

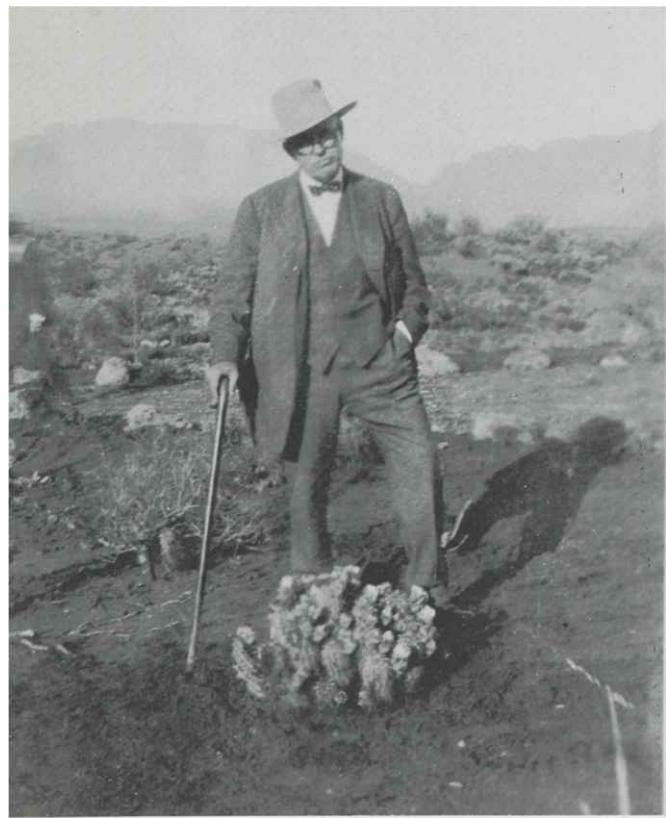


Cacti in the Living Plant Collection of the Boyce Thompson Southwestern Arboretum

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Cacti in the Living Plant Collection of the Boyce Thompson Southwestern Arboretum

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and Frank S. Crosswhite
Boyce Thompson Southwestern Arboretum



*W.B. Thompson standing behind his namesake, *Echinocereus fasciculatus* var. *boyce-thompsonii*, the very first cactus planted at the Arboretum in the early 1920's.*

The following list will serve as an index to the 805 kinds of cacti, belonging to 110 genera, in the living plant collection of the Boyce Thompson Southwestern Arboretum. The Arboretum has maintained a high degree of interest in the entire cactus family since the decade of the 1920's, resulting in numerous publications over the years on propagation and care, taxonomy, natural history, speciation and evolution, and life form relationships. Whether by original design or happenstance, the Arboretum has become a center for the study of cacti by scientist and casual visitor alike. Tourist guidebooks often call attention to the Arboretum's collection of cacti and invariably use superlatives, sometimes even calling it the greatest or largest or most complete cactus collection in the world. Although such claims may be somewhat exaggerated, the institution does seek to make the collection as meaningful and complete as possible. To this end the Arboretum will happily accept contributions of species not found on the present list.

Most of the 805 kinds of cacti are displayed with identifying labels in the Arboretum's cactus garden or in a special cactus greenhouse attached to the Visitor Center building. A few are only in special propagating or research areas and are not yet on display to the public. In response to questions by visitors as to how they could purchase potted specimens of many of the desirable and rare species, a sales area was established adjacent to the Visitor Center building to make available propagated specimens which have not been dug up from the desert. This sales program is a conservation effort designed to discourage persons from despoiling the desert by illegally digging cacti or other desert plants, and to encourage them to grow desert plants which have resulted from horticultural propagation and production methods. The sales area is open only to persons who come to the Arboretum to walk its trails, study the plants, or otherwise participate in the educational and nature-appreciation aspects of the institution. This restriction was established to avoid creating an unrelated business activity and to adhere to University of Arizona regulations, Arizona state law, and Internal Revenue Service guidelines dealing with non-profit educational and scientific institutions. All income from the sales program goes directly into operating the Arboretum. It is important for subscribers to *Desert Plants* to realize that the majority of the 805 kinds of cacti on the present list are not "stock items" in the sales area. They are members of the Arboretum's living collection used for purposes of research, education and display and as such will be available for sale only as propagation permits. Numerous cacti, including some popular and easy-to-grow types, are grown by a corps of volunteers at the Arboretum for placing in the sales area. Yet others are trucked to the Arboretum periodically by hobbyists and commercial growers for the Arboretum to sell for fund-raising purposes. Although practically all of the 805 kinds of cacti on the present list have at one time or another been present in the sales area, the majority are available only as spin-offs of the educational and scientific programs and/or have an undependable and unpredictable supply. To adhere to the guidelines and philosophy of the "propagated plant sales program" the Arboretum asks that persons refrain from coming specifically to buy plants or to seek specific plants to buy. It is recommended that if persons have any landscaping or other plant requirements that can be anticipated in advance, they should visit some of



A young visitor looks at immense white *Trichocereus* flowers amidst a veritable jungle of cactus stems in a greenhouse attached to the visitor center of the Boyce Thompson Southwestern Arboretum. Photograph by Carol D. Crosswhite.



Borzicactus aureispinus adapts to a hanging pot at the Boyce Thompson Southwestern Arboretum. In its native Bolivia it hangs from sides of cliffs. Photograph by Carol D. Crosswhite.

the very excellent retail plant nurseries present in Arizona and adjacent desert regions.

Although the designation "arboretum" in the name of the institution emphasizes trees, cacti have always been included, along with other desert plants, among the subject matter to be studied and displayed. The Arboretum's interest in cacti goes back to the 1920's when Charles Russell Orcutt was hired as the institution's first professional plant collector. Cacti collected by Orcutt in Mexico and the Southwestern United States were established at the Arboretum at an early date. Of special interest historically are a handful of species discovered at or near the Arboretum itself and which Orcutt considered entirely new to science. First discovered were *Echinocereus arizonicus* and *Mammillaria viridiflora* at 4700 feet elevation about 11 miles northeast of the Arboretum. The *Echinocereus* is now considered a variety of *Echinocereus triglochidiatus* by Lyman Benson and is listed as an "endangered species" by the United States government. Benson considers the *Mammillaria* to be a good taxon in species rank. It is not uncommon as a wild plant at the Arboretum itself. Orcutt also described *Echinocereus boyce-thompsonii* as a new species on the basis of wild plants native to the Arboretum grounds. It is retained by Benson in the rank of variety under *Echinocereus fasciculatus*.

From 1928 to 1945 five Arboretum botanists and horticulturists published articles on cacti. Fritz Berger, the son of the famous European cactus and succulent expert Alwin Berger, grew cacti at the Arboretum as the institution's first professional plant propagator. We have found articles he published on *Echinomastus* and *Mammillaria* during this period of his career before he began his better-known work at the Huntington Botanical Garden in Pasadena, California. A number

of Fritz Berger's cactus photographs taken at or near the Arboretum appeared in his father's landmark book *Kakteen, Anleitung zur Kultur und Kenntnis der Wichtigsten Einge-führten Arten* published in 1929 at Stuttgart. Ralph O. Baird published articles on "A Recent Cactus Expedition" and "A New Species of *Cactus*" while employed at the Arboretum. William Palmer Stockwell served as research assistant and propagator at the Arboretum during the decade of the 1930's. In 1933 he was senior author, with Lucretia Breazeale, of a brand-new 116-page book *Arizona Cacti*, published by the University of Arizona. This was the forerunner of the University's later book *Cacti of Arizona* which appeared in 1940 under authorship of Dr. Lyman Benson. (This latter book, through all of its incarnations including the 1969 third edition, continued to be illustrated by Lucretia Breazeale, who became Lucretia Hamilton after marrying Louis Hamilton.)

Another employee of the Arboretum, Jack Whitehead, published on cacti and other desert plants in the decade of the 1930's, a good example being a 1936 article on *Opuntia leptocaulis* in the Journal of the Cactus and Succulent Society of America. A plant collector for the Arboretum in both the 1930's and 1940's, J. Pinckney Hester, published numerous articles on his cactus discoveries, including a number of supposed new species and even a proposed new genus *Escobes-seya*. Although some of his "new species" have stood the test of time, some have been downgraded to the status of variety or form or outright synonymized.

During the decade of the 1950's when most species of Arizona cacti had already been discovered, Arboretum botanist Bernard W. Benson surprised cactus and succulent experts around the world by describing *Pediocactus parviflorus* as a new species from House Rock Valley in Coconino County. The famous German cactus expert Curt Backeberg proclaimed Benson's cactus not only a new species but an entirely new genus as well, naming it *Pilocanthus*. Today scholars agree that Benson's cactus is quite unique, but accept Benson's classification in preference to that of Backeberg.

During the decade of the 1960's the University of Arizona officially entered into cooperative management of the Arboretum and a number of research projects, some resulting in successful MS theses and PhD dissertations, were undertaken by U. of A. students at the Arboretum. Noteworthy was a 1967 thesis by Don Despain on *Survival of Saguaro Seedlings on Soils of Differing Albedo, Cover and Temperature*.

When Dr. Verne Grant became Director of the Arboretum in 1968, research began to emphasize evolutionary biology and pollination systems, culminating in the 1971 book *Plant Speciation* published by Columbia University Press. Verne and Karen Grant also published an article on "Dynamics of Clonal Microspecies in *Cholla Cactus*" based on their studies while at the Arboretum and described the new species *Opuntia kelvinensis*.

During the 1970's and 1980's the emphasis on cacti at the Arboretum shifted to conservation efforts and ecological studies. Kent C. Newland took charge of the Arboretum's cactus collections and a large number of plants were salvaged from highway construction projects, land scheduled to be cleared for power substations, or otherwise bulldozed. Newland has served on cactus conservation committees and was elected to membership in the International Organization of Succulent Plant Study. An article on his crested Totem Pole Cactus

appeared in the 1984 volume of the Journal of the Cactus and Succulent Society of America.

