

# Volunteers, weeds, and the Calflora Database



## **Steps to Volunteer Action**

- Learn about the issue
- Connect as an individual
- Get involved in coordinated action

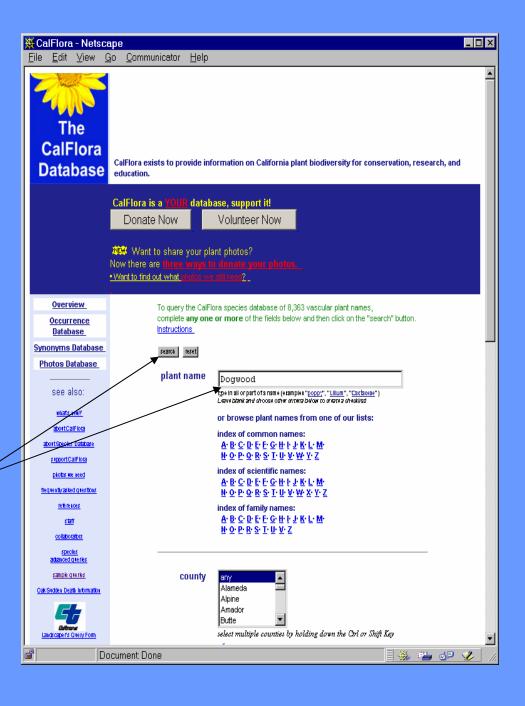


## **Support Learning**

- Provide easy access to photos and information about California wild plants
- Introduce concepts of native and exotic

## **Simple Search**

Are there wild dogwoods in California? What do they look like? Where do they occur?



## **Initial Query Results**

### •Click on name to see Species Report

•Click on photo to see more photos

CalFlora Database - No File Edit View Go Co CalFlora Databas	ommunicator <u>H</u> elp			
Number of matches: 6 Click on the name to see a report, ch	ick on the image to see additional photographs.			
Scientific name	Common name	Photo	Lifeform	Native to California?
<u>Cornus glabrata</u>	brown dogwood	None Available <u>contribute your piloto!</u>	Tree, Shrub	native
<u>Cornus nuttallii</u>	Pacific dogwood	Brotler Althed Brosseau	Shrub	native
<u>Cornus sericea</u>	American dogwood, redosier dogwood		Shrub	native
<u>Cornus sericea ssp. occidentalis</u>	western dogwood		Shrub	native
<u>Cornus sericea ssp. sericea</u>	red osier dogwood, redosier dogwood		Shrub	native
<u>Cornus sessilis</u>	Miners dogwood, blackfruit dogwood, westem comelian cherry	None Available	Tree	native
http://www.cattora.org/. (Accessed: C The CalFlora Database Free	ant for edication, research and consentation, level application), 2021, Berkeley, C lot 14, 2020 quentity Asked Questions Suggestions Box	alifornia: The CaliFiora Database (a non-	profitorgan ization) .	Augilizio (e :
Comments and Questions about	nt CalFlora			

## **Initial Query Results**

I saw it on my hike in Marin, I know it was a composite. Help me out....

#### **CalFlora** Database

Number of matches: 186

next 50

Click on the name to see a report, click on the image to see additional photographs.

Scientific name	Common name	Photo	Lifeform	Native to California?
Achillea millefolium	common yarrow, yarrow	Brother Alfred Brousseau	Perennial herb	native
Achyrachaena mollis	blow-wives	Brother Alfred Brousseau	Annual herb	native
Ageratina adenophora	sticky snakeroot	Charles Webber	Perennial herb	not native INVASIVE WEED
Agoseris apargioides	seaside agoseris	Brother Alfred Brousseau	Perennial herb	native



## **Species Report**

#### CalFlora Taxon Report

#### Cirsium arvense (L.) Scop. (Asteraceae)



Common names: Canada thistle [Hrusa] Plant community: introduced plant which is becoming naturalized [Lum/Walker] Wetlands: equally likely to occur in wetlands or non wetlands [U.S. Fish & Wildlife Svc.] Elevation: between 0 and 5906 feet [Hickman 1993].

