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**Scientific Name:** *Selenia grandis* R. Martin

**Synonyms:** None.

**Common Name:** large selenia

**Global/State Ranks:** G3S3

**Federal Status:** None.

**Global Range:** Endemic to South Texas.

**State Range:** Cameron, Dimmit, Hidalgo, La Salle, McMullen, Nueces and San Patricio counties (Martin, 1940; TAES, 1998; TEX-LL, 2003).

**Description** (adapted from Correll & Johnston, 1970): Winter annual with mostly trailing or prostrate stems. **Leaves** up to 2 dm long but usually closer to 1 dm in length, dark green, bipinnate, the ultimate segments several mm wide. **Flowers** on pedicels subtended by leafy bracts, with four sepals and four bright orange-yellow or yellow-gold petals, the apex of each petal bearing a small notch. **Fruit** a thick, fleshy silique about 15 mm long and 1 cm wide.

**Similar Species:** None; no other *Selenia* species occurs within the range of *Selenia grandis*.

**Habitat:** Seasonally wet clayey soils in open areas, often on margins of fields on river terraces.

**Phenology:** Flowering February-March and disappearing shortly thereafter.

**Comments:**

**Illustrations:** None known.

**Selected References:**

Martin, R. F. 1940. A review of the cruciferous genus *Selenia*. American Midland Naturalist 23(2): 455-462.

**Scientific Name:** *Selenia jonesii* Cory

**Synonyms:** Including var. *obovata* Rollins.

**Common Name:** Jones' selenia

**Global/State Ranks:** G3S3

**Federal Status:** None.

**Global Range:** Endemic to Texas.

**State Range:** Western Edwards Plateau, with records from Crockett, Dawson, Dimmit, Glasscock, Mitchell, Nolan, Reagan and Scurry counties.

**Description** (adapted from Correll & Johnston, 1970): Winter annual with several decumbent stems from base, up to 3 dm (12 inches) long. **Leaves** alternate, bipinnate, up to 10 cm (4 inches) long, the ultimate lobes small. **Flowers** in terminal racemes; petals 4, yellow, small. **Fruit** an inflated globose pod (silique) up to 12 mm (1/2 inch) in diameter, on a stalk to 3 cm (1 1/4 inches) long or less.

**Similar Species:** The only other *Selenia* species that occurs within the range of this species is *Selenia dissecta*. In that species, the fruit is somewhat flattened and tapered at either end, rather than inflated and rounded at both ends as in *Selenia jonesii*.

**Habitat:** Moist clayey soils of swales and buffalo wallows on high prairies and plateaus (Correll & Johnston, 1970).

**Phenology:** Flowering March-April (Correll & Johnston, 1970) and presumably quickly vanishing from the landscape.

**Comments:**

**Illustrations:** A line drawing appears in Mahler (1981a).

**Selected References:**

- Correll, D. S. and M. C. Johnston. 1970. Manual of the vascular plants of Texas. Texas Research Foundation, Renner. 1881 pp.
- Cory, V. L. 1931. A new *Selenia* from the Edwards Plateau. *Rhodora* 33: 142-144.
- Mahler, W. F. 1981a. Field studies on Texas endemics. *Sida* 9(2): 176-181.
- Mahler, W. F. 1981b. Status report [on *Selenia jonesii*]. Report prepared for U. S. Fish & Wildlife Service, Albuquerque.
- Martin, R. F. 1940. A review of the cruciferous genus *Selenia*. *American Midland Naturalist* 23(2): 455-462.

**Scientific Name:** *Seymeria texana* (Gray) Penn.

**Synonyms:**

**Common Name:** Texas seymeria, Texas blacksennea

**Global/State Ranks:** G3S3

**Federal Status:** None.

**Global Range:** Endemic to the Edwards Plateau of central Texas

**State Range:** Bandera, Bexar, Comal, Gillespie, Hays, Kendall, Kerr, Kimble, Travis, Uvalde and Val Verde counties (Turner, 1982; TEX-LL, 1998; BRIT/SMU, 2001).

**Description** (adapted from Correll & Johnston, 1970): Glandular-pubescent annual with stems to 3 feet tall, sometimes profusely branched and tumbleweed-like. **Leaves** alternate, 1-2 inches long, lanceolate in outline and bipinnatifid, with narrow ultimate segments. **Flowers** on short pedicels in upper leaf axils; corolla yellow, five-lobed, rather flat, about 1/2 inch wide. **Fruit** an ovoid capsule less than 1/2 inch long.

**Similar Species:** None. No other *Seymeria* species occur within the range of *Seymeria texana*.

**Habitat:** Primarily in grassy openings in juniper-oak woodlands on rocky limestone slopes and ledges; sometimes on shaded rock outcrops.

**Phenology:** Flowering August-October.

**Comments:**

**Illustrations:** None known.

**Selected References:**

- Correll, D. S. and M. C. Johnston. 1970. Manual of the vascular plants of Texas. Texas Research Foundation, Renner. 1881 pp.
- Pennell, F. W. 1925. The genus *Alfedia*: a taxonomic study in evolution. Proceedings of the Academy of Natural Sciences [in] Philadelphia 77: 335-373.
- Turner, B. L. 1982. Revisional treatment of Mexican species of *Seymeria* (Scrophulariaceae). Phytologia 51(6): 403-422.

