

and collections of taxa in the *L. brevipes* complex that overlap in northern San Diego and southern Orange counties indicate the spatulate calyx lobes of the var. *hassei* become foliose in fruit, and the linear to triangular calyx lobes of the var. *brevipes* do not (Riefner and Boyd unpublished data). However, based on overlapping ranges and habitats, similarity in habit and phenology, additional study is needed to resolve the uncertain taxonomic distinctiveness of *L. brevipes* var. *hassei*, which has been raised previously by Skinner et al. (1995, Madroño 42: 211–241).

Significance. First documented records for the var. *brevipes* in Orange County (Roberts 1998, A Checklist of the Vascular Plants of Orange County, California, ed. 2, F.M. Roberts Publications, Encinitas, CA). These collections likely represent the northwestern-most known limit of its range in the South Coast Region.

PARIETARIA JUDAICA L. (URTICACEAE).—Los Angeles Co., City of San Pedro, Point Fermin, USGS 7.5' San Pedro Quadrangle, UTM (NAD 83) 11S 0380915E 3730581N, elev. 13 m (41 ft), common on disturbed coastal bluffs and coastal strand habitats with *Atriplex semibaccata*, *Beta vulgaris*, *Distichlis spicata*, *Rhus integrifolia*, and *Rumex crispus*, 12 Jan 2006, Riefner 06-13 (RSA, UCR); City of San Pedro, San Pedro Bay, Adams Drive St. at Miner St., USGS 7.5' San Pedro Quadrangle, UTM (NAD 83) 11S 0380915E 3730581N, elev. 3 m (9 ft), common on rocky bay shores with *Atriplex triangularis* and *Suaeda taxifolia*, 29 Jul 2006, Riefner 06-331 (RSA, UCR). Orange County, City of Huntington Beach, Beach Blvd. at MacDonald St., USGS 7.5' Newport Beach Quadrangle, UTM (NAD 83) 11S 0408290E 3732120N, elev. 6 m (18 ft), common in urban irrigated landscape, 21 May 2006, Riefner 06-199 (RSA); City of Huntington Beach, Huntington Central Park at Goldenwest St., USGS 7.5' Seal Beach Quadrangle, UTM (NAD 83) 11S 0406841E 3729999N, elev. 4 m (14 ft), uncommon, growing in disturbed *Salix*-dominated riparian woodland, 28 Jul 2006, Riefner 06-325 (RSA).

Previous knowledge. *Parietaria judaica* (spreading pellitory), native to Eurasia and North Africa, grows in cracks in sidewalks, ballast heaps, waste places, and about ports in coastal areas of California, Florida, Louisiana, Michigan, New Jersey, New York, Pennsylvania, and Texas (Boufford 1997, in *Flora of North America* Editorial Committee, eds., *Flora of North America*, Vol. 3, Magnoliophyta: Magnoliidae and Hamamelidae, Oxford University Press, New York). In North America, it is most abundant at scattered localities in California, where it is often invasive in coastal urban settings (Woodland 1993, in Hickman, ed., *The Jepson Manual: Higher Plants of California*, University of California Press, Berkeley, CA; Boufford 1997 *loc. cit.*).

Significance. First record of *P. judaica* documented for Orange County (Roberts 1998 *loc. cit.*); verification of records for Los Angeles County. *Parietaria judaica* is apparently spreading from urban environments to mesic, native plant habitats in the south coast region. It is expected elsewhere, including other native habitats and urban settings in Los Angeles, Orange, Riverside, San Diego, and Ventura counties.

RHAMNUS PILOSA (TREL.) Abrams (RHAMNACEAE).—Riverside Co., E of Rainbow Canyon, N of Rainbow Heights, Termite's Hike Trail, USGS 7.5'

Pechanga Quadrangle, UTM (NAD 83) 11S 0490089E 3699743N, elev. 614 m (2013 ft), widely scattered in rocky, mesic chaparral, 11 Oct 2006, Riefner 06-529 (RSA).

