

Desert Plants

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Corallorrhiza striata var. *vreelandii*
Photo: James T. Verrier

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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 multi-digitata*, 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 I. Taxa endemic to the Guaymas region

| | |
|--|---|
| APOCYNACEAE | <i>Mammillaria tayloriorum</i> |
| <i>Mandevilla nacapulensis</i> | CONVOLVULACEAE |
| ASTERACEAE | <i>Ipomoea seaania</i> |
| <i>Coreocarpus sanpedroensis</i> | EUPHORBIACEAE |
| <i>Coreocarpus sonoranus</i> var. <i>libranus</i> | <i>Euphorbia pediculifera</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 boollii</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 (T) 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* [*Notholaena 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 Wooton & 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
[*Carlowrightia sinaloensis* Leonard & Gentry]

Avicennia germinans (Linnaeus) Linnaeus

Carlowrightia arizonica A. Gray

Carlowrightia pectinata Brandegee

Dicliptera resupinata (Vahl) de Jussieu

Elytraria imbricata (Vahl) Persoon

Henrya insularis Nees ex Benthams

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

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

Justicia californica (Benthams) D.N. Gibson

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

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

Justicia sonorae 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 sonorae* S. Watson (T)].
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) Benthams ex S. Watson

Amaranthus obcordatus (A. Gray) Standley

Amaranthus palmeri S. Watson

Amaranthus watsonii Standley (T)

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

Atriplex barclayana (Benthams) 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. *anthelminticum*
(Linnaeus) A. Gray]
Froelichia interrupta (Linnaeus) Moquin var. *alata* (S. Watson)
R.A. McCauley
Gomphrena sonorae Torrey
Iresine alternifolia S. Watson (T)
Iresine latifolia (M. Martens & Galeotti) Bentham & Hooke f.
[*I. calea* (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. moquinii* (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. Delaroche

APOCYNACEAE

***Asclepias curassavica** Linnaeus
Asclepias leptopus I.M. Johnston (T)
Asclepias subulata Decaisne
***Cryptostegia grandiflora** R. Brown
Dictyanthus altatensis (Brandegee) W.D. Stevens [*Matelea*
altatensis (Brandegee) 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) Shinners. *Metastelma albiflorum* S. Watson (T), not Grise-
bach. *M. watsonianum* Standley (T)]
Metastelma californicum Bentham
****Nerium oleander** Linnaeus
Plumeria rubra Linnaeus [*P. acutifolia* Poiret]
Polystemma cordifolium (A. Gray) McDonnell & Fishbein
[*Matelea cordifolia* (A. Gray) Woodson. *Rothrockia cordifolia* A.
Gray]
Vallesia glabra (Cavanilles) Link var. *glabra*
Vallesia laciniata Brandegee [*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 (Brandegee) E.E. Schilling & Panero
[*Alvordia glomerata* Brandegee var. *glomerata*]
Ambrosia acuminata (Brandegee) 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 (Brandegee) 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 rhipilepis (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 [*Conyzza canadensis* (Linnaeus) Cronquist var. *glabrata* (A. Gray) Cronquist]
- Gamochaeta sphacelata** (Kunth) Cabrera [*Gnaphalium pedunculosum* 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** (Bentham) 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 acradenius* (Greene) S.F. Blake. *Isocoma veneta* (Kunth) Greene]
- Koanophyllum 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** Bentham [*P. deltoidea* S. Watson (T)]
- Perityle emoryi** Torrey
- Perityle microglossa** Bentham var. *microglossa*
- Perityle palmeri** S. Watson (T) [*P. leptoglossa* Harvey & A. Gray subsp. *palmeri* (S. Watson) Felger & Lowe]
- Pleurocoronis laphamoides** (Rose) R.M. King & H. Robinson [*Hofmeisteria laphamoides* Rose. *H. laphamoides* var. *pauciseta* (I.M. Johnston) S.F. Blake. *H. pluriseta* var. *panciceta* I.M. Johnston (T)]
- Pluchea salicifolia** (Miller) S.F. Blake [*P. adnata* (Humboldt & Bonpland ex Willdenow) C. Mohr. *P. subdecurrens* Cassini]
- Porophyllum gracile** Bentham
- Porophyllum pausodynum** 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 [*Dysodia 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) Bentham & Hooker f. ex A. Gray
- Verbesina felgeri** B.L. Turner (T)
- Viguiera dentata** (Cavanilles) Sprengel
- ***Xanthium strumarium** Linnaeus
- Xylothamia diffusa** (Bentham) G.L. Nesom [*Ericameria diffusa* Bentham. *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, HYDROPHYLACEAE, 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

