production of a cactus with greater cold-resistant qualities, thus broadening the area wherein cactus may be successfully grown. The Burbank "ROSAMEL" Forage Cactus is the latest development in this direction and is here offered for the first time.

The Luther Burbank Company cactus nursery stock is the only complete and by far the largest in existence. IT IS IMPOSSIBLE TO OBTAIN FROM ANY OTHER SOURCE THE LATEST AND MOST IMPROVED VARIETIES OF LUTHER BURBANK CACTUS. On account of our unusual facilities for plant production, we are enabled to offer the Burbank Cactus, both Forage and Fruiting varieties, this season at a very greatly reduced cost.

The Luther Burbank Company
Sole Distributer
Burbank Building, San Francisco, California

Distributer
Meek Orchards, Hayward, California

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The Wild Thorny Desert Cactus. It is covered with a mass of long dangerous thorns. Stockmen burn the thorns off and feed the nutritious slab to cattle and hog. The process is imperfect and considerable livestock is lost in feeding.

The Burbank Cactus. Luther Burbank has produced a practical forage cactus free from thorns, relished by cattle, hogs and poultry and adapted to millions of acres of semi-arid land. It is a tremendous grower and has produced at the rate of over 50 tons of forage per acre per annum without irrigation.

Burbank Cactus

The New Forage and Fruit

The wild, thorny cactus has been used as a food for cattle for centuries. It is a so-called desert plant found in the arid or semi-arid parts of the world where, on account of its ability to successfully stand drought, it survived where ordinary forms of vegetation ceased to exist. It has been referred to as the “camel of the plant world” on account of its remarkable vitality and ability to go over a long period of time without appreciable moisture. The slabs of wild cactus are covered with a mass of stout thorns one to two inches long and as sharp as needles. Under the armor of thorns is found a palatable, juicy pulp of important nutritive value.

In various parts of the world stockmen and herders make it a practice of feeding wild thorny cactus after burning off the spines or thorns. However, the expense of ridding the slabs of the thorns and the slow growth under cultivation renders the wild, thorny cactus unprofitable as a crop.

Luther Burbank realized 18 years ago the great need of a forage which would thrive under severe semi-arid conditions, and experimented with various forage grasses and plants, among which was the wild thorny cactus, or opuntia. In the cactus or opuntia was found the desired plant.

In Luther Burbank’s own words as taken from his “History of the Burbank Cactus,” we quote the following:

“For more than 50 years I have been quite familiar with ‘thornless cactus’ of many species and varieties, but among the cacti which grow to an immense size with great rapidity and which can be readily cultivated in garden, field or desert, no thornless ones were known. Some 17 years ago the work of improvement was taken up on my experiment farms. For the earliest experiments in this work the best opuntias from all sections of Mexico, Central and South America, North and South Africa, Australia, Japan, Hawaii and the South Sea Islands were secured. Some partially thornless ones from Sicily, Italy and North Africa were secured also. I had some wild, hardy thorny species from Maine, Iowa, Missouri, Colorado, California, Arizona, New Mexico, Dakota, Texas and other States, but not one among these sources was free from thorns. All these were grown and their values studied and compared with great care.

“The first work was to secure the best of these, cross them, select the best of these and so continue hoping for improvement.

“Now the improved opuntia promises to be one of the most important food products of this age. Some of the new creations will yield fully ten times as much feed as will the wild thorny ones under exactly the same conditions. In the summer of 1906 in the cool coast climate of Sonoma County, California, my new opuntias produced the first year from single rooted slabs planted June 1st at the rate of over ninety tons of forage per acre.
"The opuntias from root to tip are practically all feed and drink and are greatly relished by all herbivorous animals. It is easily cultivated and is esteemed by all classes and for this reason the land on which it is cultivated adds to the value of the land and is a valuable addition to any farmland.

The results of Burbank's work on Cactus

The economic effect of Luther Burbank's achievement in utilizing the wild cactus and turning it into a commercial forage plant cannot be overestimated.

As the result of his work, Burbank has produced rapid growing cactus free from the mass of long, dangerous thorns which prevented its extended commercial use as a forage. Increased the food value of the cactus.

Burbank Cactus increases the value of land

The ability of the Burbank Cactus to thrive with very little moisture is one which will multiply acres of semi-arid land, and increase the productivity of land under cultivation.

Burbank Cactus Feed for Cattle, Hogs, Sheep and Poultry

The whole plant, both leaves and fruit, almost without exception, find immediate favor with all herbivorous animals. It makes a superior quality of feeding material. This is not surprising, as the cactus is one of the richest foods known in sodium, potash and magnesium, which are the principal salts found in milk.