Previous knowledge. *Rhamnus pilosa* (hairy-leaf red-berry) is an uncommon shrub that grows in chaparral from 300–700 m elevation in the Peninsular Ranges and in Baja California, Mexico (Sawyer 1993, in Hickman, ed., *The Jepson Manual: Higher Plants of California*, University of California Press, Berkeley). It has been collected from San Diego County, but not from Orange or western Riverside counties (Roberts 1998 *loc. cit.*; Roberts et al. 2004 *loc. cit.*; Rebman and Simpson 2006 *loc. cit.*).

Significance. First record documented for Riverside County (Roberts et al. 2004 *loc. cit.*). *Rhamnus pilosa* is widespread in the general Rainbow Canyon area, but is most abundant in mesic chaparral developed on gabbro substrates. It is often closely associated with a number of plants that are uncommon in western Riverside County, including *Arctostaphylos rainbowensis* Keeley & Massihi, *Calamagrostis densa* Vasey, *Hesperolinon micranthum* A. Gray, *Salvia clevelandii* (A. Gray) Greene, *Senecio ganderi* T. Barkley & Beauch., and *Tetracoccus dioicus* C. Parry (Banks 1999 *loc. cit.*; California Native Plant Society 2001, Inventory of Rare and Endangered Vascular Plants of California, ed. 6, Rare Plant Scientific Advisory Committee, D. Tibor, ed., California Native Plant Society, Sacramento, CA; Roberts et al. 2004 *loc. cit.*).

—RICHARD E. RIEFNER, JR., Research Associate, Rancho Santa Ana Botanic Garden, 1500 N. College Avenue, Claremont, CA 91711, and STEVE BOYD, Herbarium, Rancho Santa Ana Botanic Garden, 1500 N. College Avenue, Claremont, CA 91711.

CALIFORNIA

BOERHAVIA DIFFUSA L. (NYCTAGINACEAE).—Yolo Co., West Sacramento, off West Capitol Avenue, ~0.5 mi. E of eastern levee of Yolo Bypass. Disturbed sandy soil, with *Salsola* sp. and *Polygonum* cf. *aviculare*. Flat mat on ground, 0.5 m across, 1 plant, near drainage ditch heading N from West Capitol Avenue. A. M. Shapiro *s.n.*, August 26, 2005 (DAV). Near 38°34'40.2"N, 121°34'08.5"W, 2 m elev. Determination confirmed by Richard Spellenberg May 12, 2006.

Previous knowledge. *Boerhavia diffusa* (common name: spreading hogweed or red spiderling) is found worldwide in the tropics and subtropics and is occasionally known from riparian areas in drier regions of the world. In the United States, *B. diffusa* is currently found in Florida, Georgia, South Carolina, and North Carolina, and there are reports from Alabama, Louisiana, and Texas. There has been no suggestion to date that this species is even likely to occur in California. *Boerhavia* is a taxonomically difficult genus with often subtle characters. Many *Boerhavia* taxa that are morphologically distinct in most of their range often tend to intergrade with related taxa when ranges overlap. *B. diffusa*, because of its morphological variability over its worldwide range, has been treated variously by past authors to include one or two species (R. Spellenberg, 2004, in *Flora of North America North of Mexico*, v. 4, Oxford University Press: 19–20).

