

# Weed Alerts 2022

## *and inventory updates*

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## Pokeweeds: *Phytolacca heterotepala* & *P. icosandra*

- Large perennial herbs (to 3 m tall or more) with showy flowers and berries (grown commercially as cut flower/fruit)
- Plant can regenerate from large taproot
- 3 introduced spp. present in California: *P. americana*, American pokeweed; *P. heterotepala*, Mexican pokeweed; *P. icosandra*, tropical pokeweed
- Likely toxicity to animals from alkaloids, glycosides, and mitogens (known for *P. americana*), but ripe fruits are bird-dispersed
- The American pokeweed, *P. americana*, native E and C U.S. is rather broadly distributed as a weed in CA
- Photo: *P. icosandra*, © 2008 Zoya Akulova

*Phytolacca americana*



*Phytolacca icosandra*

## Morphology and species differences

- Pokeweeds have a single perianth whorl (usually 5 “tepals”); inflorescence a raceme or spikelike; ovary of 6-12 carpel units, matures to a purplish-black multi-seeded berry
- The common pokeweed has equal, commonly whitish, tepals and stalked flowers
- Tropical pokeweed (*P. icosandra*) usually has very short stalks (2 mm or less) to the flowers and fruits, giving it a spikelike inflorescence
- Mexican pokeweed (*P. heterotepala*) has the smaller tepals much narrower (half as wide as the broader ones)
- Photos, R. H. Mohlenbrock, USDA NCRS; © 2020 Ron Vanderhoff; © 2005 Doreen Smith



*Phytolacca heterotepala*



# Tropical pokeweed, *Phytolacca icosandra*

- Native from Mexico to S America
- Cultivated as an ornamental cut flower/fruit in CA
- Recently rated “Q” by CDFA due escape from cultivation in San Francisco Bay region and southern CA
- Photo: Eric Wrubel