Lycocarpa 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) Engelmann var. *elongata* McVaugh & Rzedowski [*B. confusa* (Rose) Engler, in part]

Bursera hindsiana (Bentham) Engler

Bursera laxiflora S. Watson (T)

Bursera microphylla A. Gray

CACTACEAE

Carnegiea gigantea (Engelmann) Britton & Rose

Cylindropuntia arbuscula (Engelmann) F.M. Knuth [*Opuntia arbuscula* Engelmann]

Cylindropuntia bigelovii (Engelmann) F.M. Knuth [*Opuntia bigelovii* Engelmann]

Cylindropuntia fulgida (Engelmann) Knuth var. *fulgida* [*Opuntia fulgida* Engelmann]

Cylindropuntia fulgida var. *mamillata* (Schott ex Engelmann) Backeberg [*Opuntia mamillata* A. Schott ex Engelmann]

Cylindropuntia leptocaulis (de Candolle) F.M. Knuth [*Opuntia leptocaulis* de Candolle]

Cylindropuntia leptocaulis × **C. versicolor**

Cylindropuntia versicolor (Engelmann ex J.M. Coulter) F.M. Knuth [*Opuntia versicolor* Engelmann ex J.M. Coulter]

Echinocereus leucanthus N.P. Taylor (T) [*Wilcoxia albiflora* Backeberg, not *Echinocereus albiflora* Weingart]

Echinocereus llanuraensis (Rutow) W. Blum & D. Felix (T) [*E. engelmannii* (Engelmann) 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 (Engelmann) Orcutt [*F. covillei* Britton & Rose. *F. emoryi* subsp. *covillei* (Britton & Rose) D.R. Hunt & Dimmitt]

Ferocactus herrerae J. González Ortega [*F. wislizeni* (Engelmann) Britton & Rose var. *herrerae* (J. González Ortega) N.P. Taylor]

Ferocactus tiburonensis (G.E. Lindsay) Backeberg [*F. wislizeni* (Engelmann) 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 (Engelmann) Britton & Rose var. *australis* (K. Brandegee) Borg [*L. schottii* var. *tenuis* G.E. Lindsay (T)]

Lophocereus schottii var. *schottii* [*Pachycereus schottii* (Engelmann) D.R. Hunt]

Mammillaria bocensis R.T. Craig

Mammillaria boolii G.E. Lindsay (T)

Mammillaria grahamii Engelmann subsp. *sheldonii* (Britton & Rose) D.R. Hunt [*M. inaiae* R.T. Craig (T). *M. swingeli* (Britton & Rose) Boedeker. *M. swingeli* 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 (Engelmann) Britton & Rose

- Pachycereus pringlei** (S. Watson) Britton & Rose
Peniocereus marianus (Gentry) Sánchez-Mejorada [*Wilcoxia marianus* Gentry]
Peniocereus striatus (Brandegee) F. Buxbaum [*Cereus diguetii* K. Weber. *C. striatus* Brandegee. *Neoevansia diguetii* (F.A.C. Weber) W.T. Marshall. *N. striata* (Brandegee) Sánchez-Mejorada]
Pereskiopsis porteri (Brandegee ex F.A.C. Weber) Britton & Rose [*Opuntia porteri* Brandegee ex F.A.C. Weber. *Pereskiopsis 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

CELESTRACEAE

- Maytenus phyllanthoides** Bentham var. **phyllanthoides** [*Tricerma phyllanthoides* (Bentham) 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** Engelmann
Cuscuta desmouliniana Yuncker [*C. umbellata* var. *dubia* Yuncker (T)]

