

THE DESERT EDGE: FLORA OF THE GUAYMAS REGION OF SONORA, MEXICO.

PART 1: THE CHECKLIST

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Abstract: A checklist is provided for the vascular plants of the Guaymas region of western Sonora. This region encompasses 532,000 hectares (1,314,600 acres) where the southern Sonoran Desert transitions from subtropical thornscrub. This flora includes 820 native and non-native taxa in 113 families and 471 genera. There are 97 non-natives established in the flora area, 27 of which are grasses. Nineteen taxa are endemic to the flora area.

Resumen: Se proporciona un listado florístico de las plantas vasculares para la región de Guaymas en el occidente de Sonora. Esta región cubre 532,000 hectáreas (1,314,600 acres), donde ocurre la transición del matorral espinoso subtropical hacia la parte sur del Desierto Sonorense. Esta flora incluye 820 taxa nativas y no nativas, distribuidas en 113 familias y 471 géneros. Hay 97 taxa no nativas establecidas en el área de la flora, de las cuales 27 son pastos. Diecinueve taxa son endémicas a la región.



Figure 1. Guaymas region. Flora area is approximately within the dashed red line, from the vicinity of Tastiota to Río Yaqui, coastal ranges and adjacent inland ranges including parts of Sierra Libre and Sierra Bacatete. Also included are Isla San Pedro Nolasco and near-shore islands. Map by Alberto Búrquez-Montijo.

This checklist covers the vascular plants of the Guaymas region of western Sonora, Mexico. The boundaries of our floristic study extend from the vicinity of Tastiota southward to the Río Yaqui and include the Sierra El Aguaje as well as parts of the nearby Sierra Libre and Sierra Bacatete. Also included are Isla San Pedro Nolasco and small islands in Guaymas Bay and near San Carlos (Figure 1). This is the desert edge, the southern limit of the Sonoran Desert in mainland Mexico and the northern coastal limit of subtropical thornscrub—the most arid expression of the tropical deciduous forest. The terrain is complex and encompasses coastal areas with mangroves, desert and thornscrub plains, bajadas, and rugged mountains with riparian canyons (Felger et al. 2016). Shreve (1951) designated the vegetation of the region as part of the Sonoran segment of the Gulf Coast subdivision of the Sonoran Desert.

This flora includes 820 native and non-native taxa (species, subspecies, varieties, and hybrids) in 113 families and 471 genera. Non-natives established and reproducing in the flora area total 97 taxa (12 percent of the flora), 27 of which are grasses (Poaceae). An additional 24 non-natives are not established as reproducing populations. The most diverse families are grasses (Poaceae, 92 taxa), composites (Asteraceae, 82), legumes (Fabaceae, 72), euphorbs (Euphorbiaceae, 55), mallows (Malvaceae, 42), and cacti (Cactaceae, 34). The largest genera are *Euphorbia* (27 species), *Ipomoea* (15), and *Cyperus* (14). Taxa based on specimens from the flora area total 154. Nineteen taxa are endemic to the flora area (Table 1); four of these are known only from Isla San Pedro Nolasco: *Coreocarpus sanpedroensis*, *Echinocereus websterianus*, *Mammillaria multidigitata*, and *Mammillaria tayloriorum*.

Edward Palmer made the first major collections from the region, collecting hundreds of specimens on multiple trips beginning in 1867 (McVaugh 1956; Watson 1889). Over the ensuing century and a half, thousands of additional vouchers were acquired and deposited at the University of Arizona Herbarium (ARIZ), the Herbario de la Universidad de Sonora (USON), and other herbaria, including ASU, CAS, DES, GH, HCIB, MEXU, MO, NMC, RSA, SD, TEX, UC, UCR, and US. Many of these records appear in SEINet (2017). Despite this extensive botanical history, there

Table 1. Taxa endemic to the Guaymas region

| | |
|----------------------------------|--------------------------------|
| APOCYNACEAE | <i>Mammillaria tayloriorum</i> |
| <i>Mandevilla nacafulensis</i> | CONVOLVULACEAE |
| ASTERACEAE | <i>Ipomoea seaania</i> |
| <i>Coreocarpus sanpedroensis</i> | EUPHORBIACEAE |
| <i>Coreocarpus sonoranus</i> | <i>Euphorbia pediculifera</i> |
| var. <i>libranus</i> | var. <i>linearifolia</i> |
| <i>Hofmeisteria crassifolia</i> | MALVACEAE |
| <i>Verbesina felgeri</i> | <i>Briquetia sonorae</i> |
| CACTACEAE | <i>Gossypium turneri</i> |
| <i>Echinocereus llanuraensis</i> | NYCTAGINACEAE |
| <i>Echinocereus websterianus</i> | <i>Boerhavia alata</i> |
| <i>Grusonia reflexispina</i> | RUBIACEAE |
| <i>Mammillaria boolii</i> | <i>Stenaria sanchezii</i> |
| <i>Mammillaria johnstonii</i> | SOLANACEAE |
| <i>Mammillaria multidigitata</i> | <i>Physalis purpurea</i> |

exists no comprehensive floristic treatment of the greater Guaymas region. The unique flora of Isla San Pedro Nolasco comprises 59 species (Felger et al. 2011, 2012). A revised flora of Cañón del Nacapule in the Sierra El Aguaje includes 310 taxa, encompassing 38% of the regional flora (Felger et al. 2017). An in-depth flora of the region, including identification keys and species descriptions, is in preparation.

In the following checklist, family designations follow APG III & IV (Angiosperm Phylogeny Group 2009, 2016) and the Angiosperm Phylogeny Website (Stevens 2012). Selected synonyms are given in brackets. Non-native taxa established as reproducing populations in the flora area are indicated with an asterisk (*) and non-natives not established as reproducing populations are marked with two asterisks (**). Taxa described from the flora area (those with the type locality in the flora area) are indicated with (I) following the scientific name.

LYCOPHYTES

SELAGINELLACEAE

Selaginella rupincola Underwood

PTERIDOPHYTES

MARSILEACEAE

Marsilea vestita Hooker & Greville

PSILOTACEAE

Psilotum nudum (Linnaeus) Palisot de Beauvois

PTERIDACEAE

Adiantum capillus-veneris Linnaeus

Adiantum tricholepis Fée

Astrolepis sinuata (Lagasca ex Swartz) D.M. Benham subsp. *sinuata* [*Notbalaena sinuata* (Lagasca ex Swartz) Kaulfuss]

Cheilanthes lozanoi (Maxon) R.M. Tryon & A.F. Tryon var. *seemannii* (Hooker) Mickel & Beitel

Myriopteris lindheimeri (Hooker) J. Small [*Cheilanthes lindheimeri* Hooker]

Myriopteris pringlei (Davenport) Grusz & Windham subsp. *pringlei* [*Cheilanthes pringlei* Davenport]

Notholaena lemmonii D.C. Eaton var. *lemmonii*

Notholaena standleyi Maxon [*Cheilanthes standleyi* (Maxon) Mickel]

THELYPTERIDACEAE

Thelypteris puberula (Baker) C.V. Morton var. *sonorensis* A.R. Smith

EARLY ANGIOSPERMS

MAGNOLIIDS

ARISTOLOCHIACEAE

Aristolochia watsonii Wootton & Standley

SAURURACEAE

Anemopsis californica (Nuttall) Hooker & Arnott

NYMPHAEALES

NYMPHAEACEAE

Nymphaea elegans Hooker

EUDICOTS

ACANTHACEAE

Anisacanthus thurberi (Torrey) A. Gray

Aphanosperma sinaloensis (Leonard & Gentry) T.F. Daniel
[*Carlownrightia sinaloensis* Leonard & Gentry]

Avicennia germinans (Linnaeus) Linnaeus

Carlownrightia arizonica A. Gray

Carlownrightia pectinata Brandegee

Dicliptera resupinata (Vahl) de Jussieu

Elytraria imbricata (Vahl) Persoon

Henrya insularis Nees ex Bentham

Holographis virgata (Harvey ex Bentham & Hooker) T.F.

Daniel subsp. *virgata* [*Berginia virgata* Harvey ex Bentham & Hooker]

Justicia californica (Bentham) D.N. Gibson

Justicia candicans (Nees) L.D. Benson [*Jacobinia ovata* A. Gray var. *subglabrata* S. Watson (I)]

Justicia longii Hilsenbeck [*Siphonoglossa longiflora* (Torrey) A. Gray]

Justicia sonoreae Wasshausen

Ruellia californica (Rose) I.M. Johnston subsp. *californica*

Ruellia ciliatiflora Hooker [*R. nudiflora* (Engelmann & A. Gray) Urban. *R. nudiflora* var. *glabrata* Leonard]

Ruellia intermedia Leonard

Ruellia leucantha Brandegee subsp. *postinsularis* (Gentry) T.F. Daniel

Tetramerium nervosum Nees [*Dianthera sonoreae* S. Watson (I). *Tetramerium hispidum* Nees]

ACHATOCARPACEAE

Phaulothamnus spinescens A. Gray

AIZOACEAE

**Mesembryanthemum crystallinum* Linnaeus

Sesuvium portulacastrum (Linnaeus) Linnaeus

Sesuvium verrucosum Rafinesque

Trianthema portulacastrum Linnaeus

AMARANTHACEAE (includes Chenopodiaceae)

Achyranthes watsonii Standley

Allenrolfea occidentalis (S. Watson) Kuntze

Amaranthus fimbriatus (Torrey) Bentham ex S. Watson

Amaranthus obcordatus (A. Gray) Standley

Amaranthus palmeri S. Watson

Amaranthus watsonii Standley (I)

Arthrocnemum subterminale (Parish) Standley [*Salicornia subterminalis* Parish]

Atriplex barclayana (Bentham) D. Dietrich

Atriplex canescens (Pursh) Nuttall var. *canescens*

Atriplex elegans (Moquin) D. Dietrich [*A. fasciculata* S. Watson.
A. elegans subsp. *fasciculata* (S. Watson) H.M. Hall & Clements]

Atriplex linearis S. Watson (T) [*A. canescens* subsp. *linearis* (S.
Watson) H.M. Hall & Clements]

Atriplex pacifica A. Nelson

Atriplex polycarpa (Torrey) S. Watson

***Atriplex wrightii** S. Watson

***Chenopodium murale** (Linnaeus) S. Fuentes, Uotila &
Borsch [*Chenopodium murale* Linnaeus]

Chenopodium neomexicanum Standley

***Dysphania ambrosioides** (Linnaeus) Mosyakin & Clemants
[*Chenopodium ambrosioides* Linnaeus var. *anthelminiticum*
(Linnaeus) A. Gray]

Froelichia interrupta (Linnaeus) Moquin var. **alata** (S. Watson)
R.A. McCauley

Gomphrena sonora Torrey

Iresine alternifolia S. Watson (T)

Iresine latifolia (M. Martens & Galeotti) Bentham & Hooke f.
[*I. calca* (Ibáñez) Standley]

Monolepis nuttalliana (Schultes) Greene

Salicornia bigelovii Torrey

***Salsola tragus** Linnaeus [*Kali tragus* Scopoli]

Sarcocornia pacifica (Standley) A.J. Scott [*Salicornia pacifica*
Standley]

Suaeda esteroa Ferren & Whitmore

Suaeda nigra (Rafinesque) J.F. Macbride [*S. moquini* (Torrey)
Greene. *S. ramosissima* (Standley) I.M. Johnston]