Charles Webber (1 of 9)

Cirsium arvense, a dicot in the family Asteraceae, is a perennial herb that is not native to California [Hrusa]; it was introduced from elsewhere and naturalized in the wild [Lum/Walker].

The California Exotic Pest Plant Council (CalEPPC) lists Cirsium arvense on List B: Wildland pest plant of lesser invasiveness; causes lesser degree of habitat disruption than plants on list A. [CalEPPC] Cirsium arvense is also classified by the California Department of Food and Agriculture as Noxious Weed List B: Control required in nurseries, control elsewhere at the discretion of local County Agricultural Commissioner. [CDFA Weeds 2000]

#### Observations contributed to the CalFlora Occurrence Database

#### Map of observations now from CalFlora Occurrence Database.



Shading indicates presence somewhere, not necessarily everywhere, within the county indicated.

- Blue indicates that there is a specimen from this county on file.
- Light Blue indicates a documented observation that is vouchered or confirmed.
- Lavender indicates other reported
- observations that are unvouchered
- Mustard Yellow indicates other counties within range described in botanical literature

#### California County Map

Distributions from botanical literature now included in Occurrence Database

www.CalFlora.org 2001

- 206 observation records. Display as: (choose as many as desired) ✓ HTML table

  - ✓ static map (similar to above)
  - GIS Viewer 3.0 (requires Java, fast internet connection recommended) retrieve
- View observations by county;

Alameda [2], Alpine [2], Butte [3], Contra Costa [1], Del Norte [8], Fresno [3], Glenn [1], Humbeldt [40] Torre [4] Warn [1] Tales [1] Tassan [1] Tas Anaslas [1] Mandasine [15]

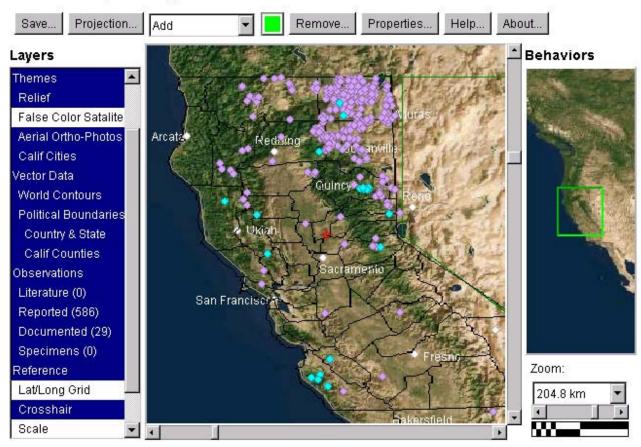
## **Observation display**

#### Java Interactive GIS Viewer 3.0:

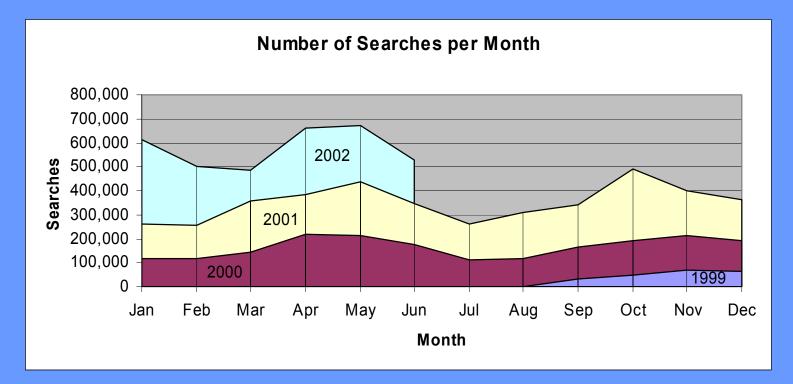
Your query searched for the following plant names: (Click on a name to see synonymy)

Bromus tectorum Bromus tectorum var. glabratus Bromus tectorum var. tectorum

#### Total Number of points mapped: 615



## **User Community**



- About 30,000 different users per month, making 600,000 requests for photos and information
- Large range of users, from expert botanists to school children.