- ***Cuscuta indecora** Choisy var. **indecora** [*C. decora* Choisy ex Engelmann var. *indecora* (Choisy) Engelmann. *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** Brandegee

- Cuscuta umbellata** Kunth var. **umbellata**

- Evolvulus alsinoides** (Linnaeus) Linnaeus var. **angustifolia** Torrey [*E. alsinoides* var. *acapulcensis* (Willdenow) van Ooststroom]

- 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 Ooststroom

- 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) Meissner [*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 sonorae 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 sonorae (S. Watson) Greene [*Maximowiczia insularis* Brandegee. *M. sonorae* S. Watson (T)]

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

Tumamoca macdougalii Rose [*Ibervillea macdougalii* (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 sonorae 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 Brandegee

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

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

Croton alamosanus Rose

Croton californicus Müller Argoviensis

Croton ciliatoglandulifer Ortega

Croton magdalena Millspaugh

Croton sonorae 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 Engelmann [*Chamaesyce arizonica* (Engelmann) Arthur. *Euphorbia portulana* S. Watson (T)]

Euphorbia californica Bentham

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

Euphorbia ceroderma I.M. Johnston (T)

Euphorbia cymosa Poiret [*E. colletioides* Bentham. *E. plicata* S. Watson]

Euphorbia eriantha Bentham [*Poinsettia eriantha* (Bentham) Rose & Standley]

Euphorbia florida Engelmann [*Chamaesyce florida* (Engelmann) 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 Brandegee [*Chamaesyce incerta* (Brandegee) Millspaugh]

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

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

Euphorbia magdalena Bentham [*Chamaesyce magdalena* (Bentham) Millspaugh]

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

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

Euphorbia polycarpa Bentham [*Chamaesyce polycarpa* (Bentham) 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 Engelmann ex Torrey [*Chamaesyce setiloba* (Engelmann) Millspaugh]
Euphorbia tomentulosa S. Watson [*Chamaesyce tomentulosa* (S. Watson) Millspaugh]
Euphorbia trachysperma Engelmann [*Chamaesyce trachysperma* (Engelmann) Millspaugh]
Euphorbia xanti Engelmann 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 [*Sapindum biloculare* (S. Watson) Pax. *Sebastiania bilocularis* S. Watson]
***Ricinus communis** Linnaeus
Tragia jonesii Radcliffe-Smith & Govaerts [*T. scandens* M.E. Jones (T), 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 Bentham
Calliandra eriophylla Bentham
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 (T), based on *Caesalpinia gracilis* Bentham ex Hemsley, not *C. gracilis* Miquel]
Coursetia caribaea (Jacquin) Lavin var. *caribaea*