While the sitting of the cactus is primarily grown for the fruit, yet the fruit, on account of the very high percentage of sugar, provides a very rich stock food, and is relished by all classes of livestock, particularly hogs. The fruit in conjunction with the slabs goes much farther toward a perfectly balanced ration than either alone, and on account of the heavy tonnage of fruit per acre produced annually it proves a most valuable adjunct to the Forage Cactus.

The Forage Cactus is more fully described in the following pages.

Burbank Forage Cactus is especially valuable in feeding dairy cattle, as it will furnish a succulent feed the entire year, so that an even flow of milk may be obtained. It is a natural silage.

Best results are obtained when cactus is fed with a moderate quantity of some concentrated food such as a little cottonseed meal, alfalfa hay or even straw to secure a balanced ration. The results obtained will be by far better if feeding the Burbank Cactus to cows, hogs, sheep and poultry with most satisfactory results. Affidavits of some of these tests are given in this Bulletin.

How and Where Burbank Cactus May be Grown

Cactus will not thrive where the ground freezes to the depth of one inch, or where the temperature remains as low as fifteen degrees above zero for any length of time. It is particularly adapted to the milder climates such as obtain in California and a large portion of Texas, Arizona, New Mexico and certain sections of the Gulf States and Florida. In the Southern Hemisphere there are millions of acres where cactus may be grown.

The Burbank Cactus reproduces itself indefinitely from the original planting. It being unnecessary to replant each year. In harvesting or obtaining cuttings for new plantings all that is necessary is to cut the mature slabs from the parent plant as needed new slabs taking the places of the ones removed.

Cactus is never reproduced from seed, always from cuttings. Slabs can be produced approximately 100 a square foot, if the cuttings are planted per acre, depending upon the method employed. Cuttings vary in size from 8 to 10 inches to 2 feet in length, from 1/2 to 2 inches in thickness, are about 1/2 inches broad, and weigh from 1/2 to 5 lbs. or even more, depending upon the variety. Cactus should be planted during the first cold weather of the year, and never during wet or cold seasons. It may be planted throughout the spring and summer in climates like California. The land best on good, well drained soil and will promptly respond to good cultivation and treatment. As it requires no irrigation, it becomes more favorable, the productivity of the cactus is increased. The Burbank Cactus, especially the Fruiting, may, under certain conditions be produced on lands which are simply small, fragile and easily detached spines, in varying number, but not enough to interfere with their being fed to cattle without previous preparation. Plants may unfed cultivation produce a few spines of no particular consequence.

About the third season the cactus should be full of fruit and ready for harvest. Cultivation is recommended and under certain conditions a light irrigation of approximately one-tenth the quantity usually given alfalfa should be given. It will produce a much larger yield, but such irrigation is not essential to good results.

It is Profitable to Grow Burbank Cactus Because

It is easily grown, cheaper and better than any other forage grown under similar conditions.

Needs no irrigation.

Produces superior beef, more milk and butter.

Thrives on land that is valueless for other crops.

Makes non-irrigated land produce as much as similar irrigated land.

Reproduces itself indefinitely from the original planting.

May be harvested at any season of the year. No necessity to harvest and store as with other forage crops. No storage needed.

It is a Natural Silage in That It May Be Cut and Fed in Its Rich, Succulent State Any Month in the Year. No Silos Needed.

It requires but three to five inches annual rainfall.

Has produced at the rate of over fifty tons of forage per acre per annum.

Produces a new, delicious fruit in heavy quantities.
Burbank Fruiting Cactus showing the heavy yield. The fruit is very palatable and makes very pleasing syrups and preserves. The yield per acre has exceeded the rate of over ten tons. Livestock relish the fruit which on account of the enormous yield is profitable to grow for stock feed.

The Burbank Cactus Fruit

Cactus has been referred to as the vegetable which bears a fruit. In Southern Italy, Sicily and North Africa the cactus fruit or pear furnished an important food for millions of people during three or four months of the year. The ordinary thorny cactus has been cultivated for centuries on account of the fruit. This fruit compared to the New Burbank Cactus Fruit is small, very seedy, and bears more or less indifferently. The fruit of the new improved Burbank varieties is unique in form and color, exceedingly handsome, unusually wholesome (the large amount of vegetable salts they contain being regarded as very beneficial) and superior in flavor, which varies from that of the plum to the watermelon.