## **Build Participation**

- Users help build and improve photo and data collections
- Opportunities for all ages and skill levels

## **Photo Collection Participation**

> Photos are donated by expert and amateur photographers.

> Annotations allows experts to review and correct identifications.

Click on
 *ID reviewed* or
 *ID not reviewed* to see or add annotations.

CalPhotos Berkeley Digital Library Project

 Number of matches: 132

 prev 12
 next 12

Click on the thumbnail to see an enlargement



Calochortus monophyllus Yellow Star Tulip □ ID not reviewed

Lowens 0000 0000 0702 0480 more information



Calochortus monophyllus Yellow Star Tulip □<u>ID not reviewed</u>

Lowens 0000 0000 0702 0479 more information



Calochortus nudus Naked Mariposa DID not reviewed

Lowens 0000 0000 0702 0482 more information



Calochortus nudus Naked Mariposa DID not reviewed

Lowens 0000 0000 0702 0481 more information



Calochortus obispoensis San Luis Mariposa Lily D not reviewed

Lowens 0000 0000 0702 0485 more information



Calochortus obispoensis San Luis Mariposa Lily D not reviewed

Lowens 0000 0000 0702 0483 more information



Frequently asked restrons

Add Observations to CalFlora

**Instructions:** Use this form to submit an observation to CaFlora. Fill out the request fields in red, and as many of the optional fields as you can, and then click on "submit". For information or such field, click on the field name. Detailed observation reports as more valuable than generalized information. Please check your spelling and information closely before submission.

**Required Information** 

name of observer(s)	Tony Horosco and Ann Dennis Name of peron())making this observation. Must include your name as registered.
plant observed	Potentilla hickmanii index Scientic numes only. Look up common numes in Callon.
county	San Mateo
observation date	February V unknown V 2002 e lost year to regard
method of identification	Incognize this plant from prior determinations and experience     I compared this plant with horbarian operimens     Incompared this plant with horbarian experimens     I compared this plant with published transmissive descriptions     f. An expert travel and confirmed this identification
certainty of identification	I am confident of this identification, and submit this as a positive observation I am not certain of this identification but believe it to be a significant observation and submit it here as an ident only.

#### Location Information

location description	Slope south of Martini from horse corrals. Test description of locations (up to 255 charact	-
GEOREFERENCE		
latitude and longitude	NAD 27 (default) datum Prends: 34.34456 or 344.397.63.334	Icensitude * or 34.30.03.334 Locas Lactors using 005 View
OR		
UTM coordina	zone Easting mms 10 or 11 6 digns	Northing 7-digits Locus UTM using OES View
OR		
meridian, township, rang and section	e -select meridian-	township range section
AND		
location precis	ion ± 200 feet	

#### Other Observation Information

elevation	select units
elevation precision	±
habitat description	Coastal prairie/grassland Deception d'hobits when this observation was made.
other notes	Transportation Biologists, this population is the largest in the world for this species. Only one other locality is known to exist in Monterey County, (and one population presumed exisnt in Soneema County).
	Your noise on this observation. 233 distudent maximum.
	Your Record Identifiers
	(Optional)
your unique	11-10-0000

Plants of Montara Mountain A way of grouping your records. Example: 'Plants of Tildes, Pak

your dataset or subset identifier

Submit Reset

## **Observation** Library **Participation**



### **Confirm Observation Contribution**

Example Photo of Potentilla hickmanii



Tony Morosco

Note the identification of this photo is not yet confirmed.

Other Photos of Potentilla hickmanii

Calflora Species report for Potentilla hickmanii

Other Observations of Potentilla hickmanii

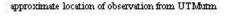
Having problems? please contact us.