**Scientific Name:** *Spigelia texana* (T. & G.) A. DC.

**Synonyms:** *Coelostylis texana* T. & G.

**Common Name:** Texas pinkroot

**Global/State Ranks:** G3S3

**Federal Status:** None.

**Global Range:** Endemic to Texas.

**State Range:** Austin, Brazoria, Burleson, Colorado, Dewitt, Fort Bend, Gonzales, Lee, Matagorda, Polk, Victoria, Waller and Washington counties (Henrickson, 1996; TAMU, 1998). Reported by Turner et al. (2003) from Bandera County, but no voucher specimen for this report has been located. A specimen from Val Verde County reported on the TEX-LL website (Gould et al., 108) is certainly misidentified.

**Description** (adapted from Correll & Johnston, 1970): Perennial forb; stems 1 to several, glabrous, to 3 dm tall; leaves opposite, simple, ovate to elliptic-lanceolate, 2.5-5 cm long and up to 2 cm wide, flowers terminal and in axils of leaves; sepals 5, setaceous, ca. 5 mm long; corolla salverform, white, 5-lobed, ca. 12 mm long; fruit a 2-celled pod 3-4 mm long.

**Similar Species:** None.

**Habitat:** Forests and woodlands on loamy soils; particularly frequent in live oak - pecan forests on floodplains of the Brazos River in the Columbia Bottomlands region.

**Phenology:** Flowering at several times during the growing season, perhaps in response to rainfall; specimens have been collected from April through November.

**Comments:** Henrickson (1996) submerged this taxon within *Spigelia loganioides* (T. & G.) A. DC., but Gould & Jansen (1999) resurrected it.

**Illustrations:** Line drawings of *Spigelia loganioides* in Henrickson (1996) will serve to identify *Spigelia texana*.

**Type specimen:** [no county specified:] Texas, *T. Drummond 321* (holotype NY; isotypes GH).

**Selected References:**

- Correll, D. S. and M. C. Johnston. 1970. Manual of the vascular plants of Texas. Texas Research Foundation, Renner. 1881 pp.
- Gould, K. R. and R. K. Jansen. 1999. Taxonomy and phylogeny of a Gulf Coast disjunct group of *Spigelia* (Loganiaceae sensu lato). *Lundellia* 2: 1-13.
- Henrickson, J. 1996. Notes on *Spigelia* (Loganiaceae). *Sida* 17(1): 89-103.
- Turner, B. L., H. Nichols, G. Denny and O. Doron. 2003. Atlas of the vascular plants of Texas. Two volumes. *Sida Botanical Miscellany*, Botanical Research Institute of Texas, Fort Worth. 888 pp.

**Scientific Name:** *Styrax platanifolius* Engelm. subsp. *platanifolius*

**Synonyms:** *Styrax platanifolius* Engelm. var. *platanifolius*

**Common Name:** smooth sycamore-leaf snowbells

**Global/State Ranks:** G3T3S3

**Federal Status:** None.

**Global Range:** Endemic to Texas.

**State Range:** Mostly on the eastern Edwards Plateau and adjacent Lampasas Cutplain, but also in the Central Mineral Basin (Llano Uplift). Fritsch (1997) cited specimens from Blanco, Burnet, Caldwell, Edwards, Kendall, Kerr, Kimble, Kinney, Llano, Real and Travis counties; also reported from Bexar, Comal, Gillespie and Hays counties.

**Description:** Large deciduous shrub or small tree up to 10-12 feet tall. **Leaves** simple, alternate, generally ovate in outline, 2-4 inches long and almost as wide, without lobes or more often with a few shallow lobes in the upper half, vaguely reminiscent of those of sycamore (*Platanus*) species. **Flowers** in small clusters among the leaves, pendant and bell-shaped, with 5 narrowly elliptic, bright white petals almost 1 inch long and a central cluster of golden-yellow stamens. **Fruit** a somewhat globose capsule about 1/2 inch long.

**Similar Species:** hairy sycamore-leaf snowbells (*Styrax platanifolius* Engelm. subsp. *stellatus*) is essentially identical except that the lower surface of its leaves are conspicuously covered with stellate hairs. It largely replaces subsp. *platanifolius* in western and southern parts of the Edwards Plateau; Fritsch (1997) cited specimens from Bandera, Kendall, Real, and Uvalde counties.

**Habitat:** Usually in oak-juniper woodlands on steep rocky banks and ledges along intermittent or perennial streams, rarely far from some reliable source of moisture, usually just out of reach of browsing animals.

**Phenology:** Flowering April-May but readily identified throughout the growing season by foliage alone.

**Comments:** Highly preferred by native browsers as well as livestock and other exotics.

**Illustrations:** A line drawing by Nancy McGowan first appeared in Lynch (1981) and is reproduced in Diggs, Lipscomb & O'Kennon (1999); other drawings are provided in Gonsoulin (1974) and Vines (1960). A color photograph appears in Enquist (1987).