The Burbank Cactus Fruit or Pear averages about the same size as the ordinary pear. It has a skin somewhat thinner than the skin of a banana, which when peeled leaves a delightfully refreshing pulp of delicious flavor. The sugar content ranges from 8 to 14 per cent. The fruit may be eaten like an apple or sliced with cream as with peaches. It makes most excellent preserves and syrups, besides various foods and confections such as Tuna honey (Miel de Tuna), Tuna butter (Melcocha), and Tuna cheese (Queso). Some of the finest candies of Mexico are candied cacti in various forms. The colors of the fruit are most pleasing, ranging from a light green, yellow to deep crimson. The juice from the fruits of the cactus varieties is used for coloring ices, jelly and confectionery, supplying a purely vegetable coloring in beautiful shades.

For the old fruiting thorny cactus eighteen thousand pounds of fruit per acre has been produced, while on good soils the Burbank fruiting varieties have produced at the rate of more than twice as much. Crop failures are unknown, the fruiting season running through from August to early spring, bearing heaviest when there is a scarcity of fresh fruit. Most of the varieties come into bearing the third season. The fruit is gathered like apples and may be stored a reasonable time or shipped in excellent condition.

The general practice to prepare the fruit for use is by brushing off the tiny hair-like bristles found on the skin with a whiskbroom or a coarse cloth, then either slicing through the center and removing the flesh with a spoon or by peeling like a banana, leaving the solid sweet flesh ready for use.

Cattle and hogs are very fond of the fruit on account of the sugar content and in view of the very heavy yield it is valuable to raise the fruit for livestock. It is a material aid in forming a balanced ration when fed with cactus slabs, and especially good for hogs.

Chancellor David Starr Jordan of Leland Stanford Jr. University, says: "Luther Burbank is the greatest originator of new and valuable forms of plant life of this or any other age." Roosevelt says: "Burbank is a man who does things that are of much benefit to mankind."

Hugo De Vries of Holland, the leading botanist of the world, says: "In all Europe there is no one who can even compare with Luther Burbank. He is a unique, great genius." Dr. Bailey, professor of Botany in Cornell University, says: "It is an honor to California that Luther Burbank is its citizen. He is all that he has ever been said to be and more."
Blooded Dairy Cows Feeding on Burbank Forage Cactus in the Sacramento Valley, California. The milk flow was increased 5 quarts per day over a green alfalfa ration. (See Affidavit) Burbank Forage Cactus supplies a greensucculent feed the year around.

EXTRACT FROM AFFIDAVIT

"Sept. 2, 1912—37 lbs. milk, 10 pounds cactus. Sept. 2, 1912—47 lbs. milk, 78 pounds cactus. The above is the result of a test in the feeding of Burbank Cactus to a dairy cow made at the H. R. Timm Dairy. As the dairy herd was being fed on the best kind of green alfalfa and alfalfa hay, it would hardly be expected that a cow would increase in milk when cactus was substituted for the green feed. On Sept. 2, the cow was taken from the herd and placed on a ration of cactus and barley, and a light feed of alfalfa hay. Within four or five days she ate it without the grain and soon reached a gain of ten pounds (5 quarts) of milk daily.

"I consider it a splendid substitute for green alfalfa when fed with a small amount of alfalfa hay. And I consider it doubly valuable as a cow feed on account of the fact that it can be harvested and fed during the winter months when there is no other green feed."

"Dec. 3, 1912. "(Signed) H. R. TIMM."

EXTRACT FROM AFFIDAVIT

Feeding Burbank Forage Cactus to Hogs under Official Test. These common hogs gained three-quarters of a pound each per day. The result of the feeding is shown by the following affidavit.

"This test was conducted near Santa Rosa, California, under the general supervision of representatives of the Santa Rosa Chamber of Commerce.

"There were eight pigs in all, divided into two pens. These pigs were common stock taken from hill pasture. Pigs ranged from 35 to 80 pounds in weight. The cactus used was taken from Mr. Burbank's experimental farm, being old stock which had been discarded. From the first the pigs ate cactus readily. From 20 to 30 pounds of cactus were fed each day to each pen. The pigs ate up all that was offered them. "Twenty-two days' net gain for eight hogs was 115 pounds.

"The net gain per hog for 22 days was 14 2/3 pounds, an average of 2/3 pounds per day.

"Condition of pigs good, and in every way showed proof that cactus makes an excellent and satisfactory green fodder, the cactus supplying a good succulent ration for growing hogs."

"June 22, 1913. "(Signed) SANTA ROSA CHAMBER OF COMMERCE."
THE NEW BURBANK "ABUNDANT." A REMARKABLE FORAGE AND FRUITING CACTUS. Never before offered. Forty-four new slabs produced from one original cutting as the result of one year's growth.