#### Please review the following messages before continuing:

- Plant Observed:
  - The plant you are submitting an observation for is considered rare. Please consider filing a report with the State of California Natural Diversity Database.

You are reporting an observation of **Potentilla** hickmanii, observed by **Tony Morosco** on **Feb** 2002 in San Mateo County.

You have indicated the location description as "Slope south of Martini Creek, uphill from horse corrals.", and included the georeferenced location Zone=10, Easting=543760, Northing=4156370





## Open door: Document observer credentials so data can be used appropriately

		JR
bio/credentials	Botanist, CalFlora Dataase. 10 years experience in field botany in California. B.A. Inegrative Biology, UC Berkeley	example: Botanical consultant; B.S. Plant Biology, Arizona State Univ. example: Student, Portola Middle School
expertise/interests	biodiversity informatics, floristics, and systematics of California plants, Poetentilla subsect. Multijugaea	<i>example</i> : Ranunculaceae (esp. Delphinium) aquatic monocots <i>example</i> : Trees of Wildcat Canyon
experience level	<ul> <li>Please check the appropriate statement:</li> <li>I am a professional biologist/botanist, or have professional</li> <li>Although I do not have formal credentials, I am recognized botanists.</li> <li>Although I do not consider myself to have professional-levex experienced in the use of keys and descriptions, and/or have which I will be submitting observations.</li> <li>I do not have extensive experience or background in botanist can accurately identify the plants for which I will be submitting</li> </ul>	d as a peer by professional rel knowledge, I am quite expertise with the plants for ny, but I am confident that I
age group	Please check the appropriate range	



## **Support Coordinated Action**

- Provide infrastructure for data sharing and exchange among local volunteer groups
- Provide tools for easy viewing, downloading and analysis of data from many sources

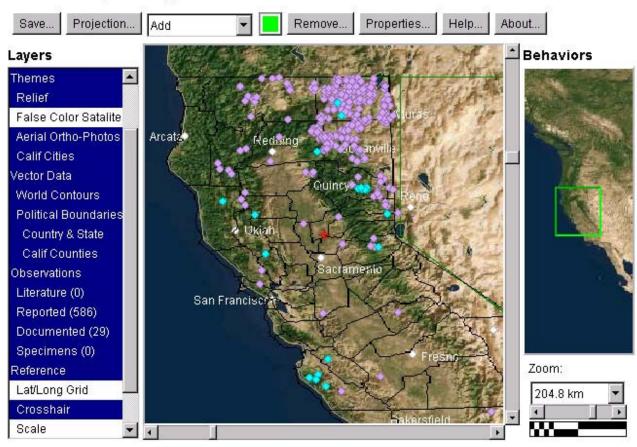
## Maintain occurrence library and tools

#### Java Interactive GIS Viewer 3.0:

Your query searched for the following plant names: (Click on a name to see synonymy)

Bromus tectorum Bromus tectorum var. glabratus Bromus tectorum var. tectorum

#### Total Number of points mapped: 615



### **Email Alerts: New county records for invasives**

Subject: Added to occ: Spartium junceum in TUL by David Graber From: web server <webuser@dlp.CS.Berkeley.EDU> Date: 7/25/2002 3:30 PM To: calflora@calflora.org The following observation was added by David Graber http://www.calflora.org/cgi-bin/occ query?seq num=1874950&one=T Subje ID #: 1874950 Fre Source: David Graber (david graber@nps.gov) Taxon: Spartium junceum Observation Date: 2002-07-25 Observer: David Graber The fo County: Tulare Subj Detail Best Georef: Zone=11, Easting=332000, Northing=4036200 (utm) ID #: Fre Location Descrip: Three Rivers. Bed of Kaweah River, Middle Fork Sourd D. Taxon Special Messages: This is a observation of an INVASIVE WEED(CalEPPC:B,CA:not listed,FED:not listed Obser New County report: Spartium junceum not previously reported from Tulare County The fo Obser INVASIVE WEED NEW TO Tulare Count Detai Best Map/V Location Descrip: Lake Shastina Golf Resort; East Side entrance. http:/ ID #: Special Messages: Sourc This is a observation of an INVASIVE WEED (CalEPPC:not listed CA:A, FED:not listed) Taxon New County report: Chondrilla juncea not previously reported from Siskiyou County Obser INVASIVE WEED NEW TO Siskiyou Obser No georeferenced points submitted Count Best Georef: Zone=11, Easting=0272589, Northing=3876705 (utm) Location Descrip: Elkhorn Hills. Elkhorn Grade, 1st summit to E of Soda Lake Rd. Special Messages: This is a observation of an INVASIVE WEED (CalEPPC: not listed, CA:C, FED: not listed) New County report: Salsola paulsenii not previously reported from San Luis Obispo County INVASIVE WEED NEW TO San Luis Obispo