Coursetia glandulosa A. Gray [*Pictetia microphylla* Bentham ex Hemsley (T)]
Dalea bicolor Humboldt & Bonpland ex Willdenow var. **bicolor**
Dalea mollis Bentham
Dalea pringlei A. Gray var. *multijuga* Barneby
Dalea purpusii Brandegee
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 (T). *D. wigginsii* Schubert]
Diphyesa occidentalis Rose (T)
Erythrina flabelliformis Kearney
Erythrostemon palmeri (S. Watson) E. Gagnon & G.P. Lewis [*Caesalpinia arida* (Britton & Rose) Wiggins. *C. palmeri* S. Watson (T). *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 (T)]
Indigofera jamaicensis Sprengel [*I. laevis* Rydberg (T)]
***Indigofera suffruticosa** Miller
***Leucaena leucocephala** (Lamarck) de Wit subsp. *glabrata* (Rose) S. Zárate
Lupinus arizonicus (S. Watson) S. Watson
Lysiloma candidum Brandegee
Lysiloma divaricatum (Jacquin) J.F. Macbride [*L. microphyllum* Bentham]
Lysiloma watsonii Rose [*L. microphyllum* var. *thornberi* (Britton & Rose) Isely. *L. thornberi* Britton & Rose]
Macroptilium atropurpureum (Sessé & Moçino ex de Candolle) Urban
Marina evanescens (Brandegee) Barneby [*Dalea evanescens* Brandegee. *Petalostemon evanescens* (Brandegee) Rose]
Marina parryi (Torrey & A. Gray) Barneby [*Dalea parryi* Torrey & A. Gray]
Marina vetula (Brandegee) Barneby [*Dalea vetula* Brandegee]
Mariosousa russelliana (Britton & Rose) Seigler & Ebinger [*Acacia coulteri* Bentham, in part. *A. russelliana* (Britton & Rose) Lundell]
Mariosousa willardiana (Rose) Seigler & Ebinger [*Acacia willardiana* Rose (T). *Prosopis heterophylla* Bentham (T)]
***Medicago polymorpha** Linnaeus
***Melilotus indicus** (Linnaeus) Allioni
Mimosa aculeaticarpa Ortega var. *biuncifera* (Bentham) Barneby [*M. biuncifera* Bentham]
Mimosa distachya Cavanilles var. *laxiflora* (Bentham) Barneby [*M. laxiflora* Bentham]
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]
Psorothamnus emoryi (A. Gray) Rydberg var. *emoryi* [*Dalea emoryi* A. Gray]
Rhynchosia minima (Linnaeus) de Candolle
Rhynchosia precatoria (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 (Brandegee) Seigler & Ebinger [*Acacia californica* Brandegee. *A. pringlei* Rose subsp. *californica* (Brandegee) 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 macdougalii Nash
Fouquieria splendens Engelmann subsp. *splendens*

GENTIANACEAE

- Zeltnera nudicaulis** (Engelmann) G. Mansion [*Centaurium nudicanle* (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)
Myriopus volubilis (Linnaeus) Small [*Tournefortia volubilis* Linnaeus]
Tournefortia hartwegiana Steudel

HYDROPHYLACEAE

- 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 Brandegee

KOEBERLINIACEAE

- Koeberlinia spinosa** Zuccarini var. *tenuispina* Kearney & Peebles

KRAMERIACEAE

- Krameria erecta** Willdenow ex Schultes [*K. parrifolia* Bentham]
Krameria sonoreae 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 Brandegee
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 Bentham
Mentzelia aspera Linnaeus

LORANTHACEAE

- Psittacanthus calyculatus** (de Candolle) G. Don
Psittacanthus sonorae (S. Watson) Kuijt [*Loranthus sonorae* S. Watson (T). *Phrygilanthus sonorae* (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** (Moçino & Sessé ex de Candolle) D.M. Johnson [*Mascagnia macroptera* (Moçino & Sessé ex de Candolle) Niedenzu]
Cottsia californica (Bentham) W.R. Anderson & C. Davis [*C. scandens* Dubard & Dop (T). *Janusia californica* Bentham]
Cottsia gracilis (A. Gray) W.R. Anderson & C. Davis [*Janusia gracilis* A. Gray]
Cottsia linearis (Wiggins) W.R. Anderson & C. Davis [*Janusia linearis* Wiggins]
Echinopterys eglandulosa (A. de Jussieu) Small [*Bunchosia eglandulosa* A. de Jussieu]
Galphimia angustifolia Bentham [*G. angustifolia* var. *oblongifolia* (A. Gray) S. Watson (T). *Thryallis angustifolia* (Bentham) Kuntze]
Malpighia watsonii Rose [*Bunchosia parvifolia* S. Watson (T), not *Malpighia parvifolia* A. de Jussieu. *Malpighia sonorae* M.E. Jones (T)]

MALVACEAE (includes Bombacaceae, Sterculiaceae, and Tiliaceae)

- Abutilon abutiloides** (Jacquin) Garcke ex Hochreutiner [*A. sebum* S. Watson (T)]
Abutilon californicum Bentham
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 revertum 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 sonorae 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 Bentham
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 sonorae* Wiggins]
Sida abutilifolia 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** (Bentham) Decaisne
Proboscidea parviflora (Wooton) Wooton & Standley subsp. *sinaloensis* (Van Eseltine) Bretting [*P. sinaloensis* Van Eseltine]