During 1974 Dr. Frank S. Crosswhite conducted studies of *Echinocereus arizonicus*, *Mamillaria viridiflora*, and *Ferocactus acanthodes* var. *eastwoodiae* for the U.S. Forest Service and supervised a mapping inventory of *Echinocereus arizonicus* on Forest Service land in 1977. In 1980 he published a 60-page article on the *Annual Saguaro Harvest and Crop Cycle of the Papago, With Reference to Ecology and Symbolism* and in 1984, jointly with Dr. Carol D. Crosswhite, a 36-page article on life forms of Sonoran Desert plants which included six cactus life forms. Carol has managed the Arboretum's "propagated plant sales program" which emphasizes cacti, and has published on cochineal dye from *Opuntia* and *The Significance of Cacti in the Diet of the Javelina*. Newland and both Crosswhites have served as judges at cactus shows. Thus, there has been an unbroken chain of interest in cacti by the staff of the Arboretum from the 1920's to the present.

Acanthocalycium

Acanthocalycium glaucum Ritter.

Acanthocalycium klimpelianum (Weidl. & Werd.) Backeberg.

Acanthocalycium violaceum (Werdermann) Backeberg.

VIOLET SEA URCHIN.

Acanthocereus colombianus Britton & Rose. TRIANGLE CACTUS; PITAHAYA.

Akersia

Akersia roseiflora — see *Borzicactus roseiflorus*.

Ancistrocactus

Ancistrocactus scheeri (Salm-Dyck) Britton & Rose. FISHHOOK CACTUS; ROOT CACTUS.

Ancistrocactus uncinatus (Galeotti) L. Benson. TURK'S HEAD; CAT-CLAW CACTUS; BROWN-FLOWERED HEDGEHOG; TEXAS HEDGEHOG.

Anisocereus

Anisocereus gaumeri — see *Pterocereus gaumeri*.

Aporocactus

Aporocactus flagelliformis (Linnaeus) Lemaire. RAT-TAIL CACTUS; JUNCO; JUNQUILLO; FLORICUERNO; FLOR DE LATIGO.

Arequipa

Arequipa erectocylindrica — see *Borzicactus hempelianus* var. *rettigii*.

Arequipa hemepeliana — see *Borzicactus hempelianus*.

Arequipa myriacantha — see *Borzicactus myriacanthus*.

Arequipa sochrensi — see *Borzicactus hempelianus* var. *rettigii*.

Arequipa spinosissima — see *Borzicactus hempelianus* var. *spinosa*.

Ariocarpus

Ariocarpus agavioides (Castaneda) Anderson.

Ariocarpus fissuratus (Engelmann) Schumann var. **fissuratus**. LIVING ROCK; STAR CACTUS; STAR ROCK; SUNAMI; CHAUTLE; PEYOTE CIMARRON.

Ariocarpus fissuratus var. **lloydii** (Rose) Anderson.

Ariocarpus kotschoubeyanus (Lemaire) Schumann.

Ariocarpus lloydii — see *Ariocarpus fissuratus* var. *lloydii*.

Ariocarpus retusus Scheidweiler. SEVEN STARS; CHAUTE.

Ariocarpus scapharostrus Boedeker.

Armatocereus

Armatocereus procerus Rauh & Backeberg.

Arrojadoa

Arrojadoa aureispina Buining & Brederoo.

Arrojadoa rhodantha (Gurke) Britton & Rose.

Astrophytum

Astrophytum asterias (Zuccarini) Lemaire. SEA URCHIN CACTUS; SAND DOLLAR.



Arboretum vehicles laden with cacti collected in Mexico stop at the customs house on the international border at Sasabe on April 21, 1925.

Astrophytum capricorne (Dietrich) Britton & Rose. GOATS HORN CACTUS.

Astrophytum myriostigma Lemaire. BISHOP'S CAP.

Astrophytum ornatum (DeCandolle) Weber. STAR CACTUS; MONK'S HOOD.

Astrocephalocereus

Astrocephalocereus albicephalus Buining and Brederoo.

Astrocephalocereus dolichospermaticus Buining and Brederoo.

Astrocephalocereus dybowskii (Gosselin) Backeberg. CABECA BRANCA; MANDACARU DE PENACHO.

Astrocephalocereus estevesii Buining and Brederoo.

Astrocephalocereus purpureus (Curke) Backeberg.

Austrocylindropuntia

Austrocylindropuntia inarmata — see Opuntia inarmata.

Austrocylindropuntia subulata — see Opuntia subulata.

Austrocylindropuntia verschaffeltii — see Opuntia verschaffeltii.

Austrocylindropuntia vestita — see Opuntia vestita.

Aylostera

Aylostera spp. — see Rebutia.

Azureocereus

Azureocereus hertlingianus (Backeberg) Backeberg.

Azureocereus viridis Rauh & Backeberg.

Backebergia

Backebergia chrysomallus — see Backebergia militaris.

Backebergia militaris (Audot) H. Bravo. GRENADIER'S CAP; TEDDY BEAR CACTUS.

Bartschella

Bartschella schumannii — see Mammillaria schumannii.

Bergerocactus

Bergerocactus emoryi (Engelmann) Britton & Rose. VELVET CACTUS; PROHIBITION CACTUS.

Bolivicereus

Bolivicereus samaipatanus — see Borzicactus samaipatanus.

Borzicactus

Borzicactus aurantiacus (Vaupel) Kimnach & Hutch.

Borzicactus aureiflorus (Ritter) Donald.

Borzicactus aureispinus (Ritter) Rowley. GOLDEN MONKEY-TAIL.

Borzicactus chlorocarpus

Borzicactus fossulatus (Labouret) Kimnach. MOUNTAIN CEREUS.

Borzicactus haynei (Otto) Kimnach.

Borzicactus hempelianus var. *rettigii* (Quel.) Donald.

Borzicactus hempelianus (Gurke) Donald var. *spinosissimus* (Ritter) Donald.

Borzicactus icosagonus (H.B.K.) Britton & Rose.

Borzicactus intertextus (Ritter) Donald.

Borzicactus margaritanus

Borzicactus myriacanthus

Borzicactus paucicostatus (Ritter) Donald.

Borzicactus plagiostoma Britton & Rose.

Borzicactus ritteri (Buining) Donald.

Borzicactus roseiflorus

Borzicactus samaipatanus (Cardenas) Kimnach. BOLIVIAN FIRE FLOWER.

Borzicactus trollii (Kupper) Kimnach. OLD MAN OF THE MOUNTAINS.

Borzicactus variabilis

Borzicactus weberbaueri (Vaupel) Donald.

Brachycalycium

Brachycalycium tilcarense (Backeberg) Backeberg.

Basilicactus

Basilicactus graessneri — see Notocactus graessneri.

Basilicactus haselbergii — see Notocactus haselbergii.

Browningia

Browningia hertlingianus — see Azureocereus hertlingianus.

Browningia viridis — see Azureocereus viridis.

Buiningia

Buiningia aurea (Ritter) Buxbaum.

Buiningia purpurea Buining & Brederoo.

Calymnanthium

Calymnanthium substerile Ritter.

Carnegiea

Carnegiea gigantea (Engelmann) Britton & Rose. SAGUARO.

Cephalocereus

Cephalocereus alensis — see Pilosocereus alensis.

Cephalocereus apicicephalium — see Neodawsonia apicicephalium.

Cephalocereus chrysomallus — see Backebergia militaris.

Cephalocereus euphorbioides — see Neobuxbaumia euphorbioides.

Cephalocereus hoppenstedtii (Weber) K. Schumann. CARDON BLANCO.

Cephalocereus leucocephalus — see Pilosocereus leucocephalus.

Cephalocereus maxonii — see Pilosocereus maxonii.

Cephalocereus mezcalenensis — see Neobuxbaumia mezcalenensis.

Cephalocereus palmeri — see Pilosocereus palmeri.

Cephalocereus polylophus — see Neobuxbaumia polylopha.

Cephalocereus purpusii — see Pilosocereus purpusii.

Cephalocereus royenii — see Pilosocereus royenii.

Cephalocereus russelianus — see Subpilocereus russelianus.

Cephalocereus scoparius — see Neobuxbaumia scoparia.

Cephalocereus senilis (Haworth) Pfeiffer. OLD MAN CACTUS; VIEJO.

Cephalocereus tetetzo — see Neobuxbaumia tetetzo.

Cereus

Cereus aethiops Haworth

Cereus alamosensis — see Stenocereus alamosensis.

Cereus azureus Parmentier.

Cereus comarapanus Cardenas.

Cereus giganteus — see Carnegiea gigantea.

Cereus hankeanus Weber.

Cereus hexagonus (Linnaeus) Miller. SOUTH AMERICAN BLUE COLUMN; BLUE CEREUS.

Cereus peruvianus (Linnaeus) Miller var. *monstrosus* DeCandolle. CURIOSITY CACTUS.

Cereus schottii — see Lophocereus schottii.

Cereus tetragonus (Linnaeus) Miller.

Chamaecereus

Chamaecereus silvestrii — see Lobivia silvestrii.

Cleistocactus

Cleistocactus ayopayanus Cardenas.

Cleistocactus buchtienii Backeberg.

Cleistocactus candelilla Cardenas. SMALL CANDLE IN THE ANDES.

Cleistocactus chacoanus Ritter.

Cleistocactus hildewinterae Ritter.

Cleistocactus hyalacanthus (K. Schumann) Gosselin. SILVER TORCH.

Cleistocactus jujuyensis (Backeberg) Backeberg. SILVER TORCH.

Cleistocactus ritteri Backeberg.

Cleistocactus strausii (Heese) Backeberg. SILVER TORCH.

Cochemiea

Cochemiea pondii — see Mammillaria pondii.

Cochemiea poselgeri — see *Mammillaria poselgeri*.

Cochemiea setispina — see *Mammillaria setispina*.

Coleocephalocereus

Coleocephalocereus goebelianus (Vaupel) Ritter ex Backeberg.

Copiapoa

Copiapoa cinerea (Phil.) Britton & Rose var. **albispina** Ritter.

Copiapoa cinerea var. **columna-alba** (Ritter) Backeberg.

Copiapoa coquimbiana (Karwinsky) Britton & Rose var. **coquimbiana**.

Copiapoa coquimbiana var. **wagenknechtii** Ritter.

Copiapoa cupreata (Poselger) Backeberg.

Copiapoa dura Ritter.

Copiapoa haseltoniana Backeberg.

Copiapoa humilis (Phil.) Hutch.

Copiapoa lembckeii Backeberg.

Copiapoa militaris

Copiapoa minuta

Copiapoa tenuissima Ritter.

Coryphantha

Coryphantha asterias (Cels) Boedeker.

Coryphantha borwigii J.A. Purpus.