Tidestromia lanuginosa (Nuttall) Standley subsp. **eliassoniana**
Sánchez-del Pino & Flores-Olvera (T) [*T. eliassoniana*
(Sánchez-del Pino & Flores-Olvera) Sánchez-del Pino]

ANACARDIACEAE

Rhus terebinthifolia Schlechtendal & Chamisso [*R. hartmanii*
F.A. Barkley]

****Schinus terebinthifolia** Raddi

APIACEAE

***Cyclospermum leptophyllum** (Persoon) Sprague ex Britton &
P. Wilson var. **leptophyllum**

Daucus pusillus Michaux

Eryngium nasturtiifolium de Jussieu ex F. Delaroché

APOCYNACEAE

***Asclepias curassavica** Linnaeus

Asclepias leptopus I.M. Johnston (T)

Asclepias subulata Decaisne

***Cryptostegia grandiflora** R. Brown

Dictyanthus altatensis (Brandege) W.D. Stevens [*Matelea*
altatensis (Brandege) Woodson]

Funastrum clausum (Jacquin) Schlechter [*Cynanchum clausum*
Jacquin. *Sarcostemma clausum* (Jacquin) Roemer & Schultes]

Funastrum heterophyllum (Engelmann ex Torrey) Standley [F.
hartwegii Schlechter. *Sarcostemma cynanchoides* Decaisne subsp.
hartwegii R.W. Holm. *S. heterophyllum* Engelmann ex Torrey]

Haplophyton cimicidum A. de Candolle

Mandevilla nacapulensis (Felger & Henrickson) A.O. Simões,
Kinoshita & M.E. Endress [*Telosiphonia nacapulensis* Felger &
Henrickson (T)]

Marsdenia edulis S. Watson (T)

Matelea cordifolia, see *Polystemma cordifolium*

Matelea parvifolia (Torrey) Woodson

Matelea pringlei (A. Gray) Woodson

Metastelma arizonicum A. Gray [*Cynanchum arizonicum* (A.
Gray) Shinnars. *Metastelma albiflorum* S. Watson (T), not Grise-
bach. *M. watsonianum* Standley (T)]

Metastelma californicum Bentham

****Nerium oleander** Linnaeus

Plumeria rubra Linnaeus [*P. acutifolia* Poirét]

Polystemma cordifolium (A. Gray) McDonnell & Fishbein
[*Matelea cordifolia* (A. Gray) Woodson. *Rothrockia cordifolia* A.
Gray]

Vallesia glabra (Cavanilles) Link var. **glabra**

Vallesia laciniata Brandege [V. *baileyana* Woodson (T)]

ASTERACEAE

Acourtia wrightii (A. Gray) Reveal & R.M. King [*Perezia wrightii*
A. Gray]

Adenophyllum anomalum (Canby & Rose) Strother [*Dysodia*
anomala (Canby & Rose) B.L. Robinson]

Aldama glomerata (Brandege) E.E. Schilling & Panero
[*Alvordia glomerata* Brandege var. *glomerata*]

Ambrosia acuminata (Brandege) W.W. Payne

Ambrosia ambrosioides (Cavanilles) W.W. Payne

Ambrosia confertiflora de Candolle

Ambrosia cordifolia (A. Gray) W.W. Payne

Ambrosia deltoidea (Torrey) W.W. Payne

Ambrosia divaricata (Brandege) W.W. Payne

Ambrosia monogyra (Torrey & A. Gray) Strother & B.G.
Baldwin [*Hymenoclea monogyra* Torrey & A. Gray]

Ambrosia psilostachya de Candolle

Arida coulteri, see *Leucosyris coulteri*

Arida crispa, see *Leucosyris crispa*

Baccharis salicifolia (Ruiz & Pavón) Persoon

Baccharis sarothroides A. Gray

Bahiopsis chenopodina (Greene) E.E. Schilling & Panero
[*Viguiera chenopodina* Greene. *V. deltoidea* A. Gray var. *chenopo-*
dina (Greene) S.F. Blake]

Bahiopsis triangularis (M.E. Jones) E.E. Schilling & Panero
[*Viguiera triangularis* M.E. Jones]

Bebbia juncea (Bentham) Greene var. **aspera** Greene

Bidens laevis (Linnaeus) Britton, Sterns, & Poggenburg

Brickellia coulteri A. Gray var. **coulteri**

Brickellia rhomboidea Greene (T)

****Carthamus tinctorius** Linnaeus

Chloracantha spinosa (Bentham) G.L. Nesom var. **spinosa**
[*Aster spinosus* Bentham var. *spinosus*]

Chromolaena sagittata (A. Gray) R.M. King & H. Robinson
[*Eupatorium sagittatum* A. Gray]

Cirsium raphilepis (Hemsley) Petrak

- Coreocarpus sanpedroensis** E.B. Smith (T) [*C. arizonicus* (A. Gray) S.F. Blake var. *sanpedroensis* (E.B. Smith) B.L. Turner]
- Coreocarpus sonoranus** Sherff var. **libranus** B.L. Turner (T)
- Coreocarpus sonoranus** var. **sonoranus** [*C. johnstonii* Sherff (T)]
- Dicoria canescens** A. Gray
- ***Eclipta prostrata** (Linnaeus) Linnaeus [*E. alba* (Linnaeus) Hasskarl. *E. erecta* Linnaeus]
- ****Egletes viscosa** (Linnaeus) Lessing [*Cotula viscosa* Linnaeus]
- Encelia farinosa** A. Gray ex Torrey
- Encelia halimifolia** Cavanilles
- ***Erigeron canadensis** Linnaeus var. **glabratus** A. Gray [*Conyza canadensis* (Linnaeus) Cronquist var. *glabrata* (A. Gray) Cronquist]
- Gamochaeta sphacelata** (Kunth) Cabrera [*Gnaphalium pedunculatum* I.M. Johnston. *G. sphacelatum* Kunth]
- ***Glebionis coronaria** (Linnaeus) Cassini ex Spach [*Chrysanthemum coronarium* Linnaeus]
- Gnaphalium palustre** Nuttall
- ***Gnaphalium polycaulon** Persoon [*G. indicum* of authors, not Linnaeus]
- Gymnosperma glutinosum** (Sprengel) Lessing
- Helenium laciniatum** A. Gray (T)
- ***Helianthus annuus** Linnaeus
- Helianthus niveus** (Benth) Brandegee var. **niveus**
- Heliopsis anomala** (M.E. Jones) B.L. Turner [*Heliopsis rubra* T.R. Fisher. *H. parvifolia* A. Gray var. *rubra* (T.R. Fisher) Wiggins]
- Hofmeisteria crassifolia** S. Watson (T)
- Isocoma acradenia** (Greene) Greene var. **acradenia** [*Haplopappus acradeniis* (Greene) S.F. Blake. *Isocoma veneta* (Kunth) Greene]
- Koanophyllon palmeri** (A. Gray) R.M. King & H. Robinson [*Eupatorium palmeri* A. Gray]
- ***Lactuca serriola** Linnaeus
- Lagascea decipiens** Hemsley var. **decipiens**
- Leucosyris coulteri** (A. Gray) Pruski & R.L. Hartman [*Arida coulteri* (A. Gray) D.R. Morgan & R.L. Hartman. *Machaeranthera coulteri* (A. Gray) B.L. Turner & Horne var. *coulteri*. *Psilactis coulteri* A. Gray (T)]
- Leucosyris crispa** (Brandegee) Pruski & R.L. Hartman [*Arida crispa* (Brandegee) D.R. Morgan & R.L. Hartman. *Machaeranthera crispa* (Brandegee) B.L. Turner & Horne. *Psilactis crispa* Brandegee]
- Logfia filaginoides** (Hooker & Arnott) Morefield [*Filago californica* Nuttall. *Logfia californica* (Nuttall) Holub]
- Malacothrix sonorae** W.S. Davis & P.H. Raven
- Melampodium cupulatum** A. Gray (T)
- Palafoxia linearis** (Cavanilles) Lagasca
- Parthenium tomentosum** de Candolle var. **stramonium** (Greene) Rollins
- Pectis coulteri** Harvey & A. Gray (T)
- Pectis cylindrica** (Fernald) Rydberg [*P. prostrata* Cavanilles var. *cylindrica* Fernald]
- Pectis filipes** Harvey & A. Gray var. **filipes**
- Pectis linifolia** Linnaeus var. **linifolia**
- Pectis papposa** Harvey & A. Gray var. **papposa**
- Pectis purpurea** Brandegee var. **sonorae** D.J. Keil (T)
- Pectis rusbyi** Greene ex A. Gray [*P. palmeri* S. Watson (T)]
- Perityle californica** Benth [P. *deltoidea* S. Watson (T)]
- Perityle emoryi** Torrey
- Perityle microglossa** Benth var. **microglossa**
- Perityle palmeri** S. Watson (T) [*P. leptoglossa* Harvey & A. Gray subsp. *palmeri* (S. Watson) Felger & Lowe]
- Pleurocoronis laphamioides** (Rose) R.M. King & H. Robinson [*Hofmeisteria laphamioides* Rose. *H. laphamioides* var. *pauciseta* (I.M. Johnston) S.F. Blake. *H. pluriseta* var. *pauciseta* I.M. Johnston (T)]
- Pluchea salicifolia** (Miller) S.F. Blake [*P. adnata* (Humboldt & Bonpland ex Willdenow) C. Mohr. *P. subdecurrens* Cassini]
- Porophyllum gracile** Benth
- Porophyllum pausodinum** B.L. Robinson & Greenman (T) [*P. brachypodium* B.L. Robinson (T). *P. seemannii* S. Watson (T), not *P. seemannii* Schultz-Bipontinus]
- Pseudognaphalium stramineum** (Kunth) Anderberg [*Gnaphalium chilense* Sprengel. *G. stramineum* Kunth]
- Senecio lemmonii** A. Gray
- ****Silybum marianum** (Linnaeus) Gaertner
- ***Sonchus oleraceus** Linnaeus
- Symphotrichum subulatum** (Michaux) G.L. Nesom var. **parviflorum** (Nees) S.D. Sundberg [*Aster subulatus* Michaux]
- Thymophylla concinna** (A. Gray) Strother [*Dyssodia concinna* (A. Gray) B.L. Robinson]
- ****Thymophylla tenuiloba** (de Candolle) Small
- Trichocoronis wrightii** (Torrey & A. Gray) A. Gray [*Ageratum wrightii* Torrey & A. Gray]
- Trixis californica** Kellogg var. **californica**
- ***Verbesina encelioides** (Cavanilles) Benth & Hooker f. ex A. Gray
- Verbesina felgeri** B.L. Turner (T)
- Viguiera dentata** (Cavanilles) Sprengel
- ***Xanthium strumarium** Linnaeus
- Xylothamia diffusa** (Benth) G.L. Nesom [*Ericameria diffusa* Benth. *Haplopappus sonorensis* (A. Gray) S.F. Blake. *Linosyris sonorensis* A. Gray (T)]

BATACEAE**Batis maritima** Linnaeus**BIGNONIACEAE******Crescentia alata** Kunth**Handroanthus impetiginosus** (Martius ex de Candolle) Mattos [*Tabebuia impetiginosa* (Martius ex de Candolle) Standley. *T. palmeri* Rose]**Tecoma stans** (Linnaeus) de Jussieu ex Kunth var. **angustata** Rehder [*T. incisa* I.M. Johnston, not *T. incisa* Sweet]***Tecoma stans** var. **stans**

BORAGINACEAE sensu lato

This formerly broadly circumscribed family is treated as 6 families in the flora area: BORAGINACEAE, CORDIACEAE, EHRETIACEAE, HELIOTROPIACEAE, HYDROPHYLLACEAE, and NAMACEAE.