For many years it has been the desire of Luther Burbank to produce a Combined Forage and Fruiting Cactus on account of the food value of the fruit. Heretofore forage cactus yielded sparingly of the fruit. The fruit has a sugar content ranging from 8 to 14 per cent, on account of which it possesses high food value for live stock and goes far toward making a perfectly balanced ration when fed with the slab. With the production of the New "Abundant" Combined Forage and Fruiting Cactus Luther Burbank not only succeeded in developing the yield of fruit, but also perfected a forage cactus of remarkable productivity. This new creation bids fair to be superior both as a forage and fruiting cactus and as a combination of both stands alone. The slabs are dark green, 10 to 18 inches long, very broad and quite thick, a very vigorous grower of the Ficus Indica type. Fruit produced early; 3 to 4 inches long; barrel shaped; light green tinge; skin extremely thin; peels readily; few small seeds; rich, sweet flesh.

A very limited quantity is available for introduction this season. Price: Cuttings $4 each, $30 per ten, $200 per hundred. The right is reserved to reject any order.

THE NEW HARDY BURBANK FORAGE CACTUS "ROSAMEL." Never Before Offered.

Luther Burbank has been for many years developing a hardy cold-resistant cactus for the purpose of broadening the area wherein cactus may be grown, thus causing many tens of thousands of acres of land to be suitable for cactus culture which were not otherwise available. The latest and highest development in this work is "ROSAMEL," produced from the hardy Tapuna class. It is of the Melrose type, producing very large slabs, which are rather thick and rapidly developed. By far the best of this type. It is extremely hardy and stands more abuse than any other variety.

A limited quantity for introduction. Price: Cuttings $2.50 each, $20 per ten, $150 per hundred. The right is reserved to reject any order.

SANTA ROSA. FORAGE. Santa Rosa is a variety introduced a few years ago, which, like Fresno, has proven under the test of actual growing conditions on a comparatively large scale to be one of the better varieties of forage cactus. Unusually large slabs are produced. It is hardy and a very heavy producer. Price: Cuttings 40 cents each, $3 per ten, $175 per thousand.

ROBUSTA. FORAGE. Cross-bred cactus originated by Luther Burbank seven years ago, the slabs are smaller than the average, but are produced in a large quantity and grow closely packed together. The slabs are quite thick, rather round, and pale green in color. A very satisfactory cactus. Price: Cuttings 40 cents each, $3 per ten, $20 per hundred and $175 per thousand.

HEMET. FORAGE. Is of the Tapuna type, producing thick, pearly white slabs. Is considered harder than the ordinary cactus. It is a very thrifty grower and a fine producer. Price: Cuttings 35 cents each, $2.50 per ten, $17.50 per hundred and $150 per thousand.

MELROSE. FORAGE. Plump, thick bluish white leaves. Strong grower. This is one of the best Tapuna types introduced by Mr. Burbank a few years ago. Hardy. Price: Cuttings 35 cents each, $2.50 per ten, $17.50 per hundred and $150 per thousand.

MODEL. FORAGE. Best of a large number of seedlings of the old well-known Smith, is as vigorous as and hardy as the old Smith, and has large, very thick, dark green slabs. It is a splendid upright grower and is one of the very best late improved varieties of the forage cactus so far produced by Luther Burbank. Price: Cuttings $2 each, $15 per ten, $100 per hundred.

PYRAMID. FORAGE. Pyramid is a strong producer of large, thick, very heavy, light green slabs. It is one of the very best for stock and poultry. It is one of the better varieties perfected by Mr. Burbank. Price: Cuttings 50 cents each, $2.50 per ten, $20 per hundred and $175 per thousand.
A field of Burbank "Fresno" Forage Cactus, showing the heavy tonnage. Note solid, compact growth and fruit, which is of fine quality.

FRESNO (IMPROVED) FORAGE CACTUS. - This variety was produced by Luther Burbank several years ago. Since then it has been closely tested under actual plantation conditions and especially selected plants were grown for nursery stock purposes at our Cactus Nursery. Its record as a rapid grower of fine, large, smooth slabs is such as to place it as one of the best forage varieties of cactus. Its compact habit of growth is very unusual, giving it a very heavy tonnage per acre. In addition to the forage qualities Fresno bears a very good quantity of lemon-colored fruit of fine quality, suitable for table use or stock feed. The quantity of the fruit, however, is considerably less than that produced by the best fruiting varieties, yet is sufficient to be a noteworthy and valuable addition to the crop of slabs. We recommend Fresno as an ideal forage, thoroughly proven. Price: Cuttings 50 cents each, $4 per ten, $30 per hundred, $260 per thousand.