## Contributing **Observations**

Add Observations to CalFlora Calflora Instructions: Use this form to submit an observation to CaFlore. Fill out the required fulls in red and as many of the optional fields as you can, and then click on "submit". For information each field, click on the field amou. Detailed observation reports are note valuable than generalized information. Please check your spelling and information closely before submission. **Required Information** You are logged in as Tony Morosco [change] me of Tony Morosco and Ann Dennis observer(s) tion. Matt include ve Potentilla hickmanii index plant observed Scientific names only. Look up common names in Californ San Mateo - California county observation date February Vunknown V 2002 a lost yer is regime F I recognize this plant from prior determinations and experience □ I compared this plant with herbarium specimens To hodter T I keyed this plant in a botanical reference Intification I compared this plant with published taxonomic description T An expert reviewed and confirmed this identification I am confident of this identification, and submit this as a positive observation tainty of  $\mathbb C$  . I am not certain of this identification but believe it to be a significant observation and submit it here as an alert only

Frequently asked

#### Location Information

	tion cription	Slope south of Martini from horse corrals. Tot description of location (up to 235 doesn't	*
	OREFERENCED LC OOSE ONE of the fol	CATION lowing location types to enter AN	D the precision of measurement.
	latitude and longitude	NAD 27 (defauk) datum Premds: 34.34456 or 344.307 03.334	lengitude w 34.30 03.334 Locar Lailing units 005 Vis
OR			
	UTM coordinates	zone Easting mms 10 or 11 6 digits	Northing 7-digits Loops UTM using 605 Vis
OR			
	meridian, township, range and section	-select meridian-	township range section
AN	D		
	location precision	± 200 feet •	



(Optional) your unique record identifier T#200202 ded if you keep track of information in a reperate file that may be updated. your dataset or Plants of Montara Mountain subset identifier A way of grouping your people. Example: "Finne of Tildes Pade" Submit Reset



### Add Observations to CalFlora

#### Observation Submissions:

Instructions

Frequently asked questions

How to georeference locations

Identification resources

Edit an observation

Instructions: Use this form to submit an observation to CalFlora. Fill out the required fields in red and as many of the optional fields as you can, and then click on "submit". For information on each field, click on the field name. Detailed observation reports are more valuable than generalized information. Please check your spelling and information closely before submission.

### **Required Information**

name of	Tony Morosco and Ann Dennis	
observer(s)	Name of person(s) making this observation. Must include your name as registered.	
plant observed	Potentilla hickmanii index	
plant observed	Scientific names only. Look up common names in Califora.	
county	San Mateo 🔽, California	
observation date	February vunknown v 2002 at least year is required	
	I recognize this plant from prior determinations and experience	
method of	I compared this plant with herbarium specimens	
identification	I keyed this plant in a botanical reference	
	I compared this plant with published taxonomic descriptions	
	An expert reviewed and confirmed this identification	
certainty of	• I am confident of this identification, and submit this as a positive observation	
identification	C I am not certain of this identification but believe it to be	
	a significant observation and submit it here as an alert only.	