BORAGINACEAE

- Cryptantha maritima** Greene [*C. maritima* var. *pilosa* I.M. Johnston]
Johnstonella angustifolia (Torrey) Hasenstab & M.G. Simpson [*Cryptantha angustifolia* (Torrey) Greene]
Johnstonella grayi (Vasey & Rose) Hasenstab & M.G. Simpson var. **cryptochaeta** (J.F. Macbride) Hasenstab & M.G. Simpson [*Cryptantha grayi* (Vasey & Rose) J.F. Macbride var. *cryptochaeta* I.M. Johnston]
Johnstonella grayi var. **nesiotica** (I.M. Johnston) Hasenstab & M.G. Simpson [*Cryptantha grayi* var. *nesiotica* I.M. Johnston]
Pectocarya recurvata I.M. Johnston

BRASSICACEAE

- ***Brassica kaber** (de Candolle) L.C. Wheeler [Not *Brassica arvensis* Linnaeus; *B. arvensis* Rabenhorst is illegitimate. *Sinapis arvensis* Linnaeus. *S. kaber* de Candolle]
***Brassica nigra** (Linnaeus) W.D.J. Koch [*Sinapis nigra* Linnaeus]
****Brassica rapa** Linnaeus var. **oleifera** de Candolle
****Brassica rapa** var. **rapa**
***Brassica tournefortii** Gouan
Descurainia pinnata (Walter) Britton
Draba cuneifolia, see *Tomostima cuneifolia*
Dryopetalon runcinatum A. Gray [*D. runcinatum* var. *laxiflorum* Rollins]
***Eruca vesicaria** (Linnaeus) Cavanilles subsp. **sativa** (Miller) Thellung [*E. sativa* Miller]
***Lepidium didymum** Linnaeus [*Coronopus didymus* (Linnaeus) Smith]
Lepidium lasiocarpum Nuttall ex Torrey & A. Gray
Lepidium virginicum Linnaeus
Lyrocarpa coulteri Hooker & Harvey ex Harvey var. **coulteri**
***Raphanus sativus** Linnaeus
Rorippa teres (Michaux) Stuckey
***Sisymbrium irio** Linnaeus
***Sisymbrium orientale** Linnaeus
Tomostima cuneifolia (Nuttall ex Torrey & A. Gray) Al-Shehbaz, M. Koch & Jordon-Thaden [*Draba cuneifolia* Nuttall ex Torrey & A. Gray. *D. cuneifolia* var. *integrifolia* S. Watson. *D. cuneifolia* var. *sonorae* (Greene) Parish. *D. sonorae* Greene. *Tomostima sonorae* (Greene) Al-Shehbaz, M. Koch & Jordon-Thaden]

BURSERACEAE

- Bursera fagaroides** (Kunth) Engelm var. **elongata** McVaugh & Rzedowski [*B. confusa* (Rose) Engler, in part]
Bursera hindsiana (Benth) Engler
Bursera laxiflora S. Watson (T)
Bursera microphylla A. Gray

CACTACEAE

- Carnegiea gigantea** (Engelm) Britton & Rose
Cylindropuntia arbuscula (Engelm) F.M. Knuth [*Opuntia arbuscula* Engelm]
Cylindropuntia bigelovii (Engelm) F.M. Knuth [*Opuntia bigelovii* Engelm]
Cylindropuntia fulgida (Engelm) Knuth var. **fulgida** [*Opuntia fulgida* Engelm]
Cylindropuntia fulgida var. **mamillata** (Schott ex Engelm) Backeberg [*Opuntia mamillata* A. Schott ex Engelm]
Cylindropuntia leptocaulis (de Candolle) F.M. Knuth [*Opuntia leptocaulis* de Candolle]
Cylindropuntia leptocaulis × **C. versicolor**
Cylindropuntia versicolor (Engelm ex J.M. Coulter) F.M. Knuth [*Opuntia versicolor* Engelm ex J.M. Coulter]
Echinocereus leucanthus N.P. Taylor (T) [*Wilcoxia albiflora* Backeberg, not *Echinocereus albiflorus* Weingart]
Echinocereus llanuraensis (Rutow) W. Blum & D. Felix (T) [*E. engelmannii* (Engelm) Lemaire subsp. *llanuraensis* (Rutow) Felger. *E. nicholii* (L.D. Benson) B.D. Parfitt subsp. *llanuraensis* Rutow]
Echinocereus scopulorum Britton & Rose (T)
Echinocereus websterianus G.E. Lindsay (T)
Ferocactus emoryi (Engelm) Orcutt [*F. covillei* Britton & Rose. *F. emoryi* subsp. *covillei* (Britton & Rose) D.R. Hunt & Dimmitt]
Ferocactus herrerae J. González Ortega [*F. wislizeni* (Engelm) Britton & Rose var. *herrerae* (J. González Ortega) N.P. Taylor]
Ferocactus tiburonensis (G.E. Lindsay) Backeberg [*F. wislizeni* (Engelm) Britton & Rose var. *tiburonensis* G.E. Lindsay]
Grusonia reflexispina (Wiggins & Rollins) E.F. Anderson [*Corynopuntia reflexispina* (Wiggins & Rollins) Backeberg. *Opuntia reflexispina* Wiggins & Rollins (T)]
Lophocereus schottii (Engelm) Britton & Rose var. **australis** (K. Brandegee) Borg [*L. schottii* var. *tenuis* G.E. Lindsay (T)]
Lophocereus schottii var. **schottii** [*Pachycereus schottii* (Engelm) D.R. Hunt]
Mammillaria bocensis R.T. Craig
Mammillaria boolii G.E. Lindsay (T)
Mammillaria grahamii Engelm subsp. **sheldonii** (Britton & Rose) D.R. Hunt [*M. inatae* R.T. Craig (T). *M. swinglei* (Britton & Rose) Boedeker. *M. swinglei* var. *diabola* P.C. Fischer (T). *Neomammillaria sheldonii* Britton & Rose (T)]
Mammillaria johnstonii (Britton & Rose) Orcutt [*M. johnstonii* var. *guaymensis* R.T. Craig (T). *M. johnstonii* var. *sancarlosensis* R.T. Craig (T). *Neomammillaria johnstonii* Britton & Rose (T)]
Mammillaria multidigitata W.T. Marshall ex G.E. Lindsay (T)
Mammillaria tayloriorum Glass & R.A. Foster (T)
Mammillaria yaquensis R.T. Craig (T) [*M. thornberi* Orcutt var. *yaquensis* (R.T. Craig) D.R. Hunt]
Opuntia bravoana E.M. Baxter
Opuntia gosseliniana F.A.C. Weber (T)
Pachycereus pecten-aboriginum (Engelm) Britton & Rose

- Pachycereus pringlei** (S. Watson) Britton & Rose
Peniocereus marianus (Gentry) Sánchez-Mejorada [*Wilcoxia marianus* Gentry]
Peniocereus striatus (Brandege) F. Buxbaum [*Cereus diguetii* K. Weber. *C. striatus* Brandege. *Neoevansia diguetii* (F.A.C. Weber) W.T. Marshall. *N. striata* (Brandege) Sánchez-Mejorada]
Pereskiaopsis porteri (Brandege ex F.A.C. Weber) Britton & Rose [*Opuntia porteri* Brandege ex F.A.C. Weber. *Pereskiaopsis gatesii* E.M. Baxter]
Stenocereus alamosensis (J.M. Coulter) A.C. Gibson & K.E. Horak [*Rathbunia alamosensis* (J.M. Coulter) Britton & Rose]
Stenocereus thurberi (Engelmann) F. Buxbaum [*Lemaireocereus thurberi* (Engelmann) Britton & Rose]

CAMPANULACEAE

- Lobelia cardinalis** Linnaeus subsp. **graminea** (Lamarck) McVaugh

CANNABACEAE

- ****Cannabis sativa** Linnaeus
Celtis pallida Torrey subsp. **pallida** [*C. tala* Gillies var. *pallida* (Torrey) Planchon]
Celtis reticulata Torrey

CAPPARACEAE

- Atamisquea emarginata** Miers ex Hooker & Arnott [*Capparis atamisquea* Kuntze]

CARYOPHYLLACEAE

- Achyronychia cooperi** A. Gray
Drymaria arenarioides Humboldt & Bonpland ex Schultes subsp. **peninsularis** (S.F. Blake) J.A. Duke
Drymaria glandulosa Bartling
Drymaria viscosa S. Watson
***Spergularia salina** J. Presl & C. Presl

CELASTRACEAE

- Maytenus phyllanthoides** Benth var. **phyllanthoides** [*Tricerna phyllanthoides* (Benth) Lundell]

CLEOMACEAE

- Cleome tenuis** S. Watson (T)
***Corynandra viscosa** (Linnaeus) Cochrane & Iltis subsp. **viscosa** [*Arivela viscosa* (Linnaeus) Rafinesque. *Cleome viscosa* Linnaeus]
Wislizenia palmeri A. Gray [*W. mamillata* Rose ex Greene (T). *W. refracta* Engelmann var. *palmeri* (A. Gray) I.M. Johnston]

COCHLOSPERMACEAE

- Amoreuxia palmatifida** de Candolle

COMBRETACEAE

- Laguncularia racemosa** (Linnaeus) C.F. Gaertner

CONVOLVULACEAE

- *Convolvulus arvensis** Linnaeus
Cressa truxillensis Kunth
Cuscuta americana Linnaeus
Cuscuta corymbosa Ruiz & Pavón var. **grandiflora** Engelm
Cuscuta desmouliniana Yuncker [*C. umbellata* var. *dubia* Yuncker (T)]
***Cuscuta indecora** Choisy var. **indecora** [*C. decora* Choisy ex Engelm var. *indecora* (Choisy) Engelm. *Epithymum indecorum* (Choisy) Nieuwland & Lunell]
Cuscuta legitima Costea & Stefanović (T) [*C. californica* Hooker & Arnott var. *reflexa* J.M. Coulter. *C. umbellata* var. *reflexa* (J.M. Coulter) Yuncker]
Cuscuta tuberculata Brandege
Cuscuta umbellata Kunth var. **umbellata**
Evolvulus alsinoides (Linnaeus) Linnaeus var. **angustifolia** Torrey [*E. alsinoides* var. *acapulcensis* (Willdenow) van Oostroom]
Ipomoea arborescens (Humboldt & Bonpland ex Willdenow) G. Don var. **arborescens**
***Ipomoea batatas** (Linnaeus) Lamarck [*Batatas edulis* (Thunberg) Choisy. *Ipomoea triloba* of authors, not Linnaeus]
Ipomoea bracteata Cavanilles [*Exogonium bracteatum* (Cavanilles) Choisy ex G. Don]
****Ipomoea carnea** Jacquin subsp. **fistulosa** (Martius ex Choisy) D.F. Austin [*I. fistulosa* Martius ex Choisy]
Ipomoea cholulensis Kunth [*I. cristulata* Hallier. *Quamoclit cholulensis* (Kunth) G. Don]
Ipomoea hederacea Jacquin
Ipomoea hederifolia Linnaeus [*I. coccinea* of authors, not Linnaeus. *Quamoclit coccinea* (Linnaeus) Moench. *Q. coccinea* var. *hederifolia* (Linnaeus) House. *Q. hederifolia* (Linnaeus) G. Don]
***Ipomoea heptaphylla** Sweet [*I. pulchella* of authors, not Roth. *I. spiralis* House (T). *I. wrightii* A. Gray]
***Ipomoea leucantha** Jacquin
Ipomoea muricata (Linnaeus) Jacquin
Ipomoea nil (Linnaeus) Roth [*I. hederacea* of authors, not Jacquin]
***Ipomoea pes-caprae** (Linnaeus) R. Brown subsp. **brasiliensis** (Linnaeus) van Oostroom
Ipomoea seaania Felger & D.F. Austin (T)
Ipomoea ternifolia Cavanilles var. **leptotoma** (Torrey) J.A. McDonald [*I. divergens* House (T). *I. leptotoma* Torrey]
***Ipomoea triloba** Linnaeus
Jacquemontia agrestis (Choisy) Meisner [*J. palmeri* S. Watson (T)]
Jacquemontia polyantha (Schlechtendal & Chamisso) Hallier f. [*J. albida* Wiggins & Rollins (T)]
Jacquemontia pringlei A. Gray [*J. pringlei* var. *glabrescens* A. Gray]
Merremia palmeri (S. Watson) Hallier f. [*Ipomoea palmeri* S. Watson (T)]