Coryphantha calipensis H. Bravo.

Coryphantha clava (Pfeiffer) Lemair.

Coryphantha elephantidens (Lemaire) Lemaire. ELEPHANT-TOTH CACTUS.

Coryphantha erecta (Lemaire) Lemaire.

Coryphantha greenwoodii H. Bravo.

Coryphantha macromeris (Engelmann) Orcutt var. **runyonii** (Britton & Rose) L. Benson. DUMPLING CACTUS.

Coryphantha missouriensis (Sweet) Britton & Rose.

Coryphantha nickelsae K. Brandegee.

Coryphantha cornifera (DeCandolle) Lemaire var. **echinus** Engelmann.

Coryphantha odorata Boedeker.

Coryphantha palmeri Britton & Rose.

Coryphantha poselgeriana (Dietrich) Britton & Rose.

Coryphantha recurvata (Engelmann) Britton & Rose.

Coryphantha redundispina Boedeker.

Coryphantha retusa (Pfeiffer) Britton & Rose.

Coryphantha robertii Berger. JUNIOR TOM THUMB CACTUS.

Coryphantha salm-dyckiana (Scheer) Britton & Rose.

Coryphantha strobiliformis (Quebel) Britton & Rose.

Coryphantha vivipara (Nuttall) Engelmann. SPINY STAR; BALL CACTUS; SOUR CACTUS; BEEHIVE; ESTRIA DEL TARDE.

Cryptocereus

Cryptocereus anthonyanus Alexander. RICK RACK CACTUS.

Cylindropuntia

Cylindropuntia spp. — see *Opuntia* spp.

Deamia

Deamia testudo — see *Selenicereus testudo*.

Denmoza

Denmoza erythrocephala (K. Schumann) Berger.

Denmoza rhodacantha (Salm-Dyck) Britton & Rose.

Discocactus

Discocactus magnimammus Buining & Brederoo.

Dolichothele

Dolichothele longimamma — see *Mammillaria longimamma*.

Dolichothele sphaerica — see *Mammillaria sphaerica*.

Dolichothele surculosa — see *Mammillaria surculosa*.

Echinocactus

Echinocactus grusonii Heldmann. GOLDEN BARREL.

Echinocactus horizonthalonius Lemaire. TURK'S HEAD;

DEVIL'S HEAD; EAGLE'S CLAWS; HORSE MAIMER; BISNAGRE; BISNAGA DE DULCE; BISNAGA MELONCILLO.

Echinocactus platyacanthus Link & Otto.

Echinocactus polycephalus Engelmann & Bigelow. MANY-HEADED BARREL; HAREM CACTUS.



Pediocactus parviflorus, a rare cactus with long hair-like spines, described as new to science by Arboretum botanist Bernard Benson.

Echinocereus

Echinocereus acifer (Otto) Lemaire.

Echinocereus adustus Engelmann.

Echinocereus barthelowanus Britton & Rose.

Echinocereus berlandieri Englemann var. **papillosus** (Link) L. Benson. YELLOW-FLOWERED ALICOCHE.

Echinocereus blanckii (Poselger) Palmer. DEVIL'S FINGER; ALICOCHE.

Echinocereus blanckii (Poselger) Palmer var. **berlandieri** (Poselger) Backeberg.

Echinocereus blanckii var. **leonensis** (Matth.) Backeberg.

Echinocereus brandegeei (Coulter) K. Schumann.

Echinocereus cinerascens (DeCandolle) Rümpler.

Echinocereus delaetii Gurke. LESSER OLD MAN; OLD LADY.

Echinocereus engelmannii (Parry) Rümpler var. **engelmannii**. STRAWBERRY HEDGEHOG.

Echinocereus engelmannii var. **nicholii** L. Benson. GOLDEN HEDGEHOG.

Echinocereus enneacanthus var. **dubius** (Engelmann) L. Benson.

Echinocereus enneacanthus Engelmann var. **enneacanthus**. WARTY HEDGEHOG; STRAWBERRY CACTUS; PITAHAYA.

Echinocereus enneacanthus var. **stramineus** (Engelmann) L. Benson. SPINE-MOUND; STRAWBERRY CACTUS.

Echinocereus fasciculatus var. **bonkerae** (Thornber & Bonker) L. Benson. SHORT-SPINED STRAWBERRY CACTUS.

Echinocereus fasciculatus var. **boyce-thompsonii** (Orcutt) L. Benson. BOYCE THOMPSON'S HEDGEHOG.

Echinocereus fasciculatus (Engelmann) L. Benson var. **fasciculatus**.

Echinocereus fendleri (Engelmann) Rümpler. PURPLE HEDGEHOG; SITTING CACTUS; FENDLER'S PITAYA.

Echinocereus ferreirianus Gates.

Echinocereus fobeatus Oehme.

Echinocereus grandis Britton & Rose.

Echinocereus huitcholensis (Weber) Gurke.

Echinocereus knippelianus Liebner.

Echinocereus lauui Frank.

Echinocereus ledingii Peebles.

Echinocereus lindsayi

Echinocereus lloydii Britton & Rose.

Echinocereus longisetus (Engelmann) Rümpler.

Echinocereus maritimus (Jones) K. Schumann.

Echinocereus merkeri Hildmann.

Echinocereus morrisonii Riha.

Echinocereus nivosus Glass & Foster.

Echinocereus pacificus (Engelmann) Britton & Rose.

Echinocereus pectinatus var. **neomexicanus** (Coulter) L. Benson. NEW MEXICO RAINBOW HEDGEHOG.

Echinocereus pectinatus (Scheidweiler) Englemann var. **pectinatus**. NEW MEXICO RAINBOW HEDGEHOG.

Echinocereus pectinatus (Scheidweiler) Englemann var.

- pectinatus.** COMB HEDGEHOG.
Echinocereus pectinatus var. **rigidissimus** (Engelmann) Rümpler. ARIZONA RAINBOW HEDGEHOG; CABEZA DEL VIEJO.
Echinocereus pectinatus var. **rubispinus** A. Lau. Echinocereus pensilis — see Morangaya pensilis.
Echinocereus pentalophus (DeCandolle) Rümpler. ALICOCHE; LADY-FINGER CACTUS.
Echinocereus pulchellus (Martius) K. Schumann.
Echinocereus reichenbachii (Terscheck) Haage Jr. LACE CACTUS.
Echinocereus salm-dyckianus Scheer.
Echinocereus scheeri (Salm-Dyck) Rümpler.
Echinocereus schwarzii Lau.
Echinocereus subinermis Salm-Dyck. var. **luteus** (Britton & Rose) Backeberg.
Echinocereus tayopensis Marsh.
Echinocereus triglochidiatus var. **arizonicus** (Rose) L. Benson. GIANT CLARET CUP.
Echinocereus triglochidiatus var. **gonacanthus** (Engelmann & Bigelow) L. Benson.
Echinocereus triglochidiatus var. **gurneyii** L. Benson.
Echinocereus triglochidiatus Engelmann var. **triglochidiatus**. CLARET CUP CACTUS; KING'S CUP CACTUS.
Echinocereus tulensis Bravo.
Echinocereus viereckii Werdermann.
Echinocereus viridiflorus Engelmann. GREEN-FLOWERED HEDGEHOG: NYLON CACTUS.
Echinocereus websterianus Lindsay.
Echinocereus weinbergii Weingart. ELEPHANT HEDGEHOG.
Echinofossulocactus
Echinofossulocactus lloydii Britton & Rose. BRAIN CACTUS.
Echinofossulocactus violaciflorus (Quehl.) Britton & Rose.
Echinofossulocactus zacatecasensis Britton & Rose.
Echinomastus
Echinomastus erectocentrus — see Neolloydia erectocentrus.
Echinomastus johnsonii — see Neolloydia johnsonii.
Echinomastus macdowellii — see Thelocactus macdowellii.
Echinomastus unguispinus (Engelmann) Britton & Rose var. **lauii** (Frank & Zecher) Glass & Foster.
Echinopsis
Echinopsis calochlora K. Schumann. SHINING BALL CACTUS.
Echinopsis eyriesii (Turpin) Zuccarini.
Echinopsis hammerschmidii Cardenas.
Echinopsis hybrid '**Apricot Delight**'
Echinopsis hybrid '**Atomic**'
Echinopsis hybrid '**Best Orange**'
Echinopsis hybrid '**Betelgeuse**'
Echinopsis hybrid '**Black Comet**'
Echinopsis hybrid '**China Doll**'
Echinopsis hybrid '**Choice**'
Echinopsis hybrid '**Dark Eyes**'
Echinopsis hybrid '**Delight**'
Echinopsis hybrid '**Forty Niner**'
Echinopsis hybrid '**Gate's Yellow**'
Echinopsis hybrid '**Goldie**'
Echinopsis hybrid '**Hermann's Cameo**'
Echinopsis hybrid '**Kate Walker**'
Echinopsis hybrid '**Los Angeles**'
Echinopsis hybrid '**Mars**'
Echinopsis hybrid '**Mary Patricia**'
Echinopsis hybrid '**Moonbeam**'
Echinopsis hybrid '**Morgenzuber**'
Echinopsis hybrid '**Morning Glory**'
Echinopsis hybrid '**Orange Glory**'
Echinopsis hybrid '**Orange Paramount**'
Echinopsis hybrid '**Pacific Sunset**'
Echinopsis hybrid '**Peach Monarch**'
Echinopsis hybrid '**Peppermint**'
Echinopsis hybrid '**Red Meteor**'
Echinopsis hybrid '**Salmon Queen**'
Echinopsis hybrid '**Scarlet O'Hara**'
Echinopsis hybrid '**Stars and Stripes**'
Echinopsis hybrid '**Sun King**'
Echinopsis hybrid '**Tangerine**'
Echinopsis hybrid '**Terra Cotta**'
Echinopsis hybrid '**Tropic Sunset**'
Echinopsis hybrid '**Watermelon**'
Echinopsis hybrid '**White Knight**'
Echinopsis leucantha (Gillies) Walp. ROSE EASTER LILY CACTUS.
Echinopsis mamillosa Gurke.
Echinopsis multiplex (Pfeiffer) Zuccarini. EASTER LILY CACTUS.
Echinopsis obrepanda (Salm-Dyck) K. Schumann. VIOLET EASTER LILY CACTUS.
Echinopsis oxygona (Link) Zuccarini. RED EASTER LILY CACTUS.
Echinopsis parryi
Echinopsis pereziensis Cardenas.
Echinopsis rhodotricha K. Schumann.
Echinopsis semidenudata Cardenas.
Echinopsis tucumanensis Backeberg.
Echinopsis turbinata (Pfeiffer) Zuccarini.
Echinopsis uruguensis
Encephalocarpus
Encephalocarpus strobiliformis (Werdermann) Berger.
Epiphyllum
Epiphyllum oxypetalum (DeCandolle) Haworth. QUEEN OF THE NIGHT; REINA DE LA NOCHE; FLOR DE BAILE.
Epiphyllum hybrids — ORCHID CACTI
Eriocactus
Eriocactus leninghausii — see Notocactus leninghausii.
Eriocactus magnificus — see Notocactus magnificus.
Eriocactus nigrispinus — see Notocactus nigrispinus.
Eriocactus schumannianus — see Notocactus schumannianus.
Eriocactus warasii — see Notocactus warasii.
Eriocereus
Eriocereus guelichii (Spegazzini) Berger.
Eriocereus jusbertii (Rebut) Riccobono.
Eriocereus martinii (Labouret) Riccobono.
Escobaria
Escobaria runyonii — see Coryphantha macromeris var. runyonii.
Escontria
Escontria chiotilla (Weber) Rose. QUIOTILLA; JIOTILLA; CHIOTILLA; TUNA.
Epsostoa
Epsostoa hylaea Ritter.
Epsostoa lanata (H.B.K.) Britton & Rose. PERUVIAN OLD MAN; COTTON BALL; SOROCO; PISCOL COLORADO.
Epsostoa laticornua Rauh & Backeberg.
Epsostoa melanostele (Vaupel) Borg. SNOW POLE.
Epsostoa mirabilis Ritter.
Epsostoa nana Ritter.
Epsostoa ritteri Buining.
Eulychnia
Eulychnia acida Philbrick. TUNA DE COBADO.
Eulychnia aricensis Ritter.
Eulychnia taltalensis Ritter.
Facheiroa
Facheiroa ulei (Gurke) Werdermann.
Ferocactus
Ferocactus acanthodes Lemaire. Britton & Rose var. **acanthodes**. CALIFORNIA BARREL; COMPASS BARREL.
Ferocactus acanthodes var. **eastwoodiae** L. Benson. GOLDEN COMPASS BARREL.
Ferocactus acanthodes var. **lecontei** (Engelmann) Lindsay.
Ferocactus alamosanus Britton & Rose.
Ferocactus chrysacanthus (Orcutt) Britton & Rose. CEDROS ISLAND BARREL.