### **Location Information**

location description	Slope south of Martini from horse corrals. Text description of location (up to 255 chara	
GEOREFERENCED LC CHOOSE ONE of the fo		ND the precision of measurement.
latitude and longitude	NAD 27 (default) datum Formats: 34.34456 or 34d.30' 03.33	- longitude 4" or 34 30 03.334 Locate Lat/Long using GIS Viewer
OR		
UTM coordinates	zone Easting zone 10 or 11 6 digits	Northing 7 digits Locate UTM using GIS Viewer
OR		
meridian, township, range and section	select meridian 💌 meridian	township range section
AND		
location precision	± 200 feet 💌	2 /1

### **Other Observation Information**

elevation	select units 💌
elevation precision	±
habitat description	Coastal prairie/grassland Description of habitat where this observation was made.
other notes	Transportation Biologists, this population is the largest in the world for this species. Only one other locality is known to exist in Monterey County, (and one population presumed extinct in Sonoma County).
	Your notes on this observation, 255 characters maximum.

### Your Record Identifiers

(Optional)

your unique record identifier	<b>TH200202</b> Reccomended if you keep track of information in a seperate file that may be updated.
your dataset or	Plants of Montara Mountain
subset identifier	A way of grouping your records. Example: "Plants of Tilden Park"

Submit Reset



### **Confirm Observation Contribution**

Example Photo of Potentilla hickmanii



Tony Morosco

Note the identification of this photo is not yet confirmed.

Other Photos of Potentilla hickmanii

Calflora Species report for Potentilla hickmanii

Other Observations of Potentilla hickmanii

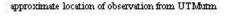
Having problems? please contact us.

#### Please review the following messages before continuing:

- Plant Observed:
  - The plant you are submitting an observation for is considered rare. Please consider filing a report with the State of California Natural Diversity Database.

You are reporting an observation of **Potentilla** hickmanii, observed by **Tony Morosco** on **Feb** 2002 in San Mateo County.

You have indicated the location description as "Slope south of Martini Creek, uphill from horse corrals.", and included the georeferenced location Zone=10, Easting=543760, Northing=4156370







Species Information Occurrence Library Synonyms Photo Collection

### **Observation Contribution Confirmed**

Thank You for your contribution. Your observation of **Potentilla hickmanii** has been added to the CalFlora Plant Observations Library. The unique Calflora ID is 1853418.

You can now view your observation details report here. or view it with maps and aerial photos on the GIS Viewer (if georeferenced). You can also view all observations of Potentilla hickmanii from all sources.

To enter a new observation, click here. To start a new observation as a duplicate of this one, click here. To modify your observation, click here.

#### Registration to Contribute Plant Observations

Calflora

Overview

Occurrence Library Synonyms Instructions: Fill out and submit this form before submitting observations to Calflora.

Here at these rule of an above in a sound rule sound reference sound in gover values to conduct Required information is in red. Your user profile will be created exactly from your registration, so please word your responses carefully. Califora does not share personal information with others, but the information you provide will be publicly available on our website. Once registered, you may immediately begin submitting plant observations. You may update your profile at any time.

Please note that registration to contribute photos is currently a separate process handled through the UC Berkeley Digital Library Project. We estimate completing this form takes less than 5 minutes.