CORDIACEAE

- Cordia parvifolia** A. de Candolle
Cordia sonora Rose

Varronia curassavica Jacquin [*Cordia brevispicata* M. Martens & Galeotti. *C. curassavica* (Jacquin) Roemer & Schultes. *C. palmeri* S. Watson (T)]

CRASSULACEAE

Graptopetalum rusbyi (Greene) Rose

CROSSOSOMATACEAE

Crossosoma bigelovii S. Watson

CUCURBITACEAE

Apodanthera palmeri S. Watson (T)

***Citrullus lanatus** (Thunberg) Matsumura & Nakai subsp. **lanatus**

***Cucumis melo** Linnaeus var. **dudaim** (Linnaeus) Naudin [*C. dudaim* Linnaeus]

Echinopepon wrightii (A. Gray) S. Watson

Ibervillea sonora (S. Watson) Greene [*Maximowiczia insularis* Brandege. *M. sonora* S. Watson (T)]

Luffa sepium (G. Meyer) C. Jeffrey [*L. operculata* (Linnaeus) Cogniaux]

Tumamoca maddougali Rose [*Ibervillea maddougali* (Rose) Lira, Dávila & Legaspi]

Vaseyanthus insularis (S. Watson) Rose [*Echinopepon insularis* S. Watson (T). *E. palmeri* S. Watson. *Vaseyanthus insularis* var. *inermis* I.M. Johnston. *V. insularis* var. *palmeri* (S. Watson) Gentry]

EHRETIACEAE

Bourreria sonora S. Watson (T)

Pholisma culiacanum (Dressler & Kuijt) Yatskievych

Tiquilia cuspidata (I.M. Johnston) A.T. Richardson [*Coldenia cuspidata* I.M. Johnston]

ELATINACEAE

Bergia texana (Hooker) Seubert

EUPHORBIACEAE

Acalypha aliena Brandege

Acalypha californica Bentham [*A. pringlei* S. Watson]

Acalypha papillosa Rose

Adelia cinerea (Wiggins & Rollins) A. Cervantes, V.W. Steinmann & Flores Olvera [*Bernardia cinerea* Wiggins & Rollins (T)]

Adelia obovata Wiggins & Rollins

Argythamnia adenophora A. Gray [*Ditaxis adenophora* (A. Gray) Pax & K. Hoffmann]

Argythamnia lanceolata (Bentham) Müller Argoviensis [*A. palmeri* S. Watson (T). *Ditaxis lanceolata* (Bentham) Pax & K. Hoffmann. *D. palmeri* (S. Watson) Pax & K. Hoffmann]

Argythamnia serrata (Torrey) Müller Argoviensis [*A. neomexicana* Müller Argoviensis. *Ditaxis gracilis* Rose & Standley (T). *D. neomexicana* (Müller Argoviensis) A. Heller. *D. serrata* (Torrey) A. Heller]

Bernardia viridis Millspaugh

Cnidocolus palmeri (S. Watson) Rose [*Jatropha palmeri* S. Watson (T)]

Croton alamosanus Rose

Croton californicus Müller Argoviensis

Croton ciliatoglandulifer Ortega

Croton magdalenae Millspaugh

Croton sonora Torrey

Croton subjucundus Croizat

Croton texensis (Klotzsch) Müller Argoviensis

Dalechampia scandens Linnaeus var. **scandens** [*D. scandens* var. *fimbriata* (Kunth) Müller Argoviensis]

Euphorbia abramsiana L.C. Wheeler [*Chamaesyce abramsiana* (L.C. Wheeler) Koutnik. *Euphorbia pediculifera* var. *abramsiana* Ewan]

Euphorbia albomarginata Torrey & A. Gray [*Chamaesyce albomarginata* (Torrey & A. Gray) Small]

Euphorbia arizonica Engelm. Arthur. [*Chamaesyce arizonica* (Engelm.) Arthur. *Euphorbia portulana* S. Watson (T)]

Euphorbia californica Bentham

Euphorbia capitellata Engelm. [*Chamaesyce capitellata* (Engelm.) Millspaugh. *Euphorbia capitellata* var. *laxiflora* S. Watson (T). *E. gladiosa* M.E. Jones (T)]

Euphorbia ceroderma I.M. Johnston (T)

Euphorbia cymosa Poir. [*E. colletioides* Benth. *E. plicata* S. Watson]

Euphorbia eriantha Benth. [*Poinsettia eriantha* (Benth.) Rose & Standley]

Euphorbia florida Engelm. [*Chamaesyce florida* (Engelm.) Millspaugh]

Euphorbia gentryi V.W. Steinmann & T.F. Daniel

Euphorbia gracillima S. Watson [*Chamaesyce gracillima* (S. Watson) Millspaugh]

***Euphorbia hirta** Linnaeus [*Chamaesyce hirta* (Linnaeus) Millspaugh]

***Euphorbia hypericifolia** Linnaeus [*Chamaesyce hypericifolia* (Linnaeus) Millspaugh]

Euphorbia hyssopifolia Linnaeus [*Chamaesyce hyssopifolia* (Linnaeus) Small]

Euphorbia incerta Brandege [*Chamaesyce incerta* (Brandegee) Millspaugh]

Euphorbia leucophylla Benth. subsp. **comcaacorum** V.W. Steinmann & Felger

Euphorbia lomelii V.W. Steinmann [*Pedilanthus macrocarpus* Benth.]

Euphorbia magdalenae Benth. [*Chamaesyce magdalenae* (Benth.) Millspaugh]

Euphorbia pediculifera Engelm. var. **linearifolia** S. Watson (T)

Euphorbia petrina S. Watson [*Chamaesyce petrina* (S. Watson) Millspaugh. *Euphorbia polycarpa* Benth. var. *petrina* (S. Watson) I.M. Johnston]

Euphorbia polycarpa Benth. [*Chamaesyce polycarpa* (Benth.) Millspaugh. *Euphorbia intermixta* S. Watson (T). *E. polycarpa* var. *hirtella* Boissier]

***Euphorbia prostrata** Aiton [*Chamaesyce prostrata* (Aiton) Small]

***Euphorbia serpens** Kunth [*Chamaesyce serpens* (Kunth) Small]
Euphorbia setiloba Engelmänn ex Torrey [*Chamaesyce setiloba* (Engelmann) Millspaugh]
Euphorbia tomentulosa S. Watson [*Chamaesyce tomentulosa* (S. Watson) Millspaugh]
Euphorbia trachysperma Engelmänn [*Chamaesyce trachysperma* (Engelmann) Millspaugh]
Euphorbia xanti Engelmänn ex Boissier
Jatropha cardiophylla (Torrey) Müller Argoviensis
Jatropha cinerea (Ortega) Müller Argoviensis [*J. canescens* (Bentham) Müller Argoviensis]
Jatropha cordata (Ortega) Müller Argoviensis
Jatropha cuneata Wiggins & Rollins
Manihot angustiloba (Torrey) Müller Argoviensis
Manihot davisiae Croizat
Manihot rubricaulis I.M. Johnston
Pleradenophora bilocularis (S. Watson) Esser & A.L. Melo [*Sapium biloculare* (S. Watson) Pax. *Sebastiania bilocularis* S. Watson]
***Ricinus communis** Linnaeus
Tragia jonesii Radcliffe-Smith & Govaerts [*T. scandens* M.E. Jones (I), not *T. scandens* Linnaeus]

FABACEAE

Acacia angustissima, see *Acaciella angustissima*
Acacia californica, see *Vachellia californica*
Acacia cochliacantha, see *Vachellia campechiana*
Acacia constricta, see *Vachellia constricta*
Acacia farnesiana, see *Vachellia farnesiana*
Acacia occidentalis, see *Senegalia occidentalis*
Acacia russelliana, see *Mariosousa russelliana*
Acacia willardiana, see *Mariosousa willardiana*
Acaciella angustissima (Miller) Britton & Rose [*Acacia angustissima* (Miller) Kuntze. *A. filicina* Willdenow]
Aeschynomene fascicularis Schlechtendal & Chamisso
Albizia sinaloensis Britton & Rose
Astragalus nuttallianus de Candolle var. **cedrosensis** M.E. Jones
***Caesalpinia cacalaco*, see *Tara cacalaco*
Caesalpinia palmeri, see *Erythrostemon palmeri*
***Caesalpinia pulcherrima** (Linnaeus) Swartz [*Poinciana pulcherrima* Linnaeus]
Caesalpinia pumila, see *Coulteria pumila*
Calliandra californica Benth
Calliandra eriophylla Benth
Cercidium × *sonorae*, see *Parkinsonia* × *sonorae*
Chamaecrista nictitans (Linnaeus) Moench var. **leptadenia** (Greenman) Gandhi & S.L. Hatch [*Cassia leptadenia* Greenman var. *mensalis* Greenman. *Chamaecrista nictitans* var. *mensalis* (Greenman) H.S. Irwin & Barneby]
Coulteria pumila (Britton & Rose) Sotuyo & G.P. Lewis [*Caesalpinia pumila* (Britton & Rose) F.J. Hermann. *Guaymasia pumila* Britton & Rose (I), based on *Caesalpinia gracilis* Benth ex Hemsley, not *C. gracilis* Miquel]
Coursetia caribaea (Jacquin) Lavin var. **caribaea**