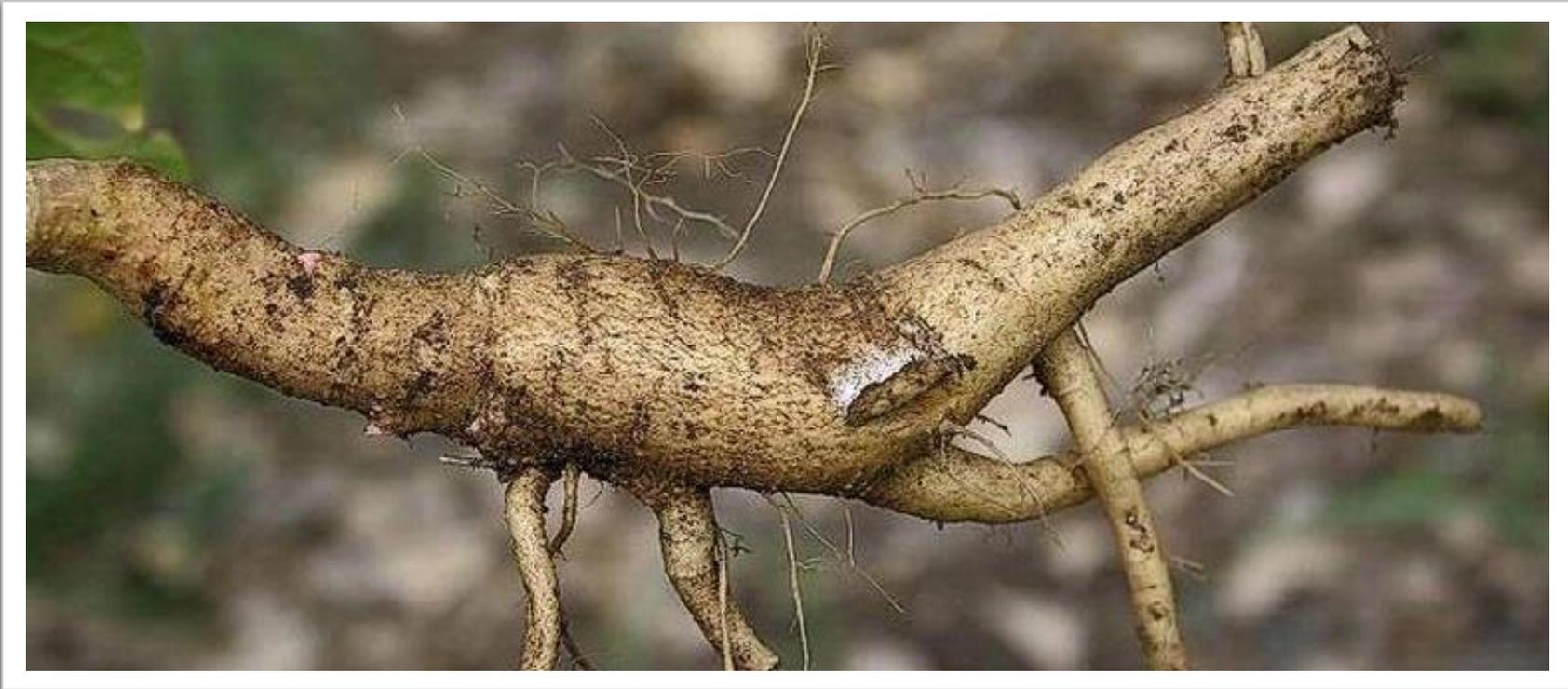


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# Mexican pokeweed (*Phytolacca heterotepala*)

- Native to northern and central Mexico (Tamaulipas), introduced into coastal counties of California
- Rated “A” by CDFA due to escapes from cultivation





## Control of pokeweeds

- Cut plants back before the fruits are produced
- Plants can regenerate from the taproot, need to be removed to below root crown
- American pokeweed root photo, J. DiTomaso, Bugwood.org



## *Osteospermum calendulaceum*, a newly introduced weed in California

- Asteraceae native to Cape Region, South Africa
- Naturalized in parts of Australia and Hawaii
- Newly found in mainland U.S. (Orange Co., CA) in Spring of 2022
- Active EDRR in Laguna Canyon area
- Photo: R. Vanderhoff

# Features of *Osteospermum calendulaceum*

- Sticky-aromatic annual herb up to 0.6 m across
- Common name (Australia), “Stinking roger”
- A small flowered weedy relative of the showy “Cape daisy”
- Well-adapted to seasonally dry open habitats
- Produce up to several hundred diversely shaped seed units per plant
- Photos: ©R. Vanderhoff; “Cape daisy”, L. Ingram, Bugwood.org



## Polymorphic seed units of *Osteospermum calendulaceum*

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- One-seeded fruits can be conical or horn-shaped
- Differ positionally within flowerheads and may differ in dormancy behavior
- Often ridged and pitted, with a cup-shaped tip, but vary within and among flower-heads
- These fruits are from the Orange County infestation (can be prominently winged in some Australian plants)
- Photo: D. Meyer, CDFA Seed Lab; seeds supplied by R. Vanderhoff



# *Osteospermum calendulaceum* in California

- First found in 2022 in Laguna Canyon area of Orange County
- Possibly introduced in transport from the Pacific region
- Likely to do well in coastal scrub habitats
- Under active control (EDRR) in Orange County in a collaboration of NGOs and government agencies
- Seeds are likely to be spread by animal and human activity, vehicles and equipment, and locally by wind and water
- Over a thousand plants in initial find; unclear how much of a seed bank is already established
- Proposed “A” rating by CDFA to encourage early eradication