Further taxonomic complication has arisen over the uncertain typification of *B. diffusa*. Fosberg (Fosberg, F. R., 1978, *Smithsonian Contributions to Botany* 39: 4–5.), in his examination of the typification of *B. diffusa*, noted that the differences between multiple named taxa in the New World (*B. paniculata* Richard, *B. coccinea* Mill., *B. caribaea* Jacq., *B. viscosa* Lag. & Rodr., and *B. hirsuta* Willd.) and *B. diffusa* had “not yet been worked out to [his] satisfaction, but several species probably exist in this complex.” Fosberg, however, mistakenly lectotypified *B. diffusa* on a specimen that could not have been seen by Linnaeus until after the publication of *B. diffusa* in *Species Plantarum* (1753) and that disagreed with the protologue. This was later corrected by Whitehouse (Whitehouse, C., 1998, *Taxon* 47: 873–874) by conserving the name *Boerhavia diffusa* L. with a conserved type from the Virgin Islands (recommended for acceptance by the Committee for Spermatophyta in 2000, *Taxon* 49: 276–277). While there was a collection in the Linnean herbarium that was most likely the source of the original description of *B. diffusa* (No. 9.7, LINN), this material agrees with what is universally called *B. coccinea* today. For the sake of nomenclatural stability, Whitehouse typified *B. diffusa* on a specimen with terminal panicle inflorescences to agree with accepted usage of the name. Taking this into account, Spellenberg correctly recognized both *B. diffusa* L. and *B. coccinea* Mill. for North America north of Mexico. Amongst the *Boerhavia* species known from California, *Boerhavia diffusa* most closely resembles and could easily be confused with *Boerhavia coccinea*. *Boerhavia diffusa* differs from *B. coccinea* by having glabrous stems and peduncles, leaves restricted to the lower half of the plant, terminal inflorescences, leaves glabrous excluding occa-

sional minute puberulence and occasional multicellular hairs on veins, leaf veins prominent, flowers borne in clusters of 2–5, and fruits with a broadly conic apex formed by an abrupt bend in the fruit ribs near the fruit apex. Beauchamp (Beauchamp, M. R., 1986, *A Flora of San Diego County*, Sweetwater River Press) recognizes *B. coccinea* Mill. for the flora San Diego Co., and lists *B. diffusa* L. as a synonym. However, Linnaeus published *B. diffusa* some 15 yr before Miller published *B. coccinea*, thus *B. diffusa* has priority if one chooses to synonymize these two species. It is unclear how this species came to occur in central California, however *Boerhavia diffusa* is used medicinally and as a food plant in several parts of the world, and may have been introduced into California through cultivation.

Significance. This is the first record of this species in California. Since *Boerhavia diffusa* prefers a tropical environment, it is unlikely that this species will become a problematic invasive weed in most areas. However, in the tropics this species grows in dry, disturbed areas (including on exposed reefs), and could be to some degree preadapted for the California climate and modern disturbance regime. This plant has the potential to spread along riparian systems, and should be watched for in the future particularly along river corridors in California's Central Valley. Thanks to Art Shapiro for providing collection locality details, and to Rich Spellenberg for assistance with determination.

—ANDREW G. MURDOCK, University & Jepson Herbaria, 1001 Valley Life Sciences Bldg. #2465, University of California, Berkeley, CA 94720-2465. murdock@berkeley.edu.



Murdock, Andrew G . 2007. "California." *Madroño; a West American journal of botany* 54, 369–370. [https://doi.org/10.3120/0024-9637\(2007\)54\[369:c\]2.0.co;2](https://doi.org/10.3120/0024-9637(2007)54[369:c]2.0.co;2).

View This Item Online: <https://www.biodiversitylibrary.org/item/185047>

DOI: [https://doi.org/10.3120/0024-9637\(2007\)54\[369:c\]2.0.co;2](https://doi.org/10.3120/0024-9637(2007)54[369:c]2.0.co;2)

Permalink: <https://www.biodiversitylibrary.org/partpdf/169039>

Holding Institution

Smithsonian Libraries and Archives

Sponsored by

Biodiversity Heritage Library

Copyright & Reuse

Copyright Status: In Copyright. Digitized with the permission of the rights holder

Rights Holder: California Botanical Society

License: <http://creativecommons.org/licenses/by-nc/3.0/>

Rights: <https://www.biodiversitylibrary.org/permissions/>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.