THE BURBANK FRUITING CACTUS.

BANANA. FRUITING. - Seedling of "White Fruit." Tall, rapid growing plant, bearing abundantly beautiful greenish white fruits, deeply shaded crimson. Fruits large, thin skinned, very good. A plant of Banana with ripening fruit is a most admirable ornament for any position, as well as a bearers of delicious fruit. Price: Cuttings $2.50 each, $20 per ten.

EL DORADO. FRUITING. - This new variety is almost but not absolutely free from small spines, a very strong grower, hardy and extremely productive. It produces unusually large, very thin skinned fruit of the very best quality. The skin, which peels most readily from the fruit, is olive green, beautifully shaded with lemon yellow and rose pink. The flesh is of the palest semi-transparent straw yellow color, firm and with a rich melon-like flavor and almost seedless. The fruit, which is of an unusually pleasing form and even size, keeps well, both when left on the plant or picked for use of shipping. Nothing better so far known for general use, market or shipping. Price: Cuttings $3 each, $35 per ten.

MARKET. FRUITING. - "Market" is a seedling of the old, well-known Smith and will greatly please growers. The plants are unusually robust growers, with large, pale green slabs, which are annually loaded down with brilliant, crimson, 5 to 6 ounce fruits of a pleasing, compact form and very thin, easily removed skin; flesh, violet, crimson, sweet. Has some seeds, but as small as tomato seeds. Ripens October to March. Price: Cuttings $1.50 each, $10 per ten.

GRAVITY. FRUITING. - A strong grower, with unusually large slabs. The fruit is very large. Yellow shaded orange, flesh yellow, sweet and delicious, with few seeds, which are almost as small as tomato seeds. Ripe from October to March. Price: Cuttings $1.50 each, $10 per ten.

NIAGARA. FRUITING. - The plant has proven a very vigorous grower. Niagara has never failed to bear at least four to six times as much fruit as the Smith. The fruit, which is of the brightest crimson color, is smoother and more compact, larger, with a thinner peel and of far superior quality; flesh crimson throughout. A few seeds, but its enormous producing ability will give it a prominent place. Price: Cuttings 75 cents each, $6 per ten, $35 per hundred and $300 per thousand.

QUILLOTA. FRUITING. - Large plants, with thick, oval, light green leaves. Fruit large, handsome; yellow with crimson blush. Thin skin, which is readily removed; firm, pale greenish, almost white flesh; seeds small; flesh sweet, rich, most excellent. Fruit ripens from September to April. Price: Cuttings $1 each, $7.50 per ten, $50 per hundred and $400 per thousand.

USE ORDER BLANK ON BACK COVER.

A MESSAGE

The Luther Burbank Company of San Francisco is the Sole Distributor of my Horticultural Productions, and from no other source can one be positively assured of obtaining genuine Luther Burbank creations.

To give each purchaser a guarantee of receiving original Burbank creations, this corporation has originated a trade-mark (see Burbank Seal on back cover). The name "Burbank" has been so indiscriminately and fraudulently used that it has been in danger of losing, in a measure, its true significance.

(Signed) LUTHER BURBANK.
PRICE LIST AND ORDER BLANK
Tear off on dotted line

The Burbank Cactus
The Luther Burbank Company
Sole Distributer

BURBANK BUILDING
SAN FRANCISCO, CALIFORNIA, U. S. A.

It is understood The Luther Burbank Company does not warrant in any way, express or implied, the contents of any package or the description, quality, productiveness or any other matter of any seed, bulbs, trees or plants sold by it, and will not be responsible for the crops.

Please ship via........................................... the following cactus cuttings, as listed and per the conditions contained in your Season 1915 Cactus Bulletin.

Ship...................................................................................

State when to ship

FOR FORAGE

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FOR FRUIT

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Enclosed find.............................................. State whether check, money order or draft

for $............................................................... in payment for above orders.

Write plainly. Signature of Purchaser..............................................

This Seal is on each Package of Plants

Shipping address.............................................. (Town)
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Date.............................................. 191... If Shipping destination and Post Office are different, give Post Office address below.

All plants and cuttings lightly and carefully packed with no charges for boxing or packing. All sales are f. o. b. San Francisco or Oakland. Freight and express charges to be paid by purchaser. No cuttings sent by mail. All orders must be accompanied by the purchase price. The right is reserved to reject any order. Orders for delivery before Sept. 1st, 1915, will be accepted if accompanied by a cash deposit of 25 per cent. of the total purchase price.