Ferocactus covillei (Britton & Rose) Berger. TRAVELER'S FRIEND; COVILLE'S BARREL.

Ferocactus diguetii (Weber) Britton & Rose.

Ferocactus fordii (Orcutt) Britton & Rose.

Ferocactus gatesii Lindsay.

Ferocactus glaucescens (DeCandolle) Britton & Rose. BLUE BARREL.

Ferocactus gracilis var. **coloratus** (Gates) Lindsay.

Ferocactus gracilis Gates var. **gracilis**. FIRE BARREL.

Ferocactus haematacanthus Borg.

Ferocactus hamatacanthus TEXAS LONGHORN; BISNAGA ESPINOSA; BISNAGA GANCHUDA; BISNAGA LIMILLA; BISNAGA DE TUNA; BISNAGA CASTILLONA.

Ferocactus histrix (DeCandolle) Lindsay.

Ferocactus latispinus (Haworth) Britton & Rose. CROWS CLAWS.

Ferocactus macrodiscus (Martius) Britton & Rose. PLATTER BARREL.

Ferocactus peninsulae (Weber) Britton & Rose. BAJA BARREL.

Ferocactus pottsii (Salm-Dyck) Backeberg.

Ferocactus rectispinus (Engelmann) Britton & Rose.

Ferocactus recurvus var. **greenwoodiae** Glass.

Ferocactus recurvus (Miller) Berger var. **recurvus**.

Ferocactus robustus (Link & Otto) Britton & Rose.

Ferocactus schwarzi Lindsay.

Ferocactus setispinus TWISTED-RIB CACTUS; STRAWBERRY CACTUS.

Ferocactus stainesii (Hooker) Britton & Rose.

Ferocactus townsendianus Britton & Rose.

Ferocactus viridescens (Torrey & Gray) Britton & Rose.

Ferocactus wislizenii (Engelmann) Britton & Rose. FISHHOOK BARREL; SOUTHWESTERN BARREL; CANDY BARREL; VISNAGA; BISNAGA.

Frailea

Frailea pumila (Lemaire) Britton & Rose.

Grusonia

Grusonia bradtiana — see Opuntia bradtiana.

Grusonia hamiltonii — see Opuntia hamiltonii.

Grusonia rosarica — see Opuntia rosarica.

Gymnocalycium

Gymnocalycium horripilus (Lemaire) Backeberg.

Gymnocalycium valdezianus — see Turbinicarpus valdezianus.

Gymnocalycium

Gymnocalycium anisitsii [K. Schumann] Britton & Rose.

Gymnocalycium artigas Hert.

Gymnocalycium baldianum (Spegazzini) Hoss. RED CHIN CACTUS.

Gymnocalycium bicolor Schutz.

Gymnocalycium bruchii (Spegazzini) Hoss. WHITE LACE CACTUS.

Gymnocalycium capillaense (Schickendantz) Backeberg.

Gymnocalycium cardenasianum Ritter.

Gymnocalycium chiquitanum Cardenas.

Gymnocalycium chubutense (Spegazzini) Spegazzini.

Gymnocalycium damsii [K. Schumann] Britton & Rose. DAM'S CHIN CACTUS.

Gymnocalycium denudatum (Link & Otto) Pfeiff. SPIDER CACTUS.

Gymnocalycium eurypleurum Ritter.

Gymnocalycium eytianum — see Gymnocalycium pflanzii var. eytianum.

Gymnocalycium fleischerianum Backeberg.

Gymnocalycium gibbosum (Haworth) Pfeiffer.

Gymnocalycium glaucum Ritter.

Gymnocalycium griseo-pallidum Backeberg.

Gymnocalycium hamatum Ritter.

Gymnocalycium horridispinum Frank.

Gymnocalycium hybopleurum [K. Schumann] Backeberg.

Gymnocalycium hyptiacanthum (Lemaire) Britton & Rose.

Gymnocalycium leeanum (Hooker) Britton & Rose.

Gymnocalycium mihanovichii (Fric & Gürke) Britton &



Arboretum propagator and cactus expert Fritz Berger in June, 1931.

Rose. ROSE PLAID CACTUS.

Gymnocalycium monvillei (Lemaire) Britton & Rose.

Gymnocalycium mostii (Gurke) Britton & Rose.

Gymnocalycium multiflorum (Hooker) Britton & Rose.

Gymnocalycium nigriareolatum Backeberg.

Gymnocalycium oenanthemum Backeberg.

Gymnocalycium pflanzii var. **eytianum** (Cardenas) Donald.

Gymnocalycium pflanzii (Vaupel) Werdermann var. **zeggarae** (Cardenas) Donald.

Gymnocalycium quehlianum (Haage Jr.) Berger.

Gymnocalycium ragonesii Castaneda.

Gymnocalycium saglione (Cels) Britton & Rose. GIANT CHIN CACTUS.

Gymnocalycium schickendantzii Weber var. **delaetti** [K. Schumann] Backeberg. WHITE CHIN CACTUS.

Gymnocalycium Schroederianum Osten.

Gymnocalycium sigelianum (Schickendantz) Berger.

Gymnocalycium spegazzinii Britton & Rose.

Gymnocalycium tilcarensis — see Brachycalycium tilcarensis.

Gymnocalycium tillianum Rausch.

Gymnocalycium uebelmannianum Rausch.

Gymnocalycium uruguayense (Arechavaleta) Britton & Rose.

Gymnocalycium valnicekianum Jajo.

Gymnocalycium vatteri Buining.

Gymnocalycium zegaruae — see *Gymnocalycium pflanzii* var. *zegaruae*.

Haageocereus

Haageocereus akersii Backeberg.

Haageocereus chrysacanthus (Akers) Backeberg. GOLDEN FOXTAIL.

Hamatocactus

Hamatocactus hamatacanthus — see *Ferocactus hamatacanthus*.

Hamatocactus setispinus — see *Ferocactus setispinus*.

Harrisia

Harrisia earlei Britton & Rose.

Harrisia fragrans Small.

Harrisia portoricensis Britton.

Harrisia simpsonii Small.

Hatiora

Hatiora salicornioides (Haworth) Britton & Rose. DRUNKARD'S DREAM.

Helia bravo

**Helia
bravo chende** (Gosselin) Backeberg. CHENDE, CHENTE, CHINOA.

Hilde wintera

Hildewintera aureispina — see *Borzicactus aureispinus*.

Homalocephala

Homalocephala texensis (Hopffer) Britton & Rose. HORSE CRIPLER; DEVIL'S HEAD; MANCO CABALLO; VIZNAGA.

Hylocereus

Hylocereus undatus (Haworth) Britton & Rose. QUEEN OF THE NIGHT; PITAHAYA OREJONA; JUNCO TAPATIO; CHACAM, ZACAMB; CHAK-WOB; REINA DE LA NOCHE.

Isolato cereus

Isolatocereus dumortieri — see *Stenocereus dumortieri*.

Lemaireo cereus

Lemaireocereus beneckei — see *Stenocereus beneckei*.

Lemaireocereus chende — see *Helia
bravo chende*.

Lemaireocereus dumortieri — see *Stenocereus dumortieri*.

Lemaireocereus griseus — see *Stenocereus griseus*.

Lemaireocereus holianus — see *Pachycereus holianus*.

Lemaireocereus marginatus — see *Stenocereus marginatus*.

Lemaireocereus montanus — see *Stenocereus montanus*.

Lemaireocereus queretaroensis — see *Stenocereus queretaroensis*.

Lemaireocereus stellatus — see *Stenocereus stellatus*.

Leptocereus

Leptocereus quadricostatus (Bello) Britton & Rose. SEBUCAN. Leuchtenbergia

Leuchtenbergia principis Hooker. PRISM CACTUS; AGAVE CACTUS.