**Selected References:**

- Correll, D. S. and M. C. Johnston. 1970. Manual of the vascular plants of Texas. Texas Research Foundation, Renner. 1881 pp.
- Cory, V. L. 1943. The genus *Styrax* in central and western Texas. *Madroño* 7: 110-115.
- Enquist, M. 1987. Wildflowers of the Texas Hill Country. Lone Star Botanical, Austin. 275 pp.
- Fritsch, P. W. 1997. A revision of *Styrax* (Styracaceae) for western Texas, Mexico, and Mesoamerica. *Annals of the Missouri Botanical Garden* 84: 705-761.
- Gonsoulin, G. J. 1974. A revision of *Styrax* (Styracaceae) in North America, Central America, and the Caribbean. *Sida* 5: 191-258.
- Vines, R. A. 1960. Trees, shrubs and woody vines of the southwest. The University of Texas Press, Austin. 1104 pp.



**Scientific Name:** *Styrax platanifolius* Engelm. subsp. *stellatus* (Cory) P. W. Fritsch

**Synonyms:** *Styrax platanifolius* Engelm. var. *stellatus* Cory

**Common Name:** hairy sycamore-leaf snowbells

**Global/State Ranks:** G3T3S3

**Federal Status:** None.

**Global Range:** Endemic to Texas.

**State Range:** Mostly on the western and southern Edwards Plateau; Fritsch (1997) cited specimens from Bandera, Kendall, Real, and Uvalde counties.

**Description** (adapted from Correll & Johnston, 1970): Large deciduous shrub or small tree up to 10-12 feet tall. **Leaves** simple, alternate, generally ovate in outline, 2-4 inches long and almost as wide, without lobes or more often with a few shallow lobes in the upper half, vaguely reminiscent of those of sycamore (*Platanus*) species, the lower surface covered with stellate hairs. **Flowers** in small clusters among the leaves, pendant and bell-shaped, with 5 narrowly elliptic, bright white petals almost 1 inch long and a central cluster of golden-yellow stamens. **Fruit** a somewhat globose capsule about 1/2 inch long.

**Similar Species:** Smooth sycamore-leaf snowbells (*Styrax platanifolius* Engelm. subsp. *platanifolius*) is essentially identical except that the lower surface of its leaves are essentially glabrous (hairless). It largely replaces subsp. *stellatus* in the eastern part of the Edwards Plateau.

**Habitat:** Usually in oak-juniper woodlands on steep rocky banks and ledges along intermittent or perennial streams, rarely far from some reliable source of moisture, usually just out of reach of browsing animals.

**Phenology:** Flowering April-May but readily identified throughout the growing season by foliage alone.

**Comments:** Highly preferred by native browsers as well as livestock and other exotics.

**Illustrations:** Line drawing of various subspecies appear in Lynch (1981), Diggs, Lipscomb & O'Kennon (1999), Gonsoulin (1974) and Vines (1960). A color photograph (of subsp. *platanifolius*?) appears in Enquist (1987).

**Selected References:**

- Correll, D. S. and M. C. Johnston. 1970. Manual of the vascular plants of Texas. Texas Research Foundation, Renner. 1881 pp.
- Cory, V. L. 1943. The genus *Styrax* in central and western Texas. *Madroño* 7: 110-115.
- Diggs, G. M., Jr., B. L. Lipscomb and R. J. O'Kennon. 1999. Shinnery and Mahler's illustrated flora of North-central Texas. Botanical Research Institute of Texas, Ft. Worth. 1626 pp.
- Enquist, M. 1987. Wildflowers of the Texas Hill Country. Lone Star Botanical, Austin. 275 pp.
- Fritsch, P. W. 1997. A revision of *Styrax* (Styracaceae) for western Texas, Mexico, and Mesoamerica. *Annals of the Missouri Botanical Garden* 84: 705-761.
- Gonsoulin, G. J. 1974. A revision of *Styrax* (Styracaceae) in North America, Central America, and the Caribbean. *Sida* 5: 191-258.
- Vines, R. A. 1960. Trees, shrubs and woody vines of the southwest. The University of Texas Press, Austin. 1104 pp.

**Scientific Name:** *Tauschia texana* Gray

**Synonyms:** *Eulophus texanus* (Gray) Benth. & Hook. f.; *Museniopsis texana* (Gray) Coult. & Rose.

**Common Name:** Texas tauschia

**Global/State Ranks:** G3S3

**Federal Status:** None.

**Global Range:** Endemic to Texas.

**State Range:** Austin, Brazoria, Caldwell, Dewitt, Fayette, Fort Bend, Goliad, Gonzales, Grimes, Harris, Lavaca, Victoria, Waller, Washington and Wharton counties (Mathias & Constance, 1951; SBSC, 1999; TEX-LL, 2003).

**Description** (adapted from Correll & Johnston, 1970): Glabrous perennial forb of the parsley family (Apiaceae); stems trailing, to 4 dm long; leaves basal (stem leaves absent), oblong in overall outline but pinnately divided, up to 15 cm long and 4 cm wide, the ultimate segments rather broad (i.e., neither linear nor filiform); flowers in compound umbels on long leafless peduncles 1-4 dm (sic-- not cm) long; involucre absent or of a single bract; involucre or several linear to lanceolate connate bractlets; rays 5-8, unequal, 5-25 mm long; flowers rich orangish-yellow.