Photo Collection Update Existing Profile Add an observation

Registration Form

	Walter	example: John C.
last name	Morosco	example: Smith
password	******	example: Delph1n1um
re-type password	*****	exactly as typed above
email	tony-morosco@calflora.org	example: jsmith@nature.com
bio/credentials	Botanist, CalFlora Dataase. 10 years experience in field botany in California. B.A. Inegrative Biology, UC Berkeley	example: Botanical consultant; B.S. Plant Biology, Arizona State Univ. example: Student, Portola Middle School
expertise/interests	biodiversity informatics, floristics, and systematics of California plants, Poetentilla subsect. Multijugaea	example: Ranunculaceae (esp. Delphiniur aquatic monocots example: Trees of Wildcat Canyon
experience level	Please check the appropriate statement: C I am a professional biologist/botanist, or have profession: C Although I do not have formal credentials, I am recognize botanists. C Although I do not consider myself to have professional-le experienced in the use of keys and descriptions, and/or have which I will be submitting observations. C I do not have extensive experience or background in bota can accurately identify the plants for which I will be submitting	ed as a peer by professional vel knowledge, I am quite expertise with the plants for any, but I am confident that I
age group	Please check the appropriate range Adult (ages 18 and over) Teen (ages 13 - 18) Child (ages 12 and under)	
age group affiliation	<ul> <li>Adult (ages 18 and over)</li> <li>Teen (ages 13 - 18)</li> </ul>	example: U.S. Forest Service
	Adult (ages 18 and over)     Teen (ages 13 - 18)     Child (ages 12 and under)	example: U.S. Forest Service example: 937 Sar Pablo Ave. Abary / CA-7070 / U.S.A. 610 628-6426
affiliation contact information	<ul> <li>Adult (ages 18 and over)</li> <li>C Teen (ages 13 - 18)</li> <li>C Child (ages 12 and under)</li> <li>E Bay Chapter California Native Plant Society</li> <li>[937 San Pablo Ave stret address</li> <li>[Albayn , [CA] [94710 U.S.A. city' state / postal code / country</li> <li>[510 528-5426</li> </ul>	example: 937 San Pablo Ave. Albany / CA / 94706 / U.S.A.
affiliation contact information strongly recommended.	<ul> <li>Adult (ages 18 and over)</li> <li>C Teen (ages 13 - 18)</li> <li>C Child (ages 12 and under)</li> <li>E Bay Chapter California Native Plant Society</li> <li>937 San Pablo Ave stret address</li> <li>Albayn , CA 94710 U.S.A. city / state / postal code / country</li> <li>510 528-5426 talephone</li> </ul>	example: orangele: 0.53 Pablo Ane, 0.53 Pablo Ane, 0.53 Pablo Ane, 0.54 Pablo Ane, 0.55 Pablo Ane, 0.
affiliation contact information strongly recommended. website	<ul> <li> <sup>©</sup> Adult (ages 18 and over)         <sup>©</sup> Teen (ages 13 - 18)         <sup>©</sup> Child (ages 12 and under)         <sup>©</sup> Child (ages 12 and under)         <sup>©</sup> Tean (ages 12 and under)         <sup>©</sup> Tean (ages 12 and under)         <sup>©</sup> San Pablo Ave         <sup>©</sup> San Pa</li></ul>	example: gy7 San Pabo Awe gy7 San Pabo Awe gy7 San Pabo Awe ho Sure San Pabo Awe for Sure San Pabo Awe for Sure San Pabo Awe example: http://www.castblink.com/my_pa lants. au'd like to submit) ave the correct mit uncertain y important and

#### Submit Reset

If you have any questions or problems with registration, please contact Califlora at califlora@califlora.org

## New Observer's Registration Form

### **Registration to contribute Plant Observations**

Confirm Registration

flora

Please check the information you submitted below. Remember that the information will appear on our website exactly as you submit it. If the information is correct, click the *Submit* button to submit your registration.

#### Profile for Walter Morosco

```
Biography & Credentials:
        Botanist, CalFlora Dataase. 10 years experience in field botany in California. B.A. Inegrative Biology, UC Berkeley
Expertise & Interests:
        Walter is a Professional Biologist.
        biodiversity informatics, floristics, and systematics of California plants, Poetentilla subsect. Multijugaea
Affiliation:
        Calflora and East Bay Chapter California Native Plant Society
Contact information:
        Email tony-morosco@calflora.org
        937 San Pablo Ave Albany, CA 94710 U.S.A. 510 528-5426
        http://www.calflora.org/~waltony
Registered:
        2002-05-21 17:51:33
                                    edit registration
  submit registration
                                                              cancel
```

If you need to make corrections please use the *Back* button on your web browser to make corrections. Please contact us with any questions or problems. For more information about contributing observations and other requirements, see About Contributing Observations.