Lobivia

Lobivia aurea (Britton & Rose) Backeberg. GOLDEN COB CACTUS. **Lobivia aurea** var. **leucomalla** GOLDEN LILY CACTUS.

Lobivia backebergii (Werdermann) Backeberg. CARMINE COB CACTUS.

Lobivia chrysantha (Werdermann) Backeberg. var. **jajoiana** (Backeberg) Rausch.

Lobivia ferox Britton & Rose.

Lobivia formosa (Pfeiffer) Dodds. ssp. **bruchii** (Britton & Rose) Rausch.

Lobivia formosa var. **kieslingii** Rausch.

Lobivia huascha (Weber) Marsh.

Lobivia huascha var. **crassicaulis** (Backeberg) Rausch.

Lobivia huascha var. **grandiflora** (Britton & Rose) Rausch.

Lobivia hybrid 'Firechief'

Lobivia hybrid 'Little Red Riding Hood'

Lobivia lateritia (Gurke) Britton & Rose.

Lobivia pampana Britton & Rose.

Lobivia pentlandii (Hooker) Britton & Rose.

Lobivia pentlandii var. **larae** (Cardenas) Rausch.

Lobivia silvestrii (Spegazzini) Rowley. PEANUT CACTUS.

Lobivia tiegeliana Wessn.

Lophocereus

Lophocereus gatesii M. E. Jones.

Lophocereus schottii var. **australis** (K. Brandegee) Borg.

Lophocereus schottii fma. **mieckleyanus** Lindsay.

Lophocereus schottii fma. **monstrosus** Lindsay. TOTEM POLE.

Lophocereus schottii (Engelmann) Britton & Rose var. **schottii**. ARIZONA OLD MAN; SENITA; SINITA; MOCHI; GARAMBUYO; TUNA BARBONA; VIEJO; SINA; CINA.

Loxanthocereus

Loxanthocereus nanus (Akers) Backeberg.

Machaerocereus

Machaerocereus eruca — see *Stenocereus eruca*.

Machaerocereus gummosus — see *Stenocereus gummosus*.

Malacocarpus

Malacocarpus tephracanthus — see **Notocactus tephracanthus**.

Mammillaria

Mammillaria albicans Berger.

Mammillaria albicoma Boedeker.

Mammillaria albilanata Backeberg.

Mammillaria angelensis Craig.

Mammillaria armillata K. Brandegee.

Mammillaria aureiceps Lemaire.

Mammillaria aureilanata Backeberg. GOLDEN FLEECE.

Mammillaria aurihamata Boedeker. YELLOW-HOOK CUSHION.

Mammillaria backebergiana Buchenau.

Mammillaria baumii Boedeker. BUTTERCUP PINCUSHION.

Mammillaria baxteriana (Gates) Boedeker.

Mammillaria beiselii Diers.

Mammillaria bella Backeberg.

Mammillaria blossfeldiana Boedeker.

Mammillaria bocasana Poselger. POWDER PUFF.

Mammillaria bocensis Craig.

Mammillaria boolii Lindsay.

Mammillaria bombycinia Quehl. SILKEN PINCUSHION.

Mammillaria brandegeei (Coulter) Bradegee.

Mammillaria camptotricha Dams. BIRD'S NEST.

Mammillaria canelensis Craig.

Mammillaria candida Scheidweiler. SNOWBALL.

Mammillaria carmenae Castaneda.

Mammillaria carneae Zuccarini.

Mammillaria carrettii Rebut.

Mammillaria cerralboa (Britton & Rose) Orcutt.

Mammillaria chionocephala J.A. Purpus.

Mammillaria collinsii (Britton & Rose) Orcutt.

Mammillaria columbiana Salm-Dyck. GOLDEN PINCUSHION; SOUTH AMERICAN PINCUSHION.

Mammillaria compressa DeCandolle. MOTHER-OF-HUNDREDS.

Mammillaria crinita DeCandolle.

Mammillaria crucigera Martius.

Mammillaria decipiens Scheidweiler.

Mammillaria deherdtiana Farwig var. **dodsonii** (Bravo) Glass & Foster.

Mammillaria densispina (Coulter) Vaupel.

Mammillaria dioica K. Brandegee.

Mammillaria discolor Haworth.

Mammillaria dixanthocentron Backeberg.

Mammillaria duoformis Craig & Dawson.

Mammillaria eichlamii Quehl.

Mammillaria elongata DeCandolle. GOLDEN STARS; GOLD LACE CACTUS; LADY'S FINGER.

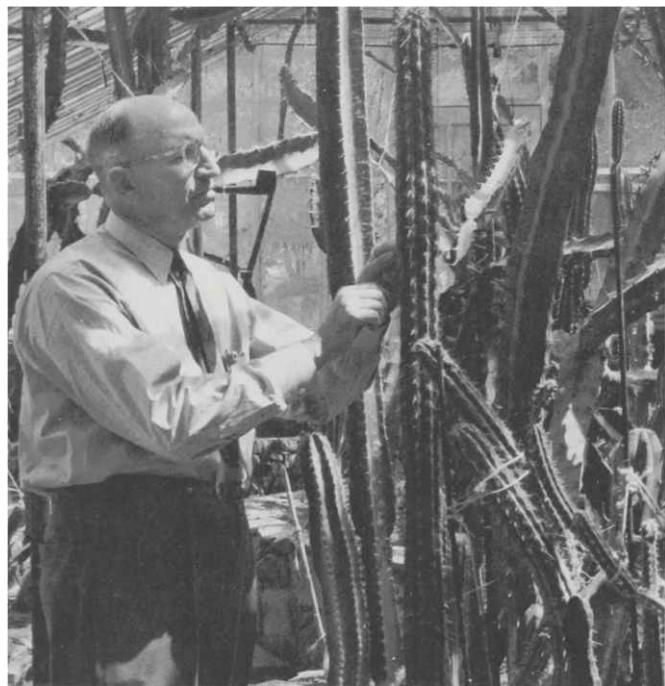
Mammillaria eriacantha Link & Otto.

Mammillaria erythrosperma Boedeker.

Mammillaria estebanensis Lindsay.

Mammillaria evermanniana (Britton & Rose) Orcutt.

Mammillaria fasciculata Engelmann.
Mammillaria fittkauii Glass & Foster.
Mammillaria fraileana (Britton & Rose) Boedeker.
Mammillaria geminispina Haworth. WHITEY.
Mammillaria glassii Foster.
Mammillaria glochidiata Martius. PINK CROWN.
Mammillaria gracilis Pfeiffer. NEEDLE-FINGERS.
Mammillaria grusonii Runge.
Mammillaria guelzowiana Werdermann.
Mammillaria guerreronis [H. Bravo] Backeberg.
Mammillaria haageana Pfeiffer. ROSY CROWN.
Mammillaria hahniana Werdermann. OLD LADY CACTUS.
Mammillaria hertrichiana Craig.
Mammillaria heyderi Muhlenpfordt var. **hemisphaerica** Engelmann. TEXAS PINCUSHION; LITTLE CHILIS; BISNAGITA DE CHILITOS.
Mammillaria heyderi var. **macdougallii** (Rose) L. Benson. CREAM CACTUS.
Mammillaria humboldtii Ehrenberg.
Mammillaria johnstonii (Britton & Rose) Orcutt.
Mammillaria karwinskiana Martius.
Mammillaria kewensis Salm-Dyck.
Mammillaria klissingiana Boedeker.
Mammillaria lenta Brandegee.
Mammillaria lindsayi Craig.
Mammillaria longiflora (Britton & Rose) Berger.
Mammillaria longimamma DeCandolle. LONG MAMMA.
Mammillaria magnifica Buchenau.
Mammillaria magnimamma Haworth. MEXICAN PINCUSHION.
Mammillaria mainae K. Brandegee. HORNED TOAD CACTUS.
Mammillaria mammillaris (Linnaeus) Karsten.
Mammillaria marksiana Krainz.
Mammillaria mathildae Kraehenbuehl & Krainz.
Mammillaria matudae H. Bravo.
Mammillaria mazatlanensis (Rebut) K. Schumann & Gurke.
Mammillaria melanocentra Poselger.
Mammillaria meyranii H. Bravo.
Mammillaria microcarpa Engelmann. FISHHOOK PINCUSHION.
Mammillaria microthele Muhlenpfordt.
Mammillaria miegeana W. H. Earle.
Mammillaria mieheana Tiegel.
Mammillaria mollendorfiana Shurly.
Mammillaria muehlenpfordtii Forst. SHOWY PINCUSHION; BELLY-BUTTON CACTUS.
Mammillaria multidigitata Lindsay.
Mammillaria mystax Martius. BIRTHDAY CAKE CACTUS.
Mammillaria nana Backeberg.
Mammillaria nejapensis Craig & Dawson. SILVER ARROWS.
Mammillaria nivosa Link. SNOWY CACTUS; WOOLLY NIPPLE-CACTUS.
Mammillaria obconella Scheidweiler. RUBY DUMPLING.
Mammillaria occidentalis (Britton & Rose) Boedeker.
Mammillaria oteroii Glass & Foster.
Mammillaria parkinsonii Ehrenberg. OWL'S EYES.
Mammillaria pennispinosa Krainz.
Mammillaria petrophila Brandegee.
Mammillaria petterssonii Hildmann.
Mammillaria picta Meinhause.
Mammillaria pitcayensis H. Bravo.
Mammillaria plumosa Weber. FEATHER CACTUS.
Mammillaria polythele Martius.
Mammillaria pondii Greene.
Mammillaria poselgeri Hildmann.
Mammillaria pottsii Scheer.
Mammillaria pringlei (Coulter) Brandegee.
Mammillaria prolifera (Miller) Haworth. GRAPE CACTUS.
Mammillaria pygmaea (Britton & Rose) Berger.
Mammillaria rekoi (Britton & Rose) Vaupel.
Mammillaria rhodantha Link & Otto. RAINBOW PINCUSHION.



Arboretum scientist Fred Gibson working in the cactus collection in the decade of the 1950's.