**Similar Species:** None. *Tauschia texana* is unique among coastal Texas members of the parsley family in having creeping stems and yellow flowers on long scapes.

**Habitat:** Deciduous forests or woodlands on loamy alluvial soils of river and stream terraces.

**Phenology:** Flowering in March and early April, usually vanishing by mid-summer.

**Comments:** Disappears under heavy grazing regimes.

**Illustrations:** Line drawings appear in Correll & Correll (1975) and Mathias & Constance (1951).

**Type specimen:** [County not specified:] Texas, *C. Wright s.n.* (NY). [Described in Boston Journal of Natural History 6: 211 (1850).]

**Selected References:**

- Correll, D. S. and H. B. Correll. 1975. Aquatic and wetland plants of southwestern United States. 2 volumes. Stanford University Press, Stanford. 1777 pp.
- Mathias, M. E. and L. Constance. 1951. Umbelliferae. Pp. 263-330 in Lundell, C. L. 1961. Flora of Texas, volume 3. Texas Research Foundation, Renner. 433 pp.

**Scientific Name:** *Tetraneuris turneri* (Parker) Parker

**Synonyms:** *Hymenoxys turneri* Parker

**Common Name:** Billie's bitterweed

**Global/State Ranks:** G3S3

**Federal Status:** None.

**Global Range:** Mostly in South Texas, with one record from Coahuila (Mcpio. Allende, Hwy 47, 0.4 mi S of El Infante, 15 May 1982, *L. J. Dorr & T. L. Atkins* 2222, TEX-LL).

**State Range:** Bee, Goliad, Karnes, Jim Wells, Live Oak and San Patricio counties (TEX-LL, 1998).

**Description** (adapted from Correll & Johnston, 1970): Herbaceous perennial of the sunflower family (Asteraceae); stems unbranched or branched only near base, long pilose-woolly in basal portion, to perhaps 20 cm tall; leaves basal or confined to the basal third of the stem, 6-15 mm wide, entire or trifid with 4-5 short lobes, densely long-pilose, lanceolate to oblanceolate to spatulate, long-tapering to base; flower heads solitary at apex of each of few stems, rather large and showy (compared to other DYC's in the region), the disk 14-22 mm wide, the phyllaries roughly 5-9 mm long; ray flowers 14-27, yellow to deep yellow; disk flowers also yellow, 3 - 4.5 mm long; achene (of both ray and disk) obturbinate, coarsely sericeous; pappus scales hyaline, 2.6-4.1 mm long.

**Similar Species:** Very much like *Tetraneuris scaposa* (*Hymenoxys scaposa*), the common perennial *Tetraneuris* to the north and west of the range of *T. turneri*; the two differ primarily in vegetative characters. In *T. turneri*, the leaf petiole is 2-6 mm broad and the leaf blade is 6-15 mm broad; in *T. scaposa*, the petiole is 0.5-1.5 mm broad and the blade is up to 14 mm wide. In *T. turneri*, the phyllaries are mostly more than 6 mm long; in *T. scaposa*, they are mostly less than 6 mm long. In *T. turneri*, the stem is densely pilose; in the various varieties of *T. scaposa*, the pubescence is generally less conspicuous.

**Habitat:** Open areas on caliche / calcareous sandstone outcrops.

**Phenology:** Flowering most predictably March-April; some plants can be expected to flower during virtually any month in response to rain or a combination of weather factors.

**Comments:**

**Illustrations:** None known. However, the similar *Tetraneuris scaposa* (*Hymenoxys scaposa*) is illustrated in any number of Texas wildflower books.

**Type specimen:** Karnes Co.: 2 mi N of Karnes City, very localized population on limestone soil along roadside, 21 Apr 1965, *B. L. Turner* 5154 (holotype at US; isotype at TEX-LL).

**Selected References:**

Correll, D. S. and M. C. Johnston. 1970. Manual of the vascular plants of Texas. Texas Research Foundation, Renner. 1881 pp.

Parker, K. F. 1970. Two new taxa in Texas *Hymenoxys* (Compositae). *Phytologia* 20(3): 192.

**Scientific Name:** *Thelesperma burridgeanum* (Regel) Blake

**Synonyms:** Sold in nurseries under the name *Cosmidium burridgeanum* (Ajilvsgi, 2002).

**Common Name:** Burrige greenthread

**Global/State Ranks:** G3S3

**Federal Status:** None.

**Global Range:** Endemic to South Texas.

**State Range:** Atascosa, Bexar, Dimmit, Frio, Karnes, La Salle, Medina, Wilson and Zavala counties (TEX-LL, 2004).

**Description** (adapted from Correll & Johnston, 1970): Annual with stems 3-7 dm tall, branching above. **Leaves** crowded in the lower half of the plant, deeply pinnately dissected into linear segments. **Flowers** in heads characteristic of sunflower family, on long peduncles, the ray florets purple-brown with yellow-orange tips, the disk florets purple brown. **Fruit** a tuberculate or warty achene 4-4.5 mm long and up to 2.5 mm wide, with narrow wings near base and a pappus of 2 retrorsely-barbed awns.