Coursetia glandulosa A. Gray [*Pictetia microphylla* Benth ex Hemsley (I)]
Dalea bicolor Humboldt & Bonpland ex Willdenow var. **bicolor**
Dalea mollis Benth
Dalea pringlei A. Gray var. **multijuga** Barneby
Dalea purpusii Brandege
Desmanthus bicornutus S. Watson
Desmanthus covillei (Britton & Rose) Wiggins [*Acuan bicornutum* (S. Watson) Britton & Rose. *A. subulatum* Britton & Rose. *Desmanthus subulatus* (Britton & Rose) Wiggins]
Desmodium procumbens (Miller) Hitchcock [*D. scopulorum* S. Watson (I). *D. wigginsii* Schubert]
Diphysa occidentalis Rose (I)
Erythrina flabelliformis Kearney
Erythrostemon palmeri (S. Watson) E. Gagnon & G.P. Lewis [*Caesalpinia arida* (Britton & Rose) Wiggins. *C. palmeri* S. Watson (I). *Poinciana palmeri* (S. Watson) Britton & Rose. *P. palmeri* (S. Watson) Rose]
Galactia wrightii A. Gray
Galactia sp.
Haematoxylum brasiletto H. Karsten
Havardia sonorae (S. Watson) Britton & Rose [*Pithecellobium sonorae* S. Watson (I)]
Indigofera jamaicensis Sprengel [*I. laevis* Rydberg (I)]
***Indigofera suffruticosa** Miller
***Leucaena leucocephala** (Lamarck) de Wit subsp. **glabrata** (Rose) S. Zárate
Lupinus arizonicus (S. Watson) S. Watson
Lysiloma candidum Brandege
Lysiloma divaricatum (Jacquin) J.F. Macbride [*L. microphyllum* Benth]
Lysiloma watsonii Rose [*L. microphyllum* var. *thornberi* (Britton & Rose) Isely. *L. thornberi* Britton & Rose]
Macroptilium atropurpureum (Sessé & Moçoiño ex de Candolle) Urban
Marina evanescens (Brandege) Barneby [*Dalea evanescens* Brandege. *Petalostemon evanescens* (Brandege) Rose]
Marina parryi (Torrey & A. Gray) Barneby [*Dalea parryi* Torrey & A. Gray]
Marina vetula (Brandege) Barneby [*Dalea vetula* Brandege]
Mariosousa russelliana (Britton & Rose) Seigler & Ebinger [*Acacia coulteri* Benth, in part. *A. russelliana* (Britton & Rose) Lundell]
Mariosousa willardiana (Rose) Seigler & Ebinger [*Acacia willardiana* Rose (I). *Prosopis heterophylla* Benth (I)]
***Medicago polymorpha** Linnaeus
***Melilotus indicus** (Linnaeus) Allioni
Mimosa aculeaticarpa Ortega var. **biuncifera** (Benth) Barneby [*M. biuncifera* Benth]
Mimosa distachya Cavanilles var. **laxiflora** (Benth) Barneby [*M. laxiflora* Benth]
Nissolia schottii (Torrey) A. Gray
Olneya tesota A. Gray
***Parkinsonia aculeata** Linnaeus
Parkinsonia × **carterae** Hawkins

Parkinsonia florida (Bentham ex A. Gray) S. Watson subsp. **florida** [*Cercidium floridum* Bentham ex A. Gray subsp. *floridum*]
Parkinsonia florida subsp. **peninsulare** (Rose) Hawkins & Felger [*Cercidium floridum* subsp. *peninsulare* (Rose) Carter. *C. peninsulare* Rose]
Parkinsonia microphylla Torrey [*Cercidium microphyllum* (Torrey) Rose & I.M. Johnston]
Parkinsonia praecox (Ruiz & Pavón ex Hooker) Hawkins [*Cercidium praecox* (Ruiz & Pavón ex Hooker) Harms]
Parkinsonia × **sonorae** (Rose & I.M. Johnston ex I.M. Johnston) Hawkins & Felger [*Cercidium molle* I.M. Johnston. *C.* × *sonorae* Rose & I.M. Johnston ex I.M. Johnston (T)]
Phaseolus acutifolius A. Gray var. **acutifolius**
Phaseolus filiformis Bentham
Piscidia mollis Rose
***Pithecellobium dulce** (Roxburgh) Bentham
Prosopis articulata S. Watson (T)
Prosopis glandulosa Torrey var. **torreyana** (L.D. Benson) M.C. Johnston [*P. juliflora* (Swartz) de Candolle var. *torreyana* L.D. Benson]
Psoralea emoryi (A. Gray) Rydberg var. **emoryi** [*Dalea emoryi* A. Gray]
Rhynchosia minima (Linnaeus) de Candolle
Rhynchosia preclatoria (Humboldt & Bonpland ex Willdenow) de Candolle
Senegalia occidentalis (Rose) Britton & Rose [*Acacia occidentalis* Rose]
Senna covesii (A. Gray) H.S. Irwin & Barneby [*Cassia covesii* A. Gray]
Senna pallida (Vahl) H.S. Irwin & Barneby var. **shreveana** H.S. Irwin & Barneby
Sesbania herbacea (Miller) McVaugh
Sphinctospermum constrictum (S. Watson) Rose [*Tephrosia constricta* S. Watson (T)]
****Tara cacalaco** (Bonpland) Molinari-Nova & Sánchez Ocharan [*Caesalpinia cacalaco* Bonpland]
Tephrosia tenella A. Gray [*T. vicioides* Schlechtendal]
Vachellia californica (Brandege) Seigler & Ebinger [*Acacia californica* Brandege. *A. pringlei* Rose subsp. *californica* (Brandege) Lee, Seigler & Ebinger. *A. sonorensis* Rose (T)]
Vachellia campechiana (Miller) Seigler & Ebinger [*Acacia cochliacantha* Humboldt & Bonpland ex Willdenow. *A. cymbispina* Sprague & Riley (T)]
Vachellia constricta (Bentham) Seigler & Ebinger [*Acacia constricta* Bentham]
Vachellia farnesiana (Linnaeus) Wight & Arnott [*Acacia farnesiana* (Linnaeus) Willdenow. *A. minuta* (M.E. Jones) Beauchamp subsp. *densiflora* (Alexander ex Small) Beauchamp. *A. smallii* Isely]
Zapoteca formosa (Kunth) H.M. Hernández subsp. **rosei** (Wiggins) H.M. Hernández [*Calliandra rosei* Wiggins. *C. schottii* subsp. *rosei* (Wiggins) Felger & Lowe]

FOUQUIERIACEAE

Fouquieria diguetii (van Tieghem) I.M. Johnston
Fouquieria macdougallii Nash
Fouquieria splendens Engelm subsp. **splendens**

GENTIANACEAE

Zeltnera nudicaulis (Engelmann) G. Mansion [*Centaurium nudicaule* (Engelmann) B.L. Robinson]

HELIOTROPIACEAE

Euploca convolvulacea Nuttall [*E. convolvulacea* subsp. *californica* (Greene) Abrams. *Heliotropium convolvulaceum* (Nuttall) A. Gray. *H. convolvulaceum* var. *californicum* (Greene) I.M. Johnston]
Euploca procumbens (Miller) Diane & Hilger [*Heliotropium procumbens* Miller]
Heliotropium angiospermum Murray
Heliotropium curassavicum Linnaeus var. **oculatum** (A. Heller) I.M. Johnston ex Tidestrom
Heliotropium wigginsii I.M. Johnston (T)
Muriopsis volubilis (Linnaeus) Small [*Tournefortia volubilis* Linnaeus]
Tournefortia hartwegiana Steudel

HYDROPHYLLACEAE

Eucrypta chrysanthemifolia (Bentham) Greene var. **bipinnatifida** (Torrey) Constance
Eucrypta micrantha (Torrey) Heller
Phacelia crenulata Torrey ex S. Watson [*P. ambigua* M.E. Jones. *P. crenulata* var. *minutiflora* (J.W. Voss ex Munz) Jepson]
Phacelia distans Bentham
Phacelia scariosa Brandege

KOEBERLINIACEAE

Koerberlinia spinosa Zuccarini var. **tenuispina** Kearney & Peebles

KRAMERIACEAE

Krameria erecta Willdenow ex Schultes [*K. parvifolia* Bentham]
Krameria sonorae Britton (T)

LAMIACEAE

Condea albida (Kunth) Harley & J.F.B. Pastore [*Condea emoryi* (Torrey) Harley & J.F.B. Pastore. *Hyptis albida* Kunth. *H. emoryi* Torrey. *H. emoryi* var. *palmeri* (S. Watson) I.M. Johnston. *H. palmeri* S. Watson (T)]
Salvia lasiocephala Hooker & Arnott
Salvia misella Kunth [*S. privoides* Bentham. *S. riparia* Kunth]
Salvia similis Brandege
Stachys coccinea Ortega [*S. coccinea* Jacquin]
Teucrium cubense Jacquin subsp. **depressum** (Small) McClintock & Epling [*T. cubense* var. *densum* Jepson. *T. depressum* Small]
Vitex mollis Kunth
****Vitex trifolia** Linnaeus

LOASACEAE

- Eucnide cordata** Kellogg ex Curran
Eucnide rupestris (Baillon) H.J. Thompson & W.R. Ernst
 [*Loasella rupestris* Baillon (T). *Sympetaleia rupestris* (Baillon) A. Gray ex S. Watson]
Mentzelia adhaerens Benth
Mentzelia aspera Linnaeus

LORANTHACEAE

- Psittacanthus calyculatus** (de Candolle) G. Don
Psittacanthus sonora (S. Watson) Kuijt [*Loranthus sonora* S. Watson (T). *Phrygilanthus sonora* (S. Watson) Standley]
Struthanthus palmeri Kuijt [*S. haenkei* (Presl) Engler sensu lato, in part. *S. haenkei* var. *angustatus* I.M. Johnston (T)]

LYTHRACEAE

- Ammannia robusta** Heer & Regel

MALPIGHIACEAE

- Callaeum macropterum** (Moçoiño & Sessé ex de Candolle) D.M. Johnson [*Mascagnia macroptera* (Moçoiño & Sessé ex de Candolle) Niedenzu]
Cottisia californica (Benth) W.R. Anderson & C. Davis [*C. scandens* Dubard & Dop (T). *Janusia californica* Bentham]
Cottisia gracilis (A. Gray) W.R. Anderson & C. Davis [*Janusia gracilis* A. Gray]
Cottisia linearis (Wiggins) W.R. Anderson & C. Davis [*Janusia linearis* Wiggins]
Echinopterys eglandulosa (A. de Jussieu) Small [*Bunchosia eglandulosa* A. de Jussieu]
Galphimia angustifolia Benth [G. *angustifolia* var. *oblongifolia* (A. Gray) S. Watson (T). *Thryallis angustifolia* (Benth) Kuntze]
Malpighia watsonii Rose [*Bunchosia parvifolia* S. Watson (T), not *Malpighia parvifolia* A. de Jussieu. *Malpighia sonora* M.E. Jones (T)]

MALVACEAE (includes Bombacaceae, Sterculiaceae, and Tiliaceae)

- Abutilon abutiloides** (Jacquin) Garcke ex Hochreutiner [*A. scabrum* S. Watson (T)]
Abutilon californicum Benth
Abutilon incanum (Link) Sweet [*A. pringlei* Hochreutiner]
Abutilon mollicomum (Willdenow) Sweet
Abutilon palmeri A. Gray (T) [*A. aurantiacum* S. Watson, not *A. aurantiacum* Linden ex Turczaninow]
Abutilon parishii S. Watson
Abutilon reventum S. Watson
Anoda crenatiflora Ortega
Anoda pentaschista A. Gray
Ayenia filiformis S. Watson (T) [*A. compacta* Rose. *A. pusilla* of various authors, not *A. pusilla* Linnaeus]
Ayenia jaliscana S. Watson
Briquetia sonora Fryxell (T)
Ceiba acuminata (S. Watson) Rose