Mammillaria saboae Glass.
Mammillaria sartorii J. A. Purpus.
Mammillaria schumannii Hildmann.
Mammillaria scrippsiiana (Britton & Rose) Orcutt.
Mammillaria sempervivi DeCandolle. STRAWBERRY CACTUS.
Mammillaria setispina Engelmann.
Mammillaria schiedeana Ehrenberg.
Mammillaria sheldonii (Britton & Rose) Boedeker.
Mammillaria solisioides Backeberg.
Mammillaria sphaerica Dietrich. BUTTER PINCUSHION.
Mammillaria spinosissima Lemaire. RED-HEADED IRISHMAN.
Mammillaria standleyi (Britton & Rose) Orcutt.
Mammillaria schwarzi Shurly. POWDER PUFF.
Mammillaria senilis Salm-Dyck.
Mammillaria sonorensis Craig.
Mammillaria sphacelata Martius.
Mammillaria stella-de-tacubaya Heese.
Mammillaria surculosa Boedeker.
Mammillaria swingeli (Britton & Rose) Boedeker.
Mammillaria tayloriorum Glass & Foster.
Mammillaria tetrancistra Engelmann. CALIFORNIA PINCUSHION; CALIFORNIA FISHHOOK CACTUS.
Mammillaria uncinata Zuccarini.
Mammillaria vetula Martius.
Mammillaria viridiflora (Britton & Rose) Boedeker. GREEN-FLOWERED PINCUSHION.
Mammillaria wagneriana Boedeker.
Mammillaria wildii Dietrich. FISHHOOK PINCUSHION.
Mammillaria winteriae Boedeker.
Mammillaria woburnensis Scheer.
Mammillaria wrightii Engelmann.
Mammillaria xaltianguensis Sanchez-Mejorada.
Mammillaria yaquensis Craig.

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Mammillaria yucatanensis (Britton & Rose) Orcutt.
Mammillaria zeilmanniana Boedeker. RUBY CROWN.
Mammillaria zephyranthoides Scheidweiler.

Mammillopsis

Mammillopsis senilis — see Mammillaria senilis.

Marshallocereus

Marshallocereus thurberi — see Stenocereus thurberi.

Matucana

Matucana haynei — see Borzicactus haynei.

Matucana myriacantha — see Borzicactus myriacanthus.

Matucana variabilis — see Borzicactus variabilis.

Matucana weberbaueri — see Borzicactus weberbaueri.

Melocactus

Melocactus azureus Buining & Brederoo. BLUE TURK'S CAP.

Melocactus brasiliensis Frič ex Pazout. CABECA DE FRADE.

Melocactus caesioides Wendl. TURK'S CAP; TURK'S HEAD.

Melocactus canescens Ritter. TURK'S CAP.

Melocactus ernestii Vaupel. TURK'S CAP.

Melocactus macrodiscus Werdermann. TURK'S CAP.

Melocactus matanzanus Werdermann. DWARF TURK'S CAP; MELONES.

Melocactus neryi K. Sch. TURK'S CAP.

Melocactus pachycantha

Melocactus salvadorensis Werdermann. TURK'S CAP.

Melocactus violaceus Pfeiffer. TURK'S CAP.

Micranthocereus

Micranthocereus auri-azureus Buining & Brederoo.

Micranthocereus purpureus — see Austrocephalocereus purpureus.

Mila

Mila pugionifera Rauh & Backeberg.

Mitrocereus

Mitrocereus fulviceps (Weber) Backeberg.

Monvillea

Monvillea sphaerophylla (Weber) Britton & Rose.

Morangaya

Morangaya pensilis (K. Brandegee) Rowley.

Morawetzia

Morawetzia sericata Ritter.

Myrtillocactus

Myrtillocactus cochal (Orcutt) Britton & Rose. DAGGER CACTUS; COCHAL.

Myrtillocactus geometrizans (Martius) Console. BLUE MYRTLE; GARAMBULLA; PADRE NUESTRO.

Neolloydia

Neolloydia erectocentra (Coulter) L. Benson var. **erectocentra**. PURPLE-SPINED VISNAGITA.

Neolloydia grandiflora (Otto) Berger.

Neolloydia johnsonii (Parry) L. Benson. PINK-FLOWERED VISNAGITA.

Neopoteria

Neopoteria bulbocalyx (Werdermann) Donald & Rowley.

Neopoteria chilensis (Hildmann) Britton & Rose.

Neopoteria gerocephala Y. Ito. OLD WOMAN CACTUS.

Neopoteria huascensis (Ritter) Donald & Rowley.

Neopoteria jussieui (Monville) Britton & Rose.

Neopoteria littoralis Ritter.

Neopoteria multicolor Ritter.

Neopoteria napina (Phil.) Backeberg.

Neopoteria napina (Phil.) Backeberg var. **mitis** (Phil.).
Donald & Rowley.

Neopoteria nigriscoparia Backeberg.

Neopoteria paucicostata (Ritter) Donald & Rowley.

Neopoteria subgibbosa (Haworth) Britton & Rose. SOUTH AMERICAN BARREL.

Neoraimondia

Neoraimondia roseiflora (Werdermann & Backeberg) Backeberg.

Normanbokea

Normanbokea pseudopectinata — see Turbinicarpus pseudopectinatus.

Normanbokea valdeziana — see Turbinicarpus valdezianus.

Neobesseyea

Neobesseyea missouriensis — see Coryphantha missouriensis.

Neobinghamia

Neobinghamia climaxantha (Werdermann) Backeberg.

Neobuxbaumia

Neobuxbaumia euphorbioides (Haworth) F. Buxbaum.

Neobuxbaumia mezcalensis (H. Bravo) Backeberg.

Neobuxbaumia polylopha (DeCandolle) Backeberg. AZTEC COLUMN.

Neobuxbaumia scoparia (Poselger) Backeberg.

Neobuxbaumia tetetzo (Weber) Backeberg. TETETZO; TETECHE; CARDON; HIGOS DE TETECHE.

Neocardenasia

Neocardenasia herzogiana Backeberg. RED TORCH.

Neochilenia

Neochilenia hausensis — see Neopoteria huascensis.

Neochilenia mitis — see Neopoteria napina var. mitis.

Neochilenia napina — see Neopoteria napina.

Neochilenia paucicostata — see Neopoteria paucicostata.

Neodawsonia

Neodawsonia apicicephalum (Dawson) Backeberg.

Neoevansia

Neoevansia striata (Brandegee) H. Sanchez-Mejorada. DAHLIA CACTUS; PITAYITA; PITAHITA; SARAMATRACA; JARAMATACA; CARDONCILLO.

Neogomesia

Neogomesia agavoides — see Ariocarpus agavoides.

Notocactus

Notocactus acutus Ritter.

Notocactus allosiphon Marchesi.

Notocactus arachnites Ritter.

Notocactus apricus (Arechavaleta) Berger. BALL CACTUS; SUN CUP.

Notocactus buenekeri (Buining) Buxbaum.

Notocactus buiningii Buxbaum.

Notocactus carambeiensis Buining & Berderoo.

Notocactus claviceps (Ritter) Krainz.

Notocactus concinnus (Monville) Berger. SUN CUPS.

Notocactus corynodes (Otto) Krainz.

Notocactus elegans

Notocactus erinaceus (Haworth) Krainz.

Notocactus floricomus (Arechavaleta) Berger.

Notocactus fuscus Ritter.

Notocactus glaucinus Ritter.

Notocactus graessneri (K. Schumann) Berger.

Notocactus haselbergii (F. Haage) Berger. SCARLET CROWN; SCARLET BALL; WHITE WEB BALL.

Notocactus herteri Werdermann.

Notocactus horstii Ritter.

Notocactus leninghausii (Haage Jr.) Berger. GOLDEN BALL; GOLDFINGER CACTUS.

Notocactus leprosorum (Ritter) Theunissen.

Notocactus linkii (Lehman) Hert.

Notocactus magnificus (Ritter) Krainz.

Notocactus mammulosus (Lemaire) Berger. LEMON CROWN; LEMON BALL.

Notocactus minimus Frič & Krzgr.

Notocactus mueller-melchersii Frič ex Backeberg.

Notocactus mugelianus

Notocactus multicostatus Buining & Brederoo.

Notocactus muricatus (Otto) Berger.

Notocactus nigrispinus (K. Schumann) Buining.

Notocactus orthacanthus (Link & Otto) van Vliet.
Notocactus ottonis (Lehm.) Berger var. **ottonis**. INDIAN HEAD CACTUS.
Notocactus ottonis var. **venclusianus** Schumann.
Notocactus rauschii van Vliet.
Notocactus rutilans Daen. & Krainz. PINK BALL.
Notocactus scopo (Spreng.) Berger. SILVER BALL.
Notocactus selowii (Link & Otto) Theunissen.
Notocactus sessiliflorus (Hooker) Krainz.
Notocactus schlosseri van Vliet.
Notocactus schumannianus (Nicolai) Berger. CITRON BALL.
Notocactus submammulosus (Lemaire) Backeberg. LEMON BALL.
Notocactus succineus Ritter.
Notocactus succineus var. **albispinus**.
Notocactus supertextus
Notocactus tabularis (Cels ex K. Schumann) Berger.
Notocactus tephrocanthus (Link & Otto) Krainz.
Notocactus uebelmannianus Buining.
Notocactus vanvlietii Rausch.
Notocactus warasii (Ritter) Hew. & Donald.
Notocactus werdermannianus Hert.

Nyctocereus

Nyctocereus serpentinus (Lagasca & Rodrigues) Britton & Rose. SNAKE CACTUS; SERPENT CACTUS; JUNCO; JUNCO ESPINOSO.

Obregonia

Obregonia denegrii Frič. ARTICHOKE CACTUS; PEYOTL.