**Similar Species:** None. *Thelesperma burridgeanum* differs from other annual *Coreopsis* and *Thelesperma* species in having purple-brown (not yellow) disk florets and yellow-tipped but otherwise purple-brown ray florets.

**Habitat:** Sandy open areas.

**Phenology:** Flowering mostly April-May.

**Comments:**

**Illustrations:** A color photograph of a flowering head appears in Ajilvsgi (2002).

**Selected References:**

Ajilvsgi, G. 2002. Wildflowers of Texas. Revised edition. Shearer Publishing, Fredericksburg, Texas. 524 pp.

**Scientific Name:** *Tradescantia buckleyi* (I. M. Johnston) D. R. Hunt

**Synonyms:** *Setcreasea buckleyi* I. M. Johnston; *Setcreasea brevifolia* (Torr.) Schum. & Sydow. var. *buckleyi* (I. M. Johnston) Faruqi & Mehra. Originally described as *Tradescantia speciosa* Buckl.

**Common Name:** Buckley's spiderwort

**Global/State Ranks:** G3S3

**Federal Status:** None.

**Global Range:** South Texas to northern Tamaulipas (Faruqi & Mehra, 1970; Hunt, 1975; Faden, 2000)

**State Range:** Scattered locations in South Texas; reported by Turner et al. (2003) from Cameron, Gonzales, Hidalgo, Nueces, and Webb counties. Specimen records at TEX-LL and/or the Corpus Christi Museum verify the reports from Cameron, Nueces and Webb counties. On one of his labels of specimens from Cameron County, Robert Runyon mentioned its additional occurrence in Hidalgo County; this may be the basis of the Turner report from that county. Correll & Johnston (1970) attributed the species to Gonzales County, and Turner et al. (2003) presumably echoed that report, the basis of which should be considered suspect.

**Description** (adapted from Correll & Johnston, 1970): Herbaceous perennial with branched trailing stems to 5 dm (1 1/2 feet) long. **Leaves** alternate, simple, thickened or somewhat succulent, elliptic to ovate in outline, to about 12 cm (5 inches) long and about 35 mm (1 1/2 inches) wide. **Flowers** in small umbels in upper leaf axils; sepals 3; petals 3, 1 cm (about 1/2 inch) long, pink to white, abruptly narrowed toward base. **Fruit** a globose capsule about 3.5 mm (1/16 inch) long, usually somewhat pubescent.

**Similar Species:** The trailing stems and broad leaves serve to separate *Tradescantia buckleyi* from other *Tradescantia* species of South Texas. It is most similar to *Tradescantia brevifolia*, which in Texas occurs only in mountains of the Trans-Pecos. In that species, the ovary and fruit are glabrous; in *Tradescantia buckleyi*, the ovary and fruit are pubescent.

**Habitat:** Unclear from the few reports, but mostly in or along margins of thornscrub on clay soils near the coast. At a site along Oso Creek in Nueces County, the species formed colonies under blackbrush (*Acacia rigidula*), panalero (*Forestiera angustifolia*) and other shrubs. The single specimen from Webb County (21 Apr 1965, *J. Gonzales* 67, TEX-LL), was reportedly taken from sandy soil; vegetation was not described.

**Phenology:** Flowering (intermittently?) March through December (Jones, 1977).

**Comments:**

**Illustrations:** None known.

**Selected References:**

- Correll, D. S. and M. C. Johnston. 1970. Manual of the vascular plants of Texas. Texas Research Foundation, Renner. 1881 pp.
- Faden, R. B. 2000. Commelinaceae. Pp. 170-197 in: Flora of North America Committee. 2000. Flora of North America north of Mexico. Volume 22. Magnoliophyta: Alismatidae, Arecidae, Commelinidae (in part), and Zingiberidae. Oxford University Press, New York. 352 pp.
- Faruqi, S. A. and K. L. Mehra. 1970. Biosystematics of *Setcreasea brevifolia*. *Rhodora* 72: 264-271.

- Hunt, D. R. 1975. The reunion of *Setcreasea* and *Separothea* with *Tradescantia*. American Commelinaceae: I. Kew Bulletin 30(3): 443-458.
- Jones, F. B. 1977. Flora of the Texas Coastal Bend. Second edition. Welder Wildlife Foundation, Sinton. 262 pp.
- Turner, B. L., H. Nichols, G. Denny and O. Doron. 2003. Atlas of the vascular plants of Texas. Two volumes. Sida Botanical Miscellany, Botanical Research Institute of Texas, Fort Worth. 888 pp.

**Scientific Name:** *Tragia nigricans* Bush

**Synonyms:** None.

**Common Name:** darkstem noseburn

**Global/State Ranks:** G3S3

**Federal Status:** None.

**Global Range:** Endemic to the Edwards Plateau of central Texas.

**State Range:** Mostly along the southern edge of the Edwards Plateau, including Bandera, Comal, Kendall, Kerr, Medina, Real and Uvalde counties.