- Corchorus hirtus** Linnaeus [*C. orinocensis* Kunth. *C. hirtus* var. *orinocensis* (Kunth) K. Schumann]
****Corchorus olitorius** Linnaeus
Gossypium davidsonii Kellogg
Gossypium turneri Fryxell (T)
Guazuma ulmifolia Lamarck
Helicteres baruensis Jacquin
Heliocarpus attenuatus S. Watson
Herissantia crispa (Linnaeus) Brizicky
Hermannia pauciflora S. Watson
Hibiscus biseptus S. Watson
Hibiscus denudatus Benth
Hibiscus phoeniceus Jacquin
Horsfordia newberryi (S. Watson) A. Gray
Kosteletzkya hispidula (Sprengel) Garcke [*K. coulteri* A. Gray. *K. digitata* A. Gray (T)]
***Malva parviflora** Linnaeus
Malvastrum bicuspidatum (S. Watson) Rose subsp. **bicuspidatum**
Malvella leprosa (Ortega) Krapovickas
Melochia tomentosa Linnaeus [*M. arida* Rose (T). *M. speciosa* S. Watson (T). *M. tomentosa* var. *speciosa* (S. Watson) A. Goldberg]
Pseudabutilon thurberi (A. Gray) Fryxell [*Abutilon thurberi* A. Gray. *Pseudabutilon sonora* Wiggins]
Sida abatifolia Miller
Sida acuta Burman f.
***Sida ciliaris** Linnaeus
Sida glabra Miller
Sida hyalina Fryxell
Sphaeralcea ambigua A. Gray subsp. **ambigua**
Sphaeralcea coulteri (S. Watson) A. Gray
Sphaeralcea emoryi Torrey ex A. Gray [*S. arida* Rose (T)]
****Talipariti tiliaceum** (Linnaeus) Fryxell var. **tiliaceum** [*Hibiscus tiliaceus* Linnaeus]
Waltheria indica Linnaeus

MARTYNIACEAE

- Proboscidea altheifolia** (Benth) Decaisne
Proboscidea parviflora (Wooton) Wooton & Standley subsp. **sinaloensis** (Van Eseltine) Bretting [*P. sinaloensis* Van Eseltine]

MENISPERMACEAE

- Cocculus diversifolius** de Candolle

MOLLUGINACEAE

- *Glinus lotoides** Linnaeus
***Glinus radiatus** (Ruiz & Pavón) Rohrbach
***Mollugo cerviana** (Linnaeus) Seringe
Mollugo verticillata Linnaeus

MORACEAE

- Ficus insipida** Willdenow [*F. radulina* S. Watson]

Ficus palmeri S. Watson [*F. petiolaris* Kunth subsp. *palmeri* (S. Watson) Felger & Lowe]

Ficus pertusa Linnaeus f. [*F. fasciculata* S. Watson (T), not *F. fasciculata* F. Mueller ex Bentham. *F. padifolia* Kunth. *F. sonorae* S. Watson (T)]

NAMACEAE

Nama hispida A. Gray var. **sonorae** C.L. Hitchcock

Nama jamaicensis Linnaeus

Nama stenocarpa A. Gray

NYCTAGINACEAE

Abronia maritima Nuttall ex S. Watson subsp. **maritima**

Allionia incarnata Linnaeus [*A. incarnata* var. *nudata* (Standley) Munz. *A. incarnata* var. *villosa* (Standley) B.L. Turner]

Boerhavia alata S. Watson (T)

Boerhavia coccinea Miller [*B. caribaea* Jacquin]

Boerhavia erecta Linnaeus

Boerhavia gracillima Heimerl

Boerhavia spicata Choisy [*B. coulteri* (Hooker f.) S. Watson. *B. palmeri* S. Watson, 1889 (T), not *B. palmeri* S. Watson, 1883. *B. spicata* Choisy var. *palmeri* S. Watson (T). *B. watsonii* Standley (T). *Senkenbergia coulteri* Hooker f. (T)]

Boerhavia triquetra S. Watson [*B. intermedia* M.E. Jones. *B. maculata* Standley (T). *B. triquetra* var. *intermedia* (M.E. Jones) Spellenberg]

Boerhavia wrightii A. Gray

Boerhavia xanti S. Watson

Commicarpus scandens (Linnaeus) Standley

Pisonia capitata (S. Watson) Standley [*Cryptocarpus capitatus* S. Watson (T)]

Salpianthus macrodontus Standley

OLACACEAE, *see* SCHOEPFIACEAE and XIMENIACEAE

OLEACEAE

Forestiera angustifolia Torrey

Menodora scabra A. Gray [*M. scoparia* Engelman ex A. Gray]

ONAGRACEAE

Eremothera chamaenerioides (A. Gray) W.L. Wagner & Hoch [*Camissonia chamaenerioides* (A. Gray) P.H. Raven. *Oenothera chamaenerioides* A. Gray]

Ludwigia octovalvis (Jacquin) P.H. Raven subsp. **octovalvis**

Ludwigia peploides (Kunth) P.H. Raven

Oenothera arizonica (Munz) W.L. Wagner [*O. avita* (W.M. Klein) W.M. Klein subsp. *arizonica* (Munz) W.M. Klein. *O. californica* S. Watson subsp. *arizonica* (Munz) W.M. Klein]

Oenothera kunthiana (Spach) Munz

OXALIDACEAE

***Oxalis** sp.

PAPAVERACEAE

Argemone gracilentia Greene [*A. intermedia* Sweet]

Argemone ochroleuca Sweet

PASSIFLORACEAE

Passiflora arida (Masters & Rose) Killip [*P. foetida* Linnaeus var. *arida* Masters & Rose (T)]

Passiflora arizonica (Killip) D.H. Goldman [*P. foetida* var. *arizonica* Killip]

Passiflora mexicana de Jussieu

Turnera diffusa Willdenow var. **diffusa**

PEDALIACEAE

****Sesamum indicum** Linnaeus [*S. orientale* Linnaeus]

PETIVERIACEAE

Rivina humilis Linnaeus

PHRYMACEAE

Erythranthe floribunda (Douglas ex Lindley) G.L. Nesom [*Mimulus floribundus* Douglas ex Lindley]

PHYLLANTHACEAE

Andrachne microphylla (Lamarck) Baillon [*A. ciliatoglandulosa* (Millsbaugh) Croizat]

Phyllanthus evanescens Brandegee

PHYTOLACCACEAE, *Rivina*, *see* PETIVERIACEAE

PLANTAGINACEAE (includes Scrophulariaceae, in part)

Callitriche terrestris Rafinesque [*C. deflexa* A. Braun ex Hegelmaier]

Gambelia juncea (Bentham) D.A. Sutton [*Galvezia juncea* (Bentham) Ball]

Mecardonia procumbens (Miller) Small [*Bacopa procumbens* (Mill-er) Greenman. *Mecardonia vandellioides* (Kunth) Pennell]

Nuttallanthus texanus (Scheele) D.A. Sutton [*Linaria canadensis* (Linnaeus) Dumont de Courset var. *texana* (Scheele) Pennell]

Plantago ovata Forsskål var. **fastigiata** (Morris) S.C. Meyers & Liston [*P. fastigiata* E. Morris. *P. insularis* Eastwood var. *fastigiata* (E. Morris) Jepson]

Pseudorontium cyathiferum (Bentham) Rothmaler [*Antirrhinum cyathiferum* Bentham]

Russelia sonorensis Carlson var. **pubescens** Carlson

Saiocarpus costatus (Wiggins) D.A. Sutton [*Antirrhinum costatum* Wiggins (T)]

Saiocarpus watsonii (Vasey & Rose) D.A. Sutton [*Antirrhinum kingii* S. Watson var. *watsonii* (Vasey & Rose) Munz. *A. watsonii* Vasey & Rose]

Schistophragma intermedium (A. Gray) Pennell [*Conobea intermedia* A. Gray]

Schistophragma polystachyum (Brandege) B.L. Turner [*Conobea polystachya* (Brandege) Minod. *Stemodia polystachya* Brandege]

Stemodia durantifolia (Linnaeus) Swartz var. **durantifolia**

Stemodia palmeri A. Gray

Veronica peregrina Linnaeus subsp. **xalapensis** (Kunth)
Pennell

PLUMBAGINACEAE

Plumbago zeylanica Linnaeus [*P. scandens* Linnaeus]

POLEMONIACEAE

Dayia sonora (Rose) J.M. Porter [*Gilia sonora* Rose (T).
Ipomopsis sonora (Rose) A. Grant]

POLYGALACEAE

Hebecarpa macradenia (A. Gray) J.R. Abbott [*Polygala macradenia* A. Gray]

POLYGONACEAE

Antigonon leptopus Hooker & Arnott

Coccoloba goldmanii Standley

***Persicaria** cf. **maculosa** Gray

***Polygonum argyrocoleon** Steudel ex Kunze

Rumex inconspicuus Rechner f.

PORTULACACEAE

Portulaca halimoides Linnaeus [*P. parvula* A. Gray]

Portulaca johnstonii Henrickson

***Portulaca oleracea** Linnaeus [*P. retusa* Engelm., perhaps not
P. retusa of western authors]

Portulaca suffrutescens Engelm.

Portulaca umbraticola Kunth subsp. **lanceolata** (Engelm.)
J.F. Matthews & Ketron [*P. lanceolata* Engelm.]

PRIMULACEAE

***Anagallis arvensis** Linnaeus

Bonellia macrocarpa (Cavanilles) B. Ståhl & Källersjö subsp.
pungens (A. Gray) B. Ståhl & Källersjö [*Jacquinia macrocarpa*
Cavanilles subsp. *pungens* (A. Gray) B. Ståhl. *J. pungens* A.
Gray]

Samolus parviflorus Rafinesque [*S. floribundus* Kunth]

RANUNCULACEAE

Clematis drummondii Torrey & A. Gray

RESEDACEAE

Forchhammeria watsonii Rose (T)

Oligomeris linifolia (Vahl) J.F. Macbride

RHAMNACEAE

Colubrina californica I.M. Johnston

Colubrina triflora Brongniart ex G. Don

Colubrina viridis (M.E. Jones) M.C. Johnston [*C. glabra* S.
Watson (T)]

Condalia globosa I.M. Johnston var. **globosa**

Condalia globosa var. **pubescens** I.M. Johnston

Gouania rosei Wiggins

Karwinskia humboldtiana (Roemer & Schultes) Zuccarini [*K.*
parvifolia Rose]

Ziziphus amole (Sessé & Moçino) M.C. Johnston [*Z. sonorensis* S.
Watson (T)]

Ziziphus obtusifolia (Hooker ex Torrey & A. Gray) A. Gray var.
canescens (A. Gray) M.C. Johnston [*Condaliopsis lycioides* (A.
Gray) Suessenguth var. *canescens* (A. Gray) Suessenguth]

RHIZOPHORACEAE

Rhizophora mangle Linnaeus

RUBIACEAE

Chiococca petrina Wiggins

Diodia teres Walter

Galium microphyllum A. Gray

Galium proliferum A. Gray

Hintonia latiflora (de Candolle) Bullock [*Contarea latiflora* de
Candolle. *C. pterosperma* (S. Watson) Standley. *Portlandia*
pterosperma S. Watson (T)]