#### Registration to contribute Plant Observations Confirmed Registration Confirmed

#### Your registration has been processed and preliminarily approved.

Name: Walter Morosco Password: Ldensiflorus Unique ID: 11

Please keep this information in a safe place. A message has been sent to confirm your email address.

You may now :

submit plant observations to Calflora. view your profile. update profile for Walter Morosco. register for other features (contribute photos - contribute annotations - etc.) return to Calflora.

Please contact us if you have any questions. For more information about contributing observations, see About Contributing Observations.

## **Quality documentation: observer credentials**

bio/credentials	Botanist, CalFlora Dataase. 10 years experience in field botany in California. B.A. Inegrative Biology, UC Berkeley	<i>example</i> : Botanical consultant; B.S. Plant Biology, Arizona State Univ. <i>example</i> : Student, Portola Middle School
expertise/interests	biodiversity informatics, floristics, and systematics of California plants, Poetentilla subsect. Multijugaea	<i>example</i> : Ranunculaceae (esp. Delphinium aquatic monocots <i>example</i> : Trees of Wildcat Canyon
experience level	<ul> <li>Please check the appropriate statement:</li> <li>I am a professional biologist/botanist, or have professional</li> <li>Although I do not have formal credentials, I am recognize botanists.</li> <li>Although I do not consider myself to have professional-leve experienced in the use of keys and descriptions, and/or have which I will be submitting observations.</li> <li>I do not have extensive experience or background in bota can accurately identify the plants for which I will be submitting</li> </ul>	d as a peer by professional vel knowledge, I am quite expertise with the plants for ny, but I am confident that I
age group	Please check the appropriate range Adult (ages 18 and over) Teen (ages 13 - 18) Child (ages 12 and under)	

## **Quality documentation: attribution and methods**

fication resources	name of	Tony Morosco and Ann Dennis
dit an observation	observer(s)	Name of person(s) making this observation. Must include your name as registered.
	plant observed	Potentilla hickmanii index
		Scientific names only. Look up common names in Califora.
	county	San Mateo 🔽, California
	observation date	February Inknown 2002 at least year is required
	method of identification	<ul> <li>I recognize this plant from prior determinations and experience</li> <li>I compared this plant with herbarium specimens</li> <li>I turned this plant in a between the former of the speciments</li> </ul>
		I keyed this plant in a botanical reference I compared this plant with published taxonomic descriptions
		An expert reviewed and confirmed this identification
	certainty of	• I am confident of this identification, and submit this as a positive observation
	identification	I am not certain of this identification but believe it to be a significant observation and submit it here as an alert only.

## **Quality control: first-hand, positive observations**

agreement	I will submit only my own observations of wild plants. I realize that this system is only for first-hand reports about plants, native and introduced, that are growing without deliberate planting or cultivation.
	<ul> <li>I have read and will abide by this agreement.</li> <li>(contact calflora@calflora.org if you have other kinds of information you'd like to submit)</li> </ul>
quality commitment	I will, to the best of my ability, make sure I have the correct scientific name for plants I report. I will submit uncertain identifications only if I believe them to be very important and time sensitive, and will label such reports 'uncertain'.
	I have read and agree to this quality commitment.
permission	I hereby grant permission to the public to use data I submit to Calflora.

## **CalFlora** Partners

### **Collaborators and Data Contributors**

- Bureau of Land Management
- California Academy of Sciences
- CalTrans
- CA Dept. Fish & Game
- CA Dept. Food & Ag.
- California Native Plant Society
- San Jose State Herbarium
- Santa Barbara Botanic Garden
- > UCB Dept. ESPM
- > UCB Digital Library Project
- > UCB Univ. & Jepson Herbaria
- UC Davis Information Center for the Environment

- USDA Forest Service
- USDA Nat'l Plant Data Center
- > US Fish and Wildlife Service

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