# Newly “A” rated noxious weeds

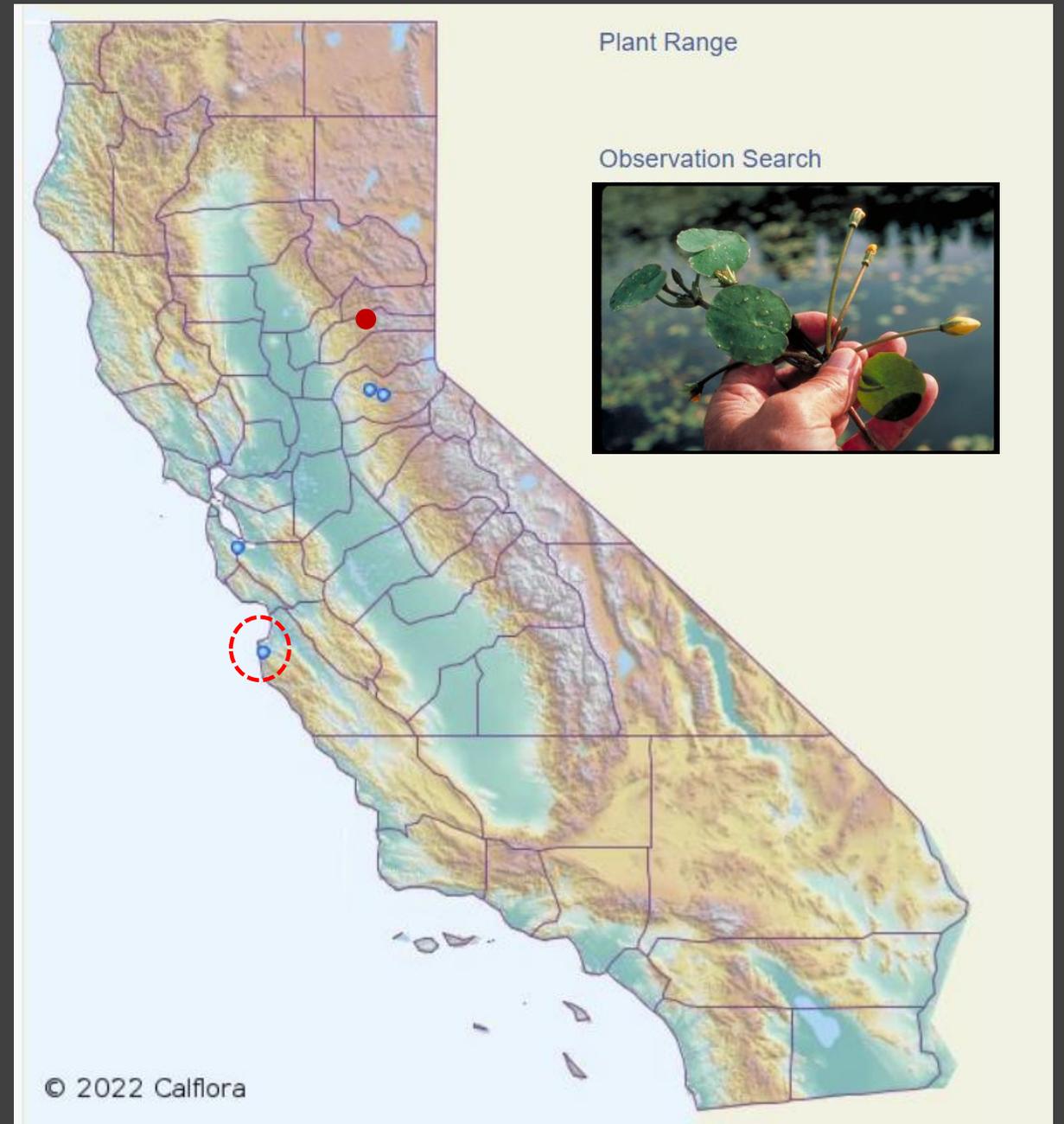
- Noxious weed seed species of restricted range in far northern or southern CA
- Himalayan knotweed; *Koenigia polystachya*, aka *Persicaria wallichii*
- Can reproduce by seed and vegetatively from small pieces of the plant
- Austrian fieldcress; *Rorippa austriaca*
- Can reproduce by tiny seeds and from small pieces of the root
- Garlic mustard; *Alliaria petiolata*