MENISPERMACEAE

- Cocculus diversifolius** de Candolle

MOLLUGINACEAE

- ***Glinus lotoides** Linnaeus
*b*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 Benthem. *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 SCHOEPIACEAE and XIMENIACEAE

OLEACEAE

Forestiera angustifolia Torrey

Menodora scabra A. Gray [*M. scoparia* Engelmann 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 gracilenta 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

Andracne microphylla (Lamarck) Baillon [*A. ciliatoglandulosa* (Millspaugh) Croizat]

Phyllanthus evanescens Brandegee

PHYTOLACCACEAE, *Rivina*, see PETIVERIACEAE

PLANTAGINACEAE (includes Scrophulariaceae, in part)

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

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

Mecardonia procumbens (Miller) Small [*Baopa procumbens* (Miller) Greenman. *Mecardonia vandelliooides* (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

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

Sairocarpus 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 (Brandegee) B.L. Turner [*Conobea polystachya* (Brandegee) Minod. *Stemodia polystachya* Brandegee]

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

POLYGALACEAE

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

POLYGONACEAE

Antigonon leptopus Hooker & Arnott

Coccocoba goldmanii Standley

***Persicaria cf. maculosa** Gray

***Polygonum argyrocoleon** Steudel ex Kunze

Rumex inconspicuus Rechinger f.

PORTULACACEAE

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

Portulaca johnstonii Henrickson

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

Portulaca suffrutescens Engelmann

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

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 & Moçiño) 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 hycoides* (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 [*Coutarea 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. diguetianum* 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]

SCHOEPFIAEAE

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*** Bernhardi***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** (Brandegee) 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]**STEGNOSPERMATAEAE*****Stegnosperma halimifolium*** Bentham [*S. watsonii* DJ. 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 menthaefolia*** Bentham [*V. officinalis* Linnaeus subsp. *halei*
(Small) S. Barber. *V. halei* Small]**VIOLACEAE*****Hybanthus fruticulosus*** (Bentham) I.M. Johnston [*H. fruticulosus*
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*****Ximenia 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]***Guaiacum 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****ALISMATACEAE*****Echinodorus berteroii*** (Sprengel) Fassett [*Echinodorus rostratus*
(Nuttall) Engelmann]***Limnocharis flava*** (Linnaeus) Buchenau [*Alisma flava* Linnaeus]

Sagittaria longiloba Engelmann 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. ostenii* 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)

Dasyllion gentryi Bogler

ASPHODELACEAE

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

BROMELIACEAE

Hechtia montana Brandegee

Tillandsia exserta Fernald

Tillandsia recurvata Linnaeus

COMMELINACEAE

Commelina erecta Linnaeus

CYMOCEACEAE

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* Rottboll. *Mariscus squarrosus* (Linnaeus) C.B. Clarke]

Cyperus subsquarrosum (Muhlenberg) Bauters [*Hemicarpha micrantha* (Vahl) Pax. *Lipocarpha micrantha* (Vahl) G.C. Tucker]

Eleocharis geniculata (Linnaeus) Roemer & Schultes [*E. capitata* R. Brown. *E. caribaea* (Rottbøll) 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 [*Cathestecum 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* Scribn.
***Cenchrus longispinus** (Hackel) Fernald
***Cenchrus myosuroides** Kunth var. **myosuroides**
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. ascendens* (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 [*Lepto-*
chloa panicoides (J. Presl) Hitchcock]
Dinebra viscosa (Scribner) P.M. Peterson & N. Snow [*Leptochloa*
viscosa (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 [*Lepto-*
chloa dubia (Kunth) Nees]
Distichlis littoralis (Engelmann) H.L. Bell & Columbus [*Monan-*
thochloe 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. **macra**
(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]
Monanthochloe 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 *Steinchisma 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]

PONTEDERIACEAE

- ***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

- Notholaena californica* de Candolle [*Cheilanthes deserti* Mickel]

ASTERACEAE

- Malperia tenuis* S. Watson

FABACEAE

- Tephrosia palmeri* S. Watson
Vachellia 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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