**Description** (adapted from Correll & Johnston, 1970): Largely glabrous herbaceous perennial with 1-5 stems from base, each stem about 3 dm (1 foot) tall and nearly black in color, with only a few leaves. **Leaves** simple, alternate, dark glossy green, lanceolate, sparingly but conspicuously toothed, 2-6 cm (3/4 - 2 1/2 inches) long and half to a third as wide. **Flowers** inconspicuous and essentially green. **Fruit** more conspicuous, a three-lobed capsular fruit about 1 cm (less than 1/2 inch) long and as wide.

**Similar Species:** Differs from other non-twining, erect-stemmed *Tragia* species in having a strikingly dark stem bearing few (if any) stinging hairs.

**Habitat:** Oak-juniper woodlands and openings in limestone canyons.

**Phenology:** Flowering intermittently throughout much of the growing season; this species can be detected almost year-round.

**Comments:** Most species of *Tragia* are covered with stinging hairs that irritate sensitive skin; this irritation is painful only for a brief period of time (Tull, 1987). Darkstem noseburn usually has relatively few such stinging hairs.

**Illustrations:** A line drawing appears in Miller & Webster (1967).

**Selected References:**

- Correll, D. S. and M. C. Johnston. 1970. Manual of the vascular plants of Texas. Texas Research Foundation, Renner. 1881 pp.
- Mahler, W. F. 1981. Status report [on *Tragia nigricans*]. Report prepared for U. S. Fish and Wildlife Service, Albuquerque.
- Miller, K. L. and G. L. Webster. 1967. A preliminary revision of *Tragia* (Euphorbiaceae) in the United States. *Rhodora* 69: 241-305.
- Tull, D. 1987. A practical guide to edible and useful plants [of Texas]. Texas Monthly Press, Austin. 518 pp.

**Scientific Name:** *Trichocoronis wrightii* (T. & G.) Gray var. *wrightii*

**Synonyms:** *Ageratum wrightii* Gray

**Common Name:** Wright's trichocoronis

**Global/State Ranks:** G4T3S2

**Federal Status:** None.

**Global Range:** California, southern Texas, Tamaulipas and San Luis Potosí (King & Robinson, 1970).

**State Range:** Aransas, Brooks, Cameron, Gonzales, Hidalgo, Karnes, Kenedy, Lavaca (or Dewitt?), Live Oak, Kleberg, Nueces, Refugio, San Patricio, Victoria, Willacy and Wilson counties (CCM, 1999; TEX-LL, 2003; Dudley Herbarium).

**Description** (adapted from Correll & Johnston, 1970): Tiny annual forb of the sunflower family (Asteraceae); stems weak, trailing, usually less than 20 cm long, usually with multiple branches; leaves mostly opposite, simple, lanceolate to oblong, mostly 1-2 cm long, the margins variable but usually sparingly and vaguely toothed; flower heads terminal but small and inconspicuous, containing only disk flowers (ray flowers absent), the involucre about 2 mm high; disk flowers few, white, about 1 mm long; achene ca. 1 mm long, glabrous, linear; pappus of a few short bristles, or absent.

**Similar Species:** None. In the Coastal Bend area, only *Eupatorium incarnatum* (*Fleischmannia incarnata*) is vaguely similar in floral features, but it is a robust scandent perennial found in upland brushy rather than a wimpy annual found in seasonal wetlands.

**Habitat:** Unshaded potholes and other seasonal wetlands, primarily on heavy clays or loamy soils over claypans.

**Phenology:** According to Jones (1977), *Trichocoronis wrightii* blooms from March through November in the Coastal Bend, probably in response to rains.

**Comments:** Most records from Texas are historical, perhaps indicating a decline as a result of alteration of wetland habitats. It is just as likely that this inconspicuous annual is simply undetected or overlooked.

**Illustrations:** A line drawing appears in Hickman (1993).

**Type specimen:** Refugio Co.: near Refugio, May 1860, *Buckley s.n.* (holotype ANS).

**Selected References:**

Correll, D. S. and M. C. Johnston. 1970. Manual of the vascular plants of Texas. Texas Research Foundation, Renner. 1881 pp.

Hickman, J. C., ed. 1993. The Jepson Manual: higher plants of California. University of California Press, Berkeley. 1400 pp.

Jones, F. B. 1977. Flora of the Texas Coastal Bend. Second edition. Welder Wildlife Foundation, Sinton. 262 pp.

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**Scientific Name:** *Tridens buckleyanus* (L. H. Dewey) Nash

**Synonyms:** *Triodia buckleyana* (L. H. Dewey) Vasey

**Common Name:** Buckley tridens

**Global/State Ranks:** G3G4S3S4

**Federal Status:** None.

**Global Range:** Endemic to central Texas.

**State Range:** Southern and eastern Edwards Plateau, with records from Bandera, Bexar, Hays, Kendall, Kerr, Kinney, Medina, Real, San Saba, Travis and Uvalde counties.