# Yellow Floatingheart *Nymphoides peltata* (Menyanthaceae)

- Native to Eurasia
- First herbarium record 1958 (Santa Clara County)
- Found and treated in El Dorado County (“extirpated”?)
- More recently reported in Nevada Co. (USGS, gen. location; red dot)
- Discovered in Monterey Co. in 2021
- State listed in Washington, Oregon, and Idaho in the western USA. Occurs in AZ
- As yet unlisted by Cal-IPC; A-listed by CDFA and on noxious weed (4500) list

*Calflora map includes Calflora, iNaturalist and California Consortium of Herbaria data; Additional location data from <https://nas.er.usgs.gov/queries/CollectionInfo.aspx?SpeciesID=243&State=CA>*



# Yellow Floatingheart

*Nymphoides peltata*



- Rooted, stoloniferous perennial aquatic plant
- Leaves are floating, heart-shaped, up to 12 cm in diameter
- 2-5 yellow flowers per node
- Flowers are 3-4 cm in diameter, bright yellow with 5 fused, lightly fringed petals.
- Self-compatible
- Fruits are beaked capsules; seeds are flat, shiny, and hooked
- Creates dense mats, can stagnate water

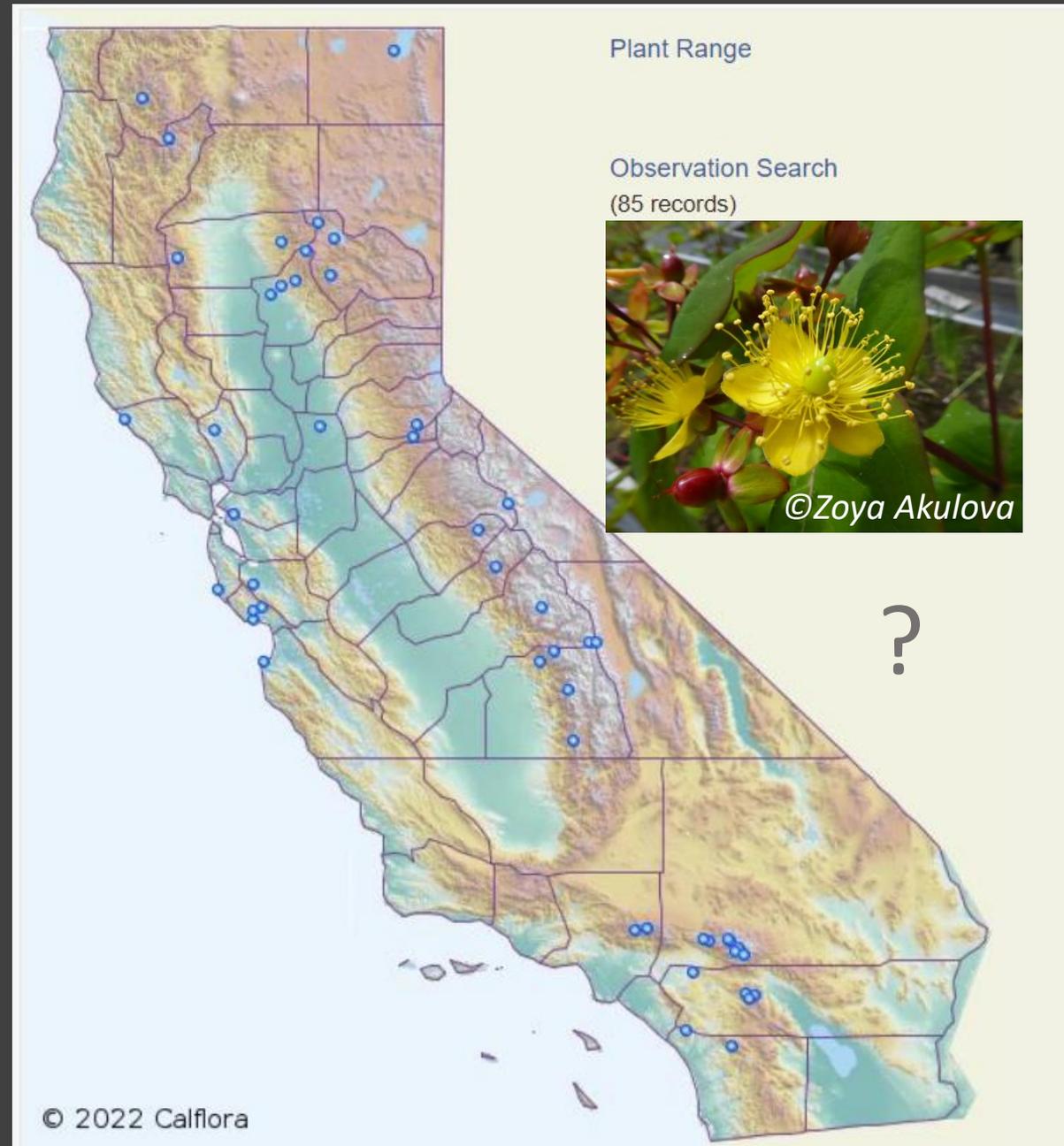
# Sweet Amber

## *Hypericum androsaemum*

### (Hypericaceae)

- Native to the Mediterranean region of Europe
- Popular ornamental
- First reported and collected in late 1800's (Santa Cruz Co.)
- Cal-IPC WATCH species (CDFA unrated)
- Found in 26 counties to date (?)
- Newly reported in Santa Clara County (J. Mo)
- Considered a significant environmental weed in Australia
- Often found away from trails and waterways

*California distribution data from Calflora (including iNaturalist and California Consortium of Herbaria data)*



# Sweet Amber

*Hypericum androsaemum*



- Perennial shrub
- Can be confused with *H. grandifolium*
- Generally grows as a decumbent shrub
- Young stems weakly winged
- Opposite, sessile gen. ovate leaves
- Flowers yellow, 15-25mm, sepals reflexed as fruit matures and indehiscent
- Petals are not longer than sepals
- Stigmas short and recurved
- Fruits fleshy, maturing from red nearly black
- Prefers moist, shady habitats

# Himalayan Balsam

## *Impatiens glandulifera*

- Native to India
- Highly invasive along waterways across most of Europe
- Overtops and displaces native vegetation
- Can increase erosion and alter water flow
- Creates persistent thatch
- Alters pollinator systems
- In western US, State listed by WA, OR, ID
- Unreviewed by either Cal-IPC or CDFA

*California distribution data from Calflora (including iNaturalist and California Consortium of Herbaria data). Red dots – additional iNaturalist reports from 2020*