***Oldenlandia corymbosa** Linnaeus

Randia obcordata S. Watson (T)

Randia sonorensis Wiggins

Randia thurberi S. Watson (T)

Stenaria sanchezii Lorence (T)

RUTACEAE

Amyris balsamifera Linnaeus

Esenbeckia hartmanii B.L. Robinson & Fernald

Zanthoxylum fagara (Linnaeus) Sargent [*Z. sonorensis* Lundell]

Zanthoxylum mazatlanum Sandwith

SALICACEAE

Populus mexicana de Candolle subsp. **dimorpha** (Brandegee)
Eckenwalder [*P. dimorpha* Brandegee]

Salix gooddingii C.R. Ball

SANTALACEAE

Phoradendron brachystachyum (de Candolle) Oliver [*P.*
brachystachyum (de Candolle) Nuttall. *P. dignetianum* van
Tieghem. *P. globuliferum* Trelease (T)]

Phoradendron californicum Nuttall

SAPINDACEAE

Cardiospermum corindum Linnaeus

Dodonaea viscosa Jacquin [*D. angustifolia* Linnaeus f. *D. viscosa*
var. *angustifolia* (Linnaeus f.) Bentham]

Paullinia sonorensis S. Watson (T)

Sapindus saponaria Linnaeus

Serjania palmeri S. Watson (T)

SAPOTACEAE

Sideroxylon occidentale (Hemsley) T.D. Pennington [*Bumelia*
occidentalis Hemsley]

SCHOEPFIACEAE

Schoepfia shreveana Wiggins (T)

SIMMONDSIACEAE

Simmondsia chinensis (Link) C.K. Schneider

SOLANACEAE

Calibrachoa parviflora (de Jussieu) D'Arcy [*Petunia parviflora* de Jussieu]

Capsicum annuum Linnaeus var. **glabriusculum** (Dunal) Heiser & Pickersgill [*C. annuum* var. *aviculare* (Dierbach) D'Arcy & Eshbaugh, nom. illegit. *C. indicum* Dierbach forma *aviculare* Dierbach]

Datura discolor Bernhardt

Lycium andersonii A. Gray var. **andersonii** [*L. andersonii* var. *deserticola* (C.L. Hitchcock) Jepson. *L. andersonii* var. *pubescens* S. Watson. *L. andersonii* var. *wrightii* A. Gray]

Lycium berlandieri Dunal var. **longistylum** C.L. Hitchcock

Lycium berlandieri var. **peninsulare** (Brandege) C.L. Hitchcock

Lycium brevipes Bentham var. **brevipes** [*L. palmeri* A. Gray (T). *L. richii* A. Gray]

Lycium californicum Nuttall ex A. Gray subsp. **carinatum** (S. Watson) Felger & C.H. Lowe [*L. carinatum* S. Watson (T)]

Lycium exsertum A. Gray

Lycium fremontii A. Gray var. **fremontii**

Lycium macrodon A. Gray var. **dispermum** (Wiggins) F. Chiang [*L. dispermum* Wiggins (T)]

Nicotiana clevelandii A. Gray

***Nicotiana glauca** Graham var. **glauca**

Nicotiana obtusifolia M. Martens & Galeotti [*N. palmeri* A. Gray. *N. trigonophylla* Dunal. *N. trigonophylla* var. *palmeri* (A. Gray) M.E. Jones]

Petunia parviflora, see *Calibrachoa parviflora*

Physalis acutifolia (Miers) Sandwith [*P. wrightii* A. Gray]

Physalis crassifolia Bentham var. **crassifolia** [*P. crassifolia* var. *versicolor* (Rydberg) Waterfall. *P. versicolor* Rydberg (T). *P. versicolor* var. *microphylla* Rydberg (T)]

***Physalis pubescens** Linnaeus [*P. pubescens* var. *integrifolia* (Dunal) Waterfall]

Physalis purpurea Wiggins (T)

***Solanum americanum** Miller [*S. nodiflorum* Jacquin]

***Solanum elaeagnifolium** Cavanilles

Solanum erianthum D. Don [*S. verbascifolium* of authors, not Linnaeus]

Solanum hindsianum Bentham

***Solanum lycopersicum** Linnaeus [*Lycopersicum esculentum* Miller]

STEGNOSPERMATAACEAE

Stegnosperma halimifolium Bentham [*S. watsonii* D.J. Rogers]

TALINACEAE

Talinum paniculatum (Jacquin) Gaertner

TAMARICACEAE

***Tamarix aphylla** (Linnaeus) H. Karsten

***Tamarix chinensis** Loureiro [*T. ramosissima* Ledebour]

THEOPHRASTACEAE, see PRIMULACEAE**TROPAEOLACEAE**

****Tropaeolum majus** Linnaeus

URTICACEAE

Parietaria hespera B.D. Hinton var. **hespera**

VERBENACEAE

Aloysia sonorensis Moldenke (T)

Bouchea dissecta S. Watson (T)

Citharexylum flabellifolium S. Watson (T)

Glandularia gooddingii (Briquet) Solbrig [*Verbena gooddingii* Briquet. *V. gooddingii* var. *nepetifolia* Tidestrom]

Lantana camara Linnaeus

Lantana hispida Kunth [*L. velutina* M. Martens & Galeotti]

Lippia palmeri S. Watson (T) [*L. palmeri* var. *spicata* Rose]

Phyla nodiflora (Linnaeus) Greene [*Lippia nodiflora* (Linnaeus) Michaux. *Phyla nodiflora* var. *incisa* (Small) Moldenke]

Verbena menthifolia Bentham [*V. officinalis* Linnaeus subsp. *balei* (Small) S. Barber. *V. halei* Small]

VIOLACEAE

Hybanthus fruticosus (Bentham) I.M. Johnston [*H. fruticosus* var. *flavescens* (Dowell) I.M. Johnston (T)]

Hybanthus mexicanus Gingins

VITACEAE

Cissus mexicana de Candolle [*C. mayoensis* Gentry]

Cissus trifoliata (Linnaeus) Linnaeus

Cissus verticillata (Linnaeus) Nicolson & C.E. Jarvis [*C. sicyoides* Linnaeus. *Viscum verticillatum* Linnaeus]

XIMENIACEAE

Ximения glauca (DeFilipps) Bentouil [*X. parviflora* Bentham var. *glauca* DeFilipps]

ZYGOPHYLLACEAE

Fagonia barclayana (Bentham) Rydberg [sensu Wiggins 1964. *F. californica* Bentham var. *barclayana* Bentham, but not as to type]

Guaiaacum coulteri A. Gray [*G. palmeri* Vail (T)]

Kallstroemia californica (S. Watson) Vail

Kallstroemia grandiflora Torrey ex A. Gray

Larrea tridentata (de Candolle) Coville var. **tridentata** [*L. divaricata* Cavanilles subsp. *tridentata* (de Candolle) Felger & C.H. Lowe]

***Tribulus terrestris** Linnaeus

Viscainoa geniculata (Kellogg) Greene var. **geniculata**

MONOCOTS**ALISMATAACEAE**

Echinodorus berteroi (Sprengel) Fassett [*Echinodorus rostratus* (Nuttall) Engelman]

Limnocharis flava (Linnaeus) Buchenau [*Alisma flava* Linnaeus]

Sagittaria longiloba Engelm ex J.G. Smith
Sagittaria montevidensis Chamisso & Schlechtendal subsp.
calycina (Engelmann) Bogin

AMARYLLIDACEAE

Hymenocallis sonorensis Standley
Nothoscordum bivalve (Linnaeus) Britton

ARACEAE (includes Lemnaceae)

Lemna aequinoctialis Welwitsch
Lemna sp.

ARECACEAE

Brahea brandegeei (Purpus) H.E. Moore [*Brahea clara* (L.H. Bailey) Espejo & López-Ferrari. *B. elegans* (Franceschi ex Beccari) H.E. Moore. *B. roezlii* sensu Wiggins, not *B. roezlii* Linden. *Erythea brandegeei* Purpus. *E. clara* L.H. Bailey (T). *E. elegans* Franceschi ex Beccari]

***Phoenix dactylifera* Linnaeus

Sabal uresana Trelease

Washingtonia robusta H. Wendland [*W. sonorae* S. Watson (T)]

ASPARAGACEAE (includes Agavaceae and Nolinaceae)

Agave angustifolia Haworth var. *angustifolia* [*A. oregonii* I.M. Johnston (T). *A. pacifica* Trelease. *A. yaquiana* Trelease]

Agave angustifolia × *A. colorata*

Agave chrysoglossa I.M. Johnston (T)

Agave colorata Gentry

Agave felgeri Gentry (T)

Dasyliirion gentryi Bogler

ASPHODELACEAE

***Aloe vera* (Linnaeus) Burman f.

BROMELIACEAE

Hechtia montana Brandegee

Tillandsia exserta Fernald

Tillandsia recurvata Linnaeus

COMMELINACEAE

Commelina erecta Linnaeus

CYMODOCEACEAE

Halodule wrightii Ascherson

CYPERACEAE

Bolboschoenus maritimus (Linnaeus) Palla [*Scirpus maritimus* Linnaeus]

Cyperus articulatus Linnaeus

Cyperus canus J. Presl & C. Presl

Cyperus dentoniae G. Tucker [*Mariscus pubescens* J. Presl & C. Presl]

Cyperus elegans Linnaeus

Cyperus entrerianus Boeckeler

Cyperus esculentus Linnaeus var. *leptostachyus* Boeckeler

Cyperus flavicomus Michaux [*C. albomarginatus* (Martius & Schrader ex Nees) Steudel]

**Cyperus iria* Linnaeus

Cyperus ochraceus Vahl

Cyperus odoratus Linnaeus [*C. ferax* Richard. *Mariscus ferax* (Richard) C.B. Clarke. *Torulinium odoratum* (Linnaeus) S.S. Hooper]

**Cyperus rotundus* Linnaeus

Cyperus semiochraceus Boeckeler

Cyperus squarrosus Linnaeus [*C. aristatus* Rottböll. *Mariscus squarrosus* (Linnaeus) C.B. Clarke]

Cyperus subsquarrosus (Muhlenberg) Batters [*Hemicarpha micrantha* (Vahl) Pax. *Lipocarpa micrantha* (Vahl) G.C. Tucker]

Eleocharis geniculata (Linnaeus) Roemer & Schultes [*E. capitata* R. Brown. *E. caribaea* (Rottböll) S.F. Blake]

Eleocharis macrostachya Britton

Eleocharis montana (Kunth) Roemer & Schultes [*E. montana* var. *nodulosa* (Roth) Svenson]

Eleocharis montevidensis Kunth

Fimbristylis complanata (Retzius) Link

Fimbristylis dichotoma (Linnaeus) Vahl [*F. annua* (Allioni) Roemer & Schultes. *F. laxa* Vahl]

Fuirena simplex Vahl var. *simplex*

Schoenoplectus americanus (Persoon) Volkart ex Schinz & R. Keller [*Scirpus americanus* Persoon. *S. olneyi* A. Gray of western authors]

JUNCACEAE

Juncus bufonius Linnaeus

POACEAE

Andropogon glomeratus (Walter) Britton, Sterns & Poggenburg var. *scabriglumis* C.S. Campbell