**Description** (adapted from Gould, 1975): Clump-forming perennial grass with flowering culms 2-3 feet tall. **Leaf blades** 1/4 inch wide or less, smooth or finely pubescent. **Panicles** terminal, bearing a few rather long branches, with each branch bearing a spikelets toward the tip. **Spikelets** 1/8 - 3/16 inches long, with 3-5 florets; like other *Tridens* species, the nerves of the lemmas are noticeably hairy.

**Similar Species:** Greasegrass (*Tridens flavus*) is vaguely similar, but it has broader leaves (to 3/8 inch wide), more densely flowered panicles, and greasy spikelets.

**Habitat:** Juniper-oak woodlands on rocky limestone slopes. Along with cedar sedge (*Carex planostachys*), Buckley tridens is often found in the species-poor ground layer of low-diversity old-growth woodlands dominated by Ashe juniper (*Juniperus ashei*).

**Phenology:** Flowering August-December.

**Comments:** The role of Buckley tridens in soil conservation in juniper woodlands on steep slopes has yet to be heralded.

**Illustrations:** A photograph of the upper stem and a line drawing of a floret appear in Silveus (1933) as *Triodia buckleyana*. A line drawing of panicle branches and florets appears in Hitchcock (1950).

**Selected References:**

- Brown, W. V. 1950. A cytological study of some Texas Gramineae. Bulletin of the Torrey Botanical Club 77(2): 63-76.
- Correll, D. S. and M. C. Johnston. 1970. Manual of the vascular plants of Texas. Texas Research Foundation, Renner. 1881 pp.
- Gould, F. W. 1975. The grasses of Texas. Texas A & M University Press, College Station. 653 pp.
- Hitchcock, A. S. 1950. Manual of the grasses of the United States. Second edition, revised by Agnes Chase. 1971 Dover reprint edition, New York. 2 volumes, 1051 pp.
- Silveus, W. A. 1933. Texas grasses. Privately published, San Antonio. 782 pp.

**Scientific Name:** *Valerianella florifera* Shinnery

**Synonyms:** None.

**Common Name:** largeflower cornsalad

**Global/State Ranks:** G3S3

**Federal Status:** None.

**Global Range:** Endemic to Texas.

**State Range:** Grasslands and early-successional openings in the post oak belt of east-central Texas, with records from Fayette, Franklin, Lee, Robertson and San Jacinto counties (Eggers, 1969; TEX-LL, 1997).

**Description** (adapted from Correll & Johnston, 1970): Glabrous annual with stems 9-18 cm tall, dichotomously branched in the upper half. **Leaves** opposite, simple, oblong to spatulate to spatulate, the upper pairs often with a few remote teeth. **Flowers** in small clusters at tips of stem branches; corolla bright white, funnelform, the lower tubular portion less than 2 mm long, the expanded upper portion 5-lobed and about 5 mm across. **Fruit** narrowly ellipsoid, sparingly pubescent, about 1.7 mm long and 0.6 mm wide, 3-celled, the single fertile cell somewhat flattened dorsally and about as wide as the two sterile cells.

**Similar Species:** All of 6 or 7 *Valerianella* taxa in Texas are more or less similar, and identification of specimens can be frustrating. However, *Valerianella florifera* stands out in the field because of its comparatively large flowers, which are about twice as large as those of the ubiquitous and weedy *Valerianella radiata*. Critical characters, however, are those of the fruit (see above).

**Habitat:** Openings in and margins of post oak woodlands on loamy sandy soils.

**Phenology:** Flowering/fruitleting March-May (Correll & Johnston, 1970), but in some years conspicuous for only a few weeks during late March and early April.

**Comments:**

**Illustrations:** Drawings of several aspects of the fruit are provided in Eggers (1969).

**Selected References:**

- Correll, D. S. and M. C. Johnston. 1970. Manual of the vascular plants of Texas. Texas Research Foundation, Renner. 1881 pp.
- Eggers, D. M. 1969. A taxonomic revision of the genus *Valerianella* in North America. Ph.D. dissertation, Vanderbilt University.

**Scientific Name:** *Valerianella stenocarpa* (Engelm.) Krok

**Synonyms:** Plants treated in Correll & Johnston (1970) as *Valerianella stenocarpa* var. *parviflora* S. Dyal are, according to Jones, Wipff & Montgomery (1997), now lumped under *Valerianella radiata* (L.) Dufr.) and are not included here.

**Common Name:** bigflower cornsalad, narrowcelled cornsalad

**Global/State Ranks:** G3S3

**Federal Status:** None.

**Global Range:** Endemic to Texas.

**State Range:** Comal, Dallas, Kerr, Medina, San Saba, Tarrant and Travis counties, usually along creekbeds or in vernal moist grassy open areas. Diggs, Lipscomb & O'Kennon (1999) indicate that reports from north and north-central Texas, i.e., Dallas, San Saba, Tarrant and Travis counties, may be erroneous [based on var. *parviflora* = *V. radiata*?]; the species would thus be limited to the southern Edwards Plateau.