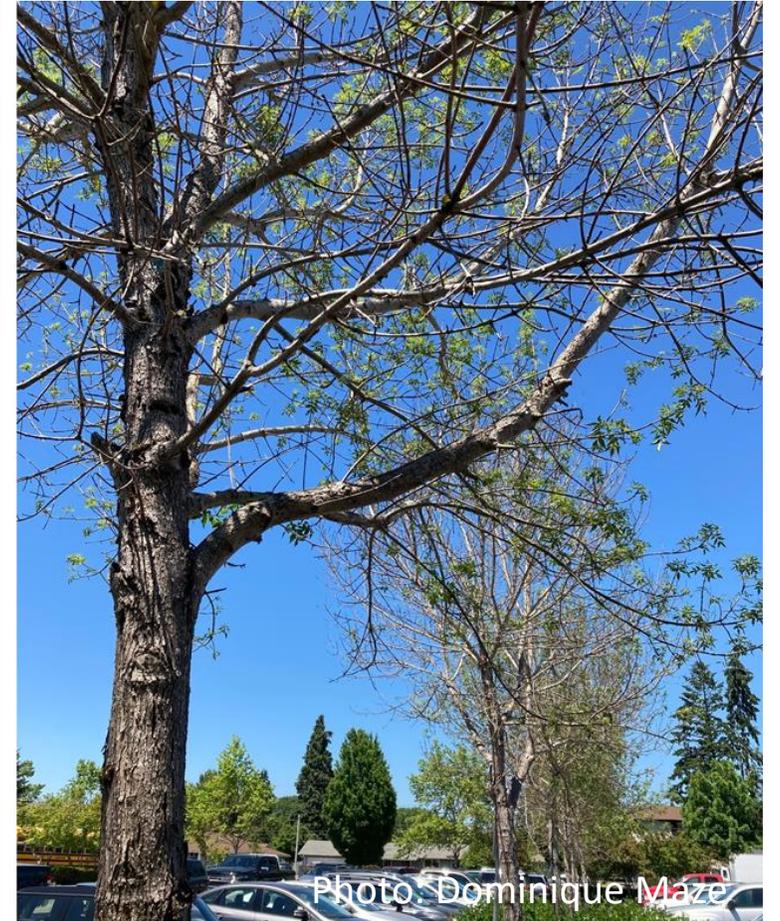
# Himalayan Balsam

*Impatiens glandulifera*



- Succulent, fast-growing annual (to 10')
- Stems can be reddish and are hollow and angled
- Foliage has strong odor
- Nectar glands below leaves
- Flowers pendulous, bee-pollinated, white to pink
- Self compatible!
- Explosive seed dispersal

# Other Invasive Taxa Near CA Borders: Emerald Ash borer



# 2022 Species Added to Cal-IPC Inventory

Scientific name	Common name	Cal-IPC Rating	CDFA Rating	Weed Alert?
<i>Arum italicum</i>	Italian <i>Arum</i>	WATCH		2021
<i>Asparagus aethiopicus</i>	Asparagus fern	WATCH		
<i>Euphorbia myrsinites</i>	Myrtle spurge	WATCH	A	2015
<i>Hieracium aurantiacum</i>	Orange hawkweed	WATCH	B	2019
<i>Lythrum junceum</i>	Creeping loosestrife	WATCH		2020
<i>Melinis repens</i>	Natal grass	WATCH		
<i>Potentilla recta</i>	Sulphur cinquefoil	WATCH	A	
<i>Senecio elegans</i>	Redpurple ragwort	WATCH	B	2021

*Plus additional photographs of distinguishing characteristics of nearly all inventory species added!*

# Cal-IPC Species in 2022 Review

*\*species being reviewed to get a “Limited”, “Moderate” or “High” rating using Plant Assessment Form (PAF)*

*Others being assessed as Watch species*

Scientific name	Common name	Current Cal-IPC Rating	CDFA Rating	Weed Alert?
<i>Alliaria petiolata*</i>	Garlic mustard		A	2021
<i>Adonis aestivalis</i>	Summer pheasant's eye			
<i>Caesalpinia spinosa</i>	Spiny holdback			
<i>Chasmanthe bicolor</i>	<i>Chasmanthe</i>			
<i>Cuscuta japonica*</i>	Japanese dodder		A	
<i>Euphorbia hypericifolia</i>	Graceful spurge		A	
<i>Lathyrus nissolia</i>	Grass pea		B	2021
<i>Melia azedarach</i>	Chinaberry			
<i>Pancratium maritimum</i>	Sea daffodil			2021
<i>Parthenium hysterophorus*</i>	Santa Maria feverfew	WATCH	A	2012 2015 2016
<i>Pennisetum ciliare</i>	Buffelgrass			
<i>Senecio angustifolius</i>	(none)			2019
<i>Senna artemisioides</i>	Silver Senna			
<i>Stipa tenuissima*</i>	Mexican feathergrass	WATCH		

# NEW AND DISTURBING SPECIES TO REPORT?

Contact us!!!

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Robert Price [robert.price@cdfa.ca.gov](mailto:robert.price@cdfa.ca.gov)

Send close-ups, whole-plant and habitat photos

Map on Calflora or iNaturalist

Contact your County Ag. Commission

Submit specimen to your local herbarium