Aristida adscensionis Linnaeus-

Aristida californica Thurber var. *californica*

Aristida divaricata Humboldt & Bonpland ex Willdenow [*A. palmeri* Vasey]

Aristida ternipes Cavanilles var. *gentilis* (Henrard) Allred [*A. gentilis* Henrard. *A. hamulosa* Henrard. *A. ternipes* var. *hamulosa* (Henrard) Trent]

Aristida ternipes var. *ternipes*

**Arundo donax* Linnaeus

**Avena fatua* Linnaeus

Bothriochloa barbinodis (Lagasca) Herter

Bouteloua aristidoides (Kunth) Grisebach [*B. aristidoides* var. *arizonica* M.E. Jones]

Bouteloua barbata Lagasca var. *barbata* [*B. arenosa* Vasey (T). *B. barbata* var. *sonorae* (Griffiths) Gould. *B. sonorae* Griffiths (T)]

Bouteloua diversispicula J.T. Columbus [*Catbestecum brevifolium* Swallen]

Bouteloua parryi (E. Fournier) Griffiths [*B. gentryi* Gould]

Bouteloua repens (Kunth) Scribner & Merrill [*B. filiformis* (E. Fournier) Griffiths]

Brachiaria reptans, see *Urochloa reptans*

**Cenchrus ciliaris* Linnaeus [*Pennisetum ciliare* (Linnaeus) Link]

- ***Cenchrus echinatus** Linnaeus [*C. insularis* Scribner]
 ***Cenchrus longispinus** (Hackel) Fernald
 ***Cenchrus myosuroides** Kunth var. **mysuroides**
Cenchrus palmeri Vasey (T)
 ***Cenchrus setaceus** (Forsskål) Morrone [*Pennisetum ruppelii* Steudel. *P. setaceum* (Forsskål) Chiovenda]
 ***Cenchrus spinifex** Cavanilles
 ***Chloris barbata** Swartz [*C. inflata* Link]
Chloris crinita, see *Leptochloa crinita*
Chloris virgata Swartz
Cottea pappophoroides Kunth
 ***Cynodon dactylon** (Linnaeus) Persoon var. **dactylon**
 ***Dactyloctenium aegyptium** (Linnaeus) Willdenow
 ***Digitaria bicornis** (Lamarck) Roemer & Schultes
Digitaria californica (Bentham) Henrard var. **californica** [*Trichachne californica* (Bentham) Chase]
 ***Digitaria ciliaris** (Retzius) Koeler [*D. adscendens* (Kunth) Henrard. *D. sanguinalis* (Linnaeus) Scopoli var. *ciliaris* (Retzius) Parlatore]
Digitaria insularis (Linnaeus) Mez ex Ekman [*Trichachne insularis* (Linnaeus) Nees]
Dinebra panicea (Retzius) P.M. Peterson & N. Snow subsp. **brachiata** (Steudel) P.M. Peterson & N. Snow [*Leptochloa brachiata* Steudel. *L. filiformis* (Persoon) P. Beauvois. *L. panicea* (Retzius) Ohwi subsp. *brachiata* (Steudel) N. Snow]
 ***Dinebra panicoides** (J. Presl) P.M. Peterson & N. Snow [*Leptochloa panicoides* (J. Presl) Hitchcock]
Dinebra viscida (Scribner) P.M. Peterson & N. Snow [*Leptochloa viscida* (Scribner) Beal]
Diplachne fusca (Linnaeus) P. Beauvois ex Roemer & Schultes subsp. **fascicularis** (Lamarck) P.M. Peterson & N. Snow [*Leptochloa fusca* (Linnaeus) Kunth subsp. *fascicularis* (Lamarck) N. Snow]
Diplachne fusca subsp. **uninervia** (J. Presl) P.M. Peterson & N. Snow [*Leptochloa fusca* subsp. *uninervia* (J. Presl) N. Snow. *L. uninervia* (J. Presl) Hitchcock & Chase]
Disakisperma dubium (Kunth) P.M. Peterson & N. Snow [*Leptochloa dubia* (Kunth) Nees]
Distichlis littoralis (Engelmann) H.L. Bell & Columbus [*Monanthochloa littoralis* Engelmann]
Distichlis spicata (Linnaeus) Greene [*D. stricta* (Torrey) Rydberg]
 ***Echinochloa colona** (Linnaeus) Link var. **colona**
 ***Echinochloa crus-galli** (Linnaeus) P. Beauvois var. **crus-galli** [*E. crus-galli* var. *mitis* (Pursh) Peterman]
Echinochloa crus-pavonis (Kunth) Schultes var. **macera** (Wiegand) Gould
Echinochloa muricata (P. Beauvois) Fernald var. **microstachya** Wiegand
 ***Eleusine indica** (Linnaeus) C.F. Gaertner
Enteropogon chlorideus (J. Presl) Clayton [*Chloris brandegeei* (Vasey) Swallen. *C. chloridea* (J. Presl) Hitchcock. *Gouinia brandegeei* (Vasey) Hitchcock]
 ***Eragrostis barrelieri** Daveau
 ***Eragrostis cilianensis** (Allioni) Vignolo-Lutati ex Janchen
Eragrostis pectinacea (Michaux) Nees var. **pectinacea** [*E. pectinacea* var. *miserrima* (E. Fournier) Reeder]
 ***Eragrostis pilosa** (Linnaeus) P. Beauvois var. **pilosa**
Eragrostis spicata Vasey
Eriochloa acuminata (J. Presl) Kunth var. **acuminata** [*E. acuminata* var. *minor* (Vasey) R.B. Shaw. *E. lemmonii* Vasey & Scribner var. *gracilis* (E. Fournier) Gould]
Eriochloa aristata Vasey var. **aristata**
Heteropogon contortus (Linnaeus) P. Beauvois ex Roemer & Schultes
Hilaria belangeri (Steudel) Nash [*H. belangeri* var. *longifolia* (Vasey) Hitchcock. *H. cenchroides* Kunth var. *ciliata* Scribner. *H. cenchroides* var. *longifolia* Vasey (T). *H. ciliata* (Scribner) Nash]
Jouvea pilosa (J. Presl) Scribner
Lasiacis ruscifolia (Kunth) Hitchcock var. **ruscifolia**
Leptochloa crinita (Lagasca) P.M. Peterson & N. Snow [*Chloris crinita* Lagasca. *Trichloris crinita* (Lagasca) Parodi. *T. mendocina* (Philippe) Kurtz]
Leptochloa dubia, see *Disakisperma dubium*
Leptochloa fusca, see *Diplachne fusca*
Leptochloa panicea, see *Dinebra panicea*
 **Leptochloa panicoides*, see *Dinebra panicoides*
Leptochloa viscida, see *Dinebra viscida*
 ***Lolium perenne** Linnaeus [*Festuca perennis* (Linnaeus) Columbus & J.P. Smith]
Luziola gracillima Prodoehl
 ***Melinis repens** (Willdenow) Zizka subsp. **repens** [*Rhynchelytrum repens* (Willdenow) C.E. Hubbard. *R. roseum* (Nees) Stapf & C.E. Hubbard]
Monanthochloa littoralis, see *Distichlis littoralis*
Muhlenbergia microsperma (de Candolle) Trinius
Muhlenbergia rigens (Bentham) Hitchcock
Panicum alatum Zuloaga & Morrone var. **alatum**
Panicum alatum var. **minus** (Andersson) Zuloaga & Morrone [*P. hirticaule* var. *minus* Andersson]
Panicum hians, see *Steinichisma hians*
Panicum hirticaule J. Presl var. **hirticaule** [*P. hirticaule* var. *miliaceum* (Vasey) Beetle. *P. hirticaule* var. *pampinosum* (Hitchcock & Chase) Beetle. *P. hirticaule* subsp. *sonorum* (Beal) Freckmann & Lelong. *P. pampinosum* Hitchcock & Chase. *P. sonorum* Beal]
Panicum hirticaule var. **stramineum** (Hitchcock & Chase) Beetle [*P. capillare* Linnaeus var. *stramineum* (Hitchcock & Chase) Gould. *P. stramineum* Hitchcock & Chase (T)]
Pappophorum philippianum Parodi
Paspalidium geminatum, see *Setaria geminata*
Paspalum distichum Linnaeus
Paspalum hartwegianum E. Fournier
Paspalum langei (E. Fournier) Nash
 **Pennisetum ciliare*, see *Cenchrus ciliaris*
 **Pennisetum setaceum*, see *Cenchrus setaceus*
Phragmites australis (Cavanilles) Trinius ex Steudel subsp. **berlandieri** (E. Fournier) Saltonstall & Hauber [*P. communis* Trinius]

**Poa annua* Linnaeus

Sporobolus airoides (Torrey) Torrey subsp. *airoides*

Sporobolus contractus Hitchcock

Sporobolus coromandelianus (Retzius) Kunth [*S. patens* Swallen. *S. pulvinatus* Swallen. *S. pyramidatus* (Lamarck) Hitchcock]

Sporobolus cryptandrus (Torrey) A. Gray

Sporobolus flexuosus (Thurber ex Vasey) Rydberg [*S. cryptandrus* var. *flexuosus* Thurber ex Vasey]

Sporobolus virginicus (Linnaeus) Kunth

Steinchisma hians (Elliott) Nash [*Panicum hians* Elliott]

***Stenotaphrum secundatum* (Walter) Kuntze

Trichloris crinita, see *Leptochloa crinita*

Tripsacum lanceolatum Ruprecht ex E. Fournier

***Triticum aestivum* Linnaeus

Urochloa arizonica (Scribner & Merrill) Morrone & Zuloaga

[*Brachiaria arizonica* (Scribner & Merrill) S.T. Blake. *Panicum arizonicum* Scribner & Merrill. *P. dissitiflorum* Vasey (T)]

Urochloa fusca (Swartz) B.F. Hansen & Wunderlin [*Brachiaria fasciculata* (Swartz) Parodi]

Urochloa reptans (Linnaeus) Stapf [*Brachiaria reptans* (Linnaeus) C.A. Gardner & C.E. Hubbard]

PONTERIDIACEAE

**Eichhornia crassipes* (C. Martius) Solms-Laubach [*Pontederia crassipes* C. Martius]

Heteranthera limosa (Swartz) Willdenow

POTAMOGETONACEAE

Zannichellia palustris Linnaeus

RUPPIACEAE

Ruppia maritima Linnaeus

TYPHACEAE

Typha domingensis Persoon

ZOSTERACEAE

Zostera marina Linnaeus var. *atam* T.W.H. Backman

TAXA DOUBTFUL AND EXCLUDED FROM THE GUAYMAS REGION FLORA

PTERIDACEAE

Notobolaea californica de Candolle [*Cheilantbes deserti* Mickel]

ASTERACEAE

Malperia tenuis S. Watson

FABACEAE

Tephrosia palmeri S. Watson

Vacbellia pennatula (Schlechtendal & Chamisso) Seigler & Ebinger
[*Acacia pennatula* (Schlechtendal & Chamisso) Bentham]

MALVACEAE

Horsfordia rotundifolia S. Watson

RUBIACEAE

Randia echinocarpa de Candolle

POACEAE

Enneapogon desvauxii P. Beauvois

Munroa pulchella (Kunth) L.D. Amarilla [*Dasyochloa pulchella* (Kunth) Willdenow ex Rydberg]

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