Opuntia

Opuntia acanthocarpa Engelmann & Bigelow. BUCKHORN CHOLLA.
Opuntia aciculata Griffiths. COWBOY'S RED WHISKERS.
Opuntia arbuscula Engelmann. PENCIL CHOLLA; CHOLLA.
Opuntia articulata Otto. PAPER-SPINE CACTUS.
Opuntia basilaris Engelmann & Bigelow var. **basilaris**. BEAVER TAIL.
Opuntia basilaris var. **treleasei** (Coulter) Coulter. BEAVER TAIL.
Opuntia bigelovii Engelmann. TEDDY BEAR CHOLLA; BALL CHOLLA; VELAS DE COYOTE; CHOLLA.
Opuntia bradtiana (Coulter) K. Brandegee. ORGANILLO VIEJO.
Opuntia bravoana Baxter.
Opuntia chaffeyi Britton & Rose. SACASIL.
Opuntia cholla Weber. CHOLLA.
Opuntia clavata Engelmann. CLUB CHOLLA; DAGGER CHOLLA.
Opuntia corrugata Salm-Dyck.
Opuntia dimorpha Forster.
Opuntia echinocarpa Engelmann & Bigelow. SILVER CHOLLA; GOLDEN CHOLLA.
Opuntia echios How.
Opuntia erinacea Engelmann & Bigelow var. **ursina** (Weber) Parish. GRIZZLY BEAR; PORCUPINE CACTUS.
Opuntia ficus-indica (Linnaeus) Miller. INDIAN FIG; NOPAL DE CASTILLA; TUNA MANSA.
Opuntia flexispina (Backeberg)
Opuntia floccosa Salm-Dyck. POLAR BEAR CACTUS.
Opuntia fulgida Engelmann var. **fulgida**. CHAIN-FRUIT CHOLLA; JUMPING CACTUS.
Opuntia fulgida var. **mammillata** Coulter. BOXING GLOVE.
Opuntia galapageia Henslow. GALAPAGOS ISLANDS PRICKLY PEAR.
Opuntia hamiltonii (Gates)
Opuntia humifusa Rafinesque.
Opuntia ignescens Vaupel.
Opuntia imbricata (Haworth) DeCandolle. CANDELABRUM CACTUS; CHAIN-LINK CACTUS; XOCONOSTLE; JOCONOSTLE; CARDENCHE; TASAO; COYONOSTLE; VELA DE COYOTE; ENTRENA; CARDON; ABROJO.
Opuntia inarmata
Opuntia invicta Brandegee. DEVIL'S CLUB.
Opuntia kelvinensis V. & K. Grant.

Opuntia kleiniae DeCandolle. KLEIN CHOLLA; CANDLE CHOLLA.
Opuntia leucotricha DeCandolle. AARON'S BEARD; PANCAKE CACTUS; NOPAL DURAZNILLO; DURAZNILLO BLANCO; NOPAL COLORADO.
Opuntia leptocaulis DeCandolle. DESERT CHRISTMAS CACTUS; ALFILERILLO; CATALINARIA; TASAJILLO.
Opuntia lindheimeri Engelmann var. **lindheimeri**.
Opuntia lindheimeri var. **linguiformis** (Griffiths) L. Benson. COW'S TONGUE; LENGUA DE VACA.
Opuntia littoralis (Engelmann) Cockerell.
Opuntia macrorhiza Engelmann. PLAINS PRICKLY PEAR.
Opuntia megasperma How.
Opuntia microdasys (Lehmann) Pfeiffer. BUNNY EARS; POLKA DOT CACTUS; HOBNAIL CACTUS; ANGEL WINGS; CEGADOR; NOPALILLO CEGADOR.
Opuntia moelleri Berger.
Opuntia molinensis Spegazzini.
Opuntia munzii C. B. Wolf.
Opuntia neochrysantha Bravo.
Opuntia nigrispina Shumann.
Opuntia oricola Philbrick.
Opuntia orurensis Cardenas.
Opuntia paediophila (Ritter) Backeberg.
Opuntia phaeacantha Engelmann var. **discata** (Griffiths) Benson & Walkington. DISCUS CACTUS; TULIP PRICKLY PEAR.
Opuntia phaeacantha var. **major** Engelmann. BROWN-SPINED PRICKLY PEAR.
Opuntia pittieri Britton & Rose.
Opuntia polyacantha Haworth. HUNGER CACTUS; STARVATION CACTUS.
Opuntia prolifera Engelmann. COAST CHOLLA.
Opuntia pubescens Wendland.
Opuntia pycnacantha Engelmann.
Opuntia quimilo Schumann. NEEDLE CACTUS; QUIMILO.
Opuntia ramosissima Englemann. DIAMOND CHOLLA; PENCIL CACTUS; HOLY CROSS CACTUS.
Opuntia robusta Wendland. NOPAL TAPON; BARTOLONA.
Opuntia rosarica Lindsay.
Opuntia rufida Engelmann. BLIND PEAR; CINNAMON BEAR.
Opuntia saxicola How.
Opuntia scheeri Weber.
Opuntia sphaerica Forster. COROTILLA; LEON; LEONCITO.
Opuntia spinosior (Engelmann) Toumey. CANE CHOLLA.
Opuntia stanlyi Engelmann. DEVIL'S CHOLLA; CREEPING CHOLLA; CURSED CHOLLA.
Opuntia streptacantha Lemaire. TUNA CARDONA; NOPAL CARDON; NOPAL HARTON.
Opuntia stricta Haworth var. **dillenii** (Ker-Gawler) L. Benson. PEST PEAR; PAK'AN; YAAXPAKAN.
Opuntia strobiliformis Berger. PINE CONE CACTUS; SPRUCE CONES.
Opuntia subulata (Muhlenpfordt) Engelmann. EVE'S NEEDLE.
Opuntia verschaffeltii Cels in Weber.
Opuntia versicolor Engelmann. STAGHORN CHOLLA.
Opuntia vestita Salm-Dyck. LAMPS-LEGS CACTUS; COTTON POLE.
Opuntia violacea var. **macrocentra** (Engelmann) L. Benson. LONG-SPINED PRICKLY PEAR; PURPLE PRICKLY PEAR.
Opuntia violacea Engelmann var. **violacea**. PURPLE—PAD PRICKLY PEAR.
Opuntia violacea var. **santa-rita** (Griffiths) L. Benson. PURPLE-PAD PRICKLY PEAR; BLUE BLADE; DOLLAR CACTUS.
Opuntia vulgaris var. **variegata** JOSEPH'S COAT.
Opuntia weberi Spegazzini.
Opuntia whipplei Engelmann & Bigelow. WHIPPLE'S CHOLLA; RAT-TAIL CACTUS; STICKER CACTUS; SMALL BITING CACTUS.

Oreocereus

Oreocereus celsianus — see Borzicactus celsianus.
Oreocereus fossulatus - see Borzicactus fossulatus.
Oreocereus trollii — see Borzicactus trollii.

Ortegocactus

Ortegocactus macdougallii Alexander.



Ferocactus acanthodes.



Homalocephala texensis.



Lobivia (yellow form).



Echinocereus triglochidiatus.



Lobivia silvestrii (red form).



Echinopsis hybrid 'Watermelon'.



Lobivia hybrid.



Mammillaria baumii.

Pachgerocereus

X Pachgerocereus orcuttii [hybrid of *Pachycereus pringlei* with *Bergerocactus emoryi*].

Pachycereus

Pachycereus gaumeri — see *Pterocereus gaumeri*.

Pachycereus hollianus [Weber] F. Buxbaum. BABOSO; BAVOSO; ACOMPES.

Pachycereus pecten-aboriginum [Engelmann] Britton & Rose. HAIRBRUSH CACTUS; INDIAN COMB; HECHO; CHIK.

Pachycereus weberi [Coulter] Backeberg. CANDELABRA CACTUS; CARDÓN; CANDELABRO; CHICO; CANDEBOBE.

Pachycereus pringlei [S. Watson] Britton & Rose. MEXICAN GIANT; CARDÓN; CARDÓN PELON; CARDÓN GIGANTE.

Parodia

Parodia aureispina Backeberg. TOM THUMB.

Parodia commutans Ritter.

Parodia echinus Ritter.

Parodia hausteiniana Rausch.

Parodia laui Brandt.

Parodia maassii [Heese] Berger. VERMILLION PARODIA.

Parodia mairanana Cardenas.

Parodia miguillensis Cardenas.

Parodia penicillata Fechs. & v.d. Steeg.

Parodia prolifera

Parodia purpureo-aurea Ritter.

Parodia sanguiniflora Frič ex Backeberg. RED TOM THUMB.

Parodia schwebsiana [Werdermann] Backeberg.

Parodia tarabucina Cardenas.

Parodia uhligiana Backeberg.

Parodia yamparaezi Cardenas.

Pediocactus

Pediocactus papyracanthus — see *Toumeya papyracantha*.

Pelecyphora

Pelecyphora aselliformis Ehrenberg. HATCHET CACTUS; PEOTE; PEYOTILLO.

Peniocereus

Peniocereus fosterianus Cutak.

Peniocereus greggii [Engelmann] Britton & Rose. ARIZONA QUEEN OF THE NIGHT; DEERHORN CACTUS; NIGHT-BLOOMING CEREUS; SWEET POTATO CACTUS; REINA DE LA NOCHE.

Peniocereus marnieranus Backeberg.

Peniocereus mariannus [Gentry] H. Sanchez-Mejorada.

Pereskia

Pereskia grandiflora Haworth. ROSE CACTUS.

Pereskia lynchidiflora DeCandolle. ARBOL DE MATRIMONIO; GUITATCHE; GUICHITACHE.

Pereskiopsis

Pereskiopsis porteri [Brandegee] Britton & Rose. YELLOW ROSE CACTUS; ALCAJES; XOCONOSTLE; ROSA AMARILLA; ALCAHUESAR.

Phillipicereus

Phillipicereus castaneus [Phil.] Backeberg.

Pilocereus

Pilocereus arrabidae Lemaire.

Pilosocereus

Pilosocereus chrysostele [Vaupel] Byles & Rowley.

Pilosocereus alensis [Weber] Byles & Rowley. BILLY GOAT CACTUS; PITAHAYA BARBONA; BARBA DE VIEJA.

Pilosocereus bradei [Backeberg & Voll] Byles & Rowley.

Pilosocereus carolinensis Ritter.

Pilosocereus chrysacanthus [Weber] Byles & Rowley.

Pilosocereus coerulescens Ritter.

Pilosocereus glaucescens [Labouret] Byles & Rowley.

Pilosocereus gounellei [Weber] Byles & Rowley. CHIQUE-CHIQUE.

Pilosocereus leucocephalus [Poselger] Byles & Rowley. WOOLY TORCH.

Pilosocereus magnificus Buining.

Pilosocereus maxonii [Rose] Byles & Rowley. TUNO; CABEZA DEL VIEJO; ORGANO.

Pilosocereus palmeri [Rose] Byles & Rowley. WOOLY TORCH.

Pilosocereus pentaedrophorus [Labouret] Byles & Rowley.

Pilosocereus purpusii [Britton & Rose] Byles & Rowley. VIEJO.

Pilosocereus salvadorensis [Werdermann] Byles & Rowley.

Pseudoespostoa

Pseudoespostoa nana — see *Espostoa nana*.

Pseudopilocereus

Pseudopilocereus azureus Buining & Brederoo.