**Description** (adapted from Correll & Johnston, 1970): Annual with stems 1-5 dm tall. **Leaves** opposite, simple, thin, the lower ones spatulate with their bases connate, the upper ovate, entire or with a few teeth near base. **Flowers** in terminal cymose clusters, tiny, the corolla white, funnellform, 2-3 mm long. **Fruit** yellowish, glabrous, narrowly ellipsoid, rounded on the dorsal side, 1.5-2.3 mm long and less than half as wide, the one fertile cell wider than the two empty (sterile) cells combined.

**Similar Species:** All of 6 or 7 *Valerianella* taxa in Texas are more or less similar, and identification of specimens can be frustrating. Although only 3 mm long, the flower of *Valerianella stenocarpa* is actually among the largest in the group. Other distinguishing features involve the fruit, which is glabrous, ellipsoid, rounded on the dorsal side, and has a broad fertile cell.

**Habitat:** Seasonally moist areas, often in openings in woodlands on alluvial soils in river bottoms.

**Phenology:** Flowering mostly in March, sometimes persisting into May.

**Comments:**

**Illustrations:** Drawings of several aspects of the fruit are provided in Eggers (1969); these drawings are reproduced in Diggs, Lipscomb & O'Kennon (1999). A drawing of most of the plant appears in volume 3 of the original Britton & Brown (1913) and is also reproduced in Diggs, Lipscomb & O'Kennon (1999). It probably represents var. *parviflora* (*Valerianella radiata*), but many of the vegetative features are similar.

**Selected References:**

- Britton, N. L. and A. Brown. 1913. An illustrated flora of the northern United States and Canada. 1970 Dover Reprint edition, New York. 3 volumes.
- Correll, D. S. and M. C. Johnston. 1970. Manual of the vascular plants of Texas. Texas Research Foundation, Renner. 1881 pp.
- Diggs, G. M., Jr., B. L. Lipscomb and R. J. O'Kennon. 1999. Shinnery and Mahler's illustrated flora of North-central Texas. Botanical Research Institute of Texas, Ft. Worth. 1626 pp.
- Eggers, D. M. 1969. A taxonomic revision of the genus *Valerianella* in North America. Ph.D. diss., Vanderbilt University.

Jones, S. D., J. K. Wipff and P. M. Montgomery. 1997. Vascular plants of Texas: a comprehensive checklist including synonymy, bibliography, and index. University of Texas Press, Austin. 404 pp.

**Scientific Name:** *Vitis rupestris* Scheele

**Synonyms:** None.

**Common Name:** sand grape

**Global/State Ranks:** G3S1

**Federal Status:** None.

**Global Range:** Alabama, Arkansas, California, Illinois, Indiana, Kentucky, Maryland, Missouri, Ohio, Oklahoma, Pennsylvania, Tennessee, Texas, Virginia, Washington D.C., and West Virginia (NatureServe, 2003).

**State Range:** Mostly on the Edwards Plateau, with records from Burnet, McCulloch, Taylor, Tom Green, Travis, and Val Verde counties.

**Description** (adapted from Vines, 1960 and Correll & Johnston, 1970): Shrub, not truly vinelike as other grapes; stems prostrate to ascending or merely reclining, scarcely climbing, rarely more than 1 m (3 feet) long; branch ends very leafy because of the rapidly unfolding tips and the short internodes. **Leaves** rather thick, glabrous or pubescent only along major veins on lower surface, somewhat kidney-shaped, unlobed or very shallowly lobed, 5-10 cm (2-4 inches) long and about as wide or even wider, often slightly folded upward and thus exposing a lighter-colored lower surface. **Flowers** small, green, in compound thyrses opposite the upper leaves. **Fruit** a grape 6-12 in diameter, black at maturity.

**Similar Species:** In our area, mountain grape (*Vitis monticola*), an Edwards Plateau endemic, is the only species likely to be mistaken for sand grape. Mountain grape is usually an obvious vine, climbing into shrubs and small trees; its leaf blades are about as wide as long and not conspicuously folded. Sand grape is typically low-growing and shrublike, with leaf blades that are wider than long and somewhat folded upward.

**Habitat:** Rocky limestone slopes and streambeds (Correll & Johnston, 1970).

**Phenology:** Fruiting July-September (Correll & Johnston, 1970). Although remnants of the inflorescence are desirable, neither fruit nor flowers are essential for identification.

**Comments:**

**Illustrations:** Line drawings appear in Vines (1960), Gleason (1952) and Steyermark (1963).

**Selected References:**

- Correll, D. S. and M. C. Johnston. 1970. Manual of the vascular plants of Texas. Texas Research Foundation, Renner. 1881 pp.
- Gleason, H. A. 1952. The new Britton and Brown illustrated flora of the northeastern United States and adjacent Canada. 3 volumes. New York Botanical Garden, New York.
- Morano, L. D. and M. A. Walker. 1995. Soils and plant communities associated with three *Vitis* species. American Midland Naturalist 134: 254-263.
- Moore, M. O. 1991. Classification and systematics of eastern North American *Vitis* (Vitaceae) north of Mexico. Sida 14(3): 339-367.
- NatureServe. 2003. NatureServe Explorer: an online encyclopedia of life [web application]. Version 1.8. NatureServe, Arlington, Virginia. Available [www.natureserve.org/explorer/](http://www.natureserve.org/explorer/).