Pseudopilocereus pachycladus var. **chapensis**

Pseudopilocereus pachycladus var. **pachycladus**

Pseudopilocereus rosea

Pseudopilocereus superfloccosus Buining & Brederoo

Pseudolobivia

Pseudolobivia kermesina — see *Echinopsis mamillosa*.

Pterocactus

Pterocactus tuberosus [Pfeiffer] Britton & Rose.

Pterocereus

Pterocereus gaumeri [Britton & Rose] MacDougall & Miranda.

NEKISIN.

Pygmaeocereus

Pygmaeocereus akersii Johnson.

Pyrrhocactus

Pyrrhocactus bulbocalyx — see *Neopoteria bulbocalyx*.

Quiabentia

Quiabentia chacoensis Backeberg.

Quiabentia pereziensis Backeberg.

Rathbunia

Rathbunia alamosensis — see *Stenocereus alamosensis*.

Rebutia

Rebutia donaldiana Lau & Rowley. ORANGE CROWN.

Rebutia heliosa Rausch var. **condorensis**. SUN CACTUS.

Rebutia krainziana Kesseli.

Rhipsalis

Rhipsalis capilliformis Weber. OLD MAN'S HEAD.

Rhipsalis cassutha Gártner. MISTLETOE CACTUS.

Rhipsalis cereuscula Haworth. CORAL CACTUS; RICE CACTUS.

Rhipsalis lumbrioides [Lemaire] Lemaire.

Rhipsalis paradoxaa Salm-Dyck. CHAIN CACTUS, LINK CACTUS.

Rhipsalis rauhiorum Barthlott.

Rhipsalis rhombea [Salm-Dyck] Pfeiffer. COPPER BRANCH.

Rooksbya

Rooksbya euphorbioides — see *Neobuxbaumia euphorbioides*.

Selenicereus

Selenicereus atropilosus Kimnach.

Selenicereus grandiflorus [Linnaeus] Britton & Rose. NIGHT-BLOOMING CEREUS; REINA DE LA NOCHE.

Selenicereus hamatus [Scheidweiler] Britton & Rose. MOON CACTUS; REINA DE LA NOCHE.

Selenicereus macdonaldiae [Hooker] Britton & Rose. QUEEN OF THE NIGHT.

Selenicereus testudo [Karwinsky ex Zuccarini] F. Buxbaum. PITAHAYA DE TORTUGA.

Selenicereus vagans [K. Brandegee] Britton & Rose.

Seticereus

Seticereus chlorocarpus — see *Borzicactus chlorocarpus*.

Seticereus icosagonus — see *Borzicactus icosagonus*.

Soehrensia

Soehrensia bruchii — see *Lobivia formosa* var. *bruchii*.

Soehrensia formosa — see *Lobivia formosa*.

Stenocereus

Stenocereus alamosensis [Coulter] Gibson & Horak. RAMBLING RANCHERO; NACIDO; SINA; TASAO.

Stenocereus beneckeii [Ehrenberg] Berger & F. Buxbaum. WAXY TORCH; CHALK TORCH.

Stenocereus dumortieri [Scheidweiler] F. Buxbaum. ORGANO;

PITAYO; CANDELABRO.

Stenocereus eruca (T. S. Brandegee) Gibson & Horak. CREEPING DEVIL; CHIRINOLE; CASE DE RATAS.

Stenocereus griseus (Haworth) F. Buxbaum. WAXY TORCH; PITAYO DE MAYO; DAATOE; KADOESI.

Stenocereus gummosus (Engelmann) Gibson & Horak. OCTOPUS CACTUS; PITAHAYA AGRE; PITAHAYA AGRIA.

Stenocereus marginatus Berger & F. Buxbaum. MEXICAN FENCE POST; MEXICAN ORGAN PIPE; ORGANO; CHILAYO.

Stenocereus montanus (Britton & Rose) F. Buxbaum. PITAYA COLORADA.

Stenocereus queretaroensis (Weber) F. Buxbaum. PITAYO DE QUERETARO.

Stenocereus stellatus (Pfeiffer) Riccobono. PITAYO; XOCONOSTLE.

Stenocereus thurberi (Engelmann) F. Buxbaum. ARIZONA ORGAN PIPE; PITAYO DULCE.

Stephanocereus

Stephanocereus leucostele (Gurke) Backeberg.

Stetsonia

Stetsonia coryne (Salm-Dyck) Britton & Rose. NEEDLE CACTUS; TOOTHPICK CACTUS.

Strombocactus

Strombocactus denegrii — see Obregonia denegrii.

Strombocactus disciformis (DeCandolle) Britton & Rose. PELLOTE, PEYOTE.

Strombocactus lophophoroides — see Turbinicarpus lophophoroides.

Strombocactus pseudomacrochele — see Turbinicarpus pseudo-macrochele.

Strombocactus schmiedickeanus — see Turbinicarpus schmiedick-eanus.

Submatucana

Submatucana aurantiacus — see Borzicactus aurantiacus.

Submatucana aureiflorus — see Borzicactus aureiflorus.

Submatucana intertextus — see Borzicactus intertextus.

Submatucana myriacantha — see Borzicactus myriacanthus.

Submatucana paucicostatus — see Borzicactus paucicostatus.

Submatucana ritteri — see Borzicactus ritteri.

Subpilocereus

Subpilocereus repandus (Linnaeus) Backeberg.

Subpilocereus rusellianus (Otto) Backeberg.

Sulcorebutia

Sulcorebutia arenacea (Cardenas) Ritter.

Sulcorebutia kruigeri (Cardenas) Ritter.

Sulcorebutia rauschii Frank.

Sulcorebutia steinbachii (Werdermann) Backeberg.

Tephrocactus

Tephrocactus articulatus — see Opuntia articulata.

Tephrocactus dimorphus — see Opuntia dimorpha.

Tephrocactus flexispinus — see Opuntia flexispina.

Tephrocactus floccosus — see Opuntia floccosa.

Tephrocactus ignescens — see Opuntia ignescens.

Tephrocactus nigrispinus — see Opuntia nigrispina.

Tephrocactus molinensis — see Opuntia molinensis.

Tephrocactus sphaericus — see Opuntia sphaerica.

Tephrocactus strobiliformis — see Opuntia strobiliformis.

Tephrocactus weberi — see Opuntia weberi.

Thelocactus

Thelocactus bicolor (Galeotti) Britton & Rose. GLORY OF TEXAS.

Thelocactus bicolor var. **bolansis** (Runge) Knuth.

Thelocactus conothele var. **aurantiacus** Glass & Foster.

Thelocactus conothele (Reg. & Klein) Knuth var. **conothele**.

Thelocactus hastifer (Werdermann & Boedeker) Knuth.

Thelocactus heterochromus (Weber) Van Oost.

Thelocactus leucacanthus (Zuccarini) Britton & Rose var. **sanchez-majoradai** (J. Meyr.) Backeberg.

Thelocactus mcdowellii (Rebut) Kladiwa & Fittkau.

Thelocactus phymatothelae (Poselger) Britton & Rose.

Thelocactus rinconensis (Poselger) Britton & Rose var. **nidulans** (Quehl.) Glass & Foster.

Thelocactus schwarzi Backeberg.

Thrixanthocereus

Thrixanthocereus ritteri

Thrixanthocereus senilis Ritter.

Toumeya

Toumeya papyracantha (Engelmann) Britton & Rose. GRAMA GRASS CACTUS; PAPER-SPINED CACTUS.

Trichocereus

Trichocereus candicans (Gillies) Britton & Rose.

Trichocereus carmargensis Cardenas.

Trichocereus courantii (K. Schumann) Backeberg.

Trichocereus fulvilanus Ritter.

Trichocereus lamprochlorus (Lemaire) Backeberg.

Trichocereus pachanoi Britton & Rose. SAN PEDRO CACTUS; AGUA COLA; GIGANTO.

Trichocereus pasacana (Weber) Britton & Rose. PASACANA.

Trichocereus santiaguensis (Spegazzini) Backeberg.

Trichocereus schickendantzii (Weber) Britton & Rose.

Trichocereus smrzianus (Backeberg) Backeberg.

Trichocereus spachianus (Lemaire) Riccobono. GOLDEN TORCH.

Trichocereus strigosus (Salm-Dyck) Britton & Rose.

Trichocereus taquimbalensis Cardenas var. **wilkae** Backeberg.

Trichocereus terscheckii (Parmentier) Britton & Rose. CARDÓN GRANDE.

Trichocereus thelegonus (Weber) Britton & Rose.

Trichocereus werdermannianus Backeberg.

Turbinicarpus

Turbinicarpus lophophoroides (Werdermann) F. Buxbaum & Backeberg.

Turbinicarpus pseudomacrochele (Backeberg) F. Buxbaum & Backeberg var. **pseudomacrochele**.

Turbinicarpus pseudopectinatus (Backeberg) Glass & Foster.

Turbinicarpus schmiedickeanus (Boedeker) F. Buxbaum & Backeberg var. **schmiedickeanus**.

Turbinicarpus schmiedickeanus var. **schwarzii** (Shurly) Glass & Foster.

Turbinicarpus valdezianus (Möller) Glass & Foster.

Uebelmannia

Uebelmannia pectinifera Buining.

Weberbauerocereus

Weberbauerocereus horridispinus Rauh & Backeberg.

Weberbauerocereus johnsonii Ritter.

Weberbauerocereus seyboldianus Rauh & Backeberg.

Weberbauerocereus weberbaueri (K. Schumann) Backeberg.

Weberbauerocereus winterianus Ritter.

Weingartia

Weingartia neocummingii Backeberg.

Wigginsia

Wigginsia corynodes — see Notocactus corynodes.

Wigginsia erinaceus — see Notocactus erinaceus.

Wigginsia sessiliflorus — see Notocactus sessiliflorus.

Wigginsia tephracanthus — see Notocactus tephracanthus.

Wilcoxia

Wilcoxia poselgeri (Lemaire) Britton & Rose. DAHLIA CACTUS;

SACASIL.

Wittia

Wittia panamensis Britton & Rose.

Zehntnerella

Zehntnerella squamulosa Britton & Rose.

Zygocactus

Zygocactus truncatus (Haworth) K. Schumann. CHRISTMAS CACTUS; HOLIDAY CACTUS; CRAB CACTUS; RINGENT-FLOWERED CACTUS.