

WHERE IN THE WORLD IS *SILENE CALIFORNICA*?

The Mysterious Vanishing Cabinet of Taxonomic Revisions

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INTRODUCTION: In 2005 a new taxonomy for the genus *Silene* in North America was published and became widely accepted ^(1,2). New combinations were created that lumped the red flowered *S. californica* into *S. laciniata* as *S. laciniata* subsp. *californica*, while recognizing the segregate *S. serpentinicola*, a red flowered taxon described in 2004 and endemic to a small area of Del Norte County. Based on observations of flower color, floral anatomy, and plant morphology from field and herbarium research in northern California, circumscriptions of *S. laciniata* and *S. serpentinicola* leave many populations of red flowered *Silene* undescribed.



I live on Mt. Tamalpais, Marin County. I used to be called *Silene californica* but now I'm known as *S. laciniata* subsp. *californica*. *S. laciniata* is mainly a Mexican species with one other subspecies in south western CA and another from Arizona to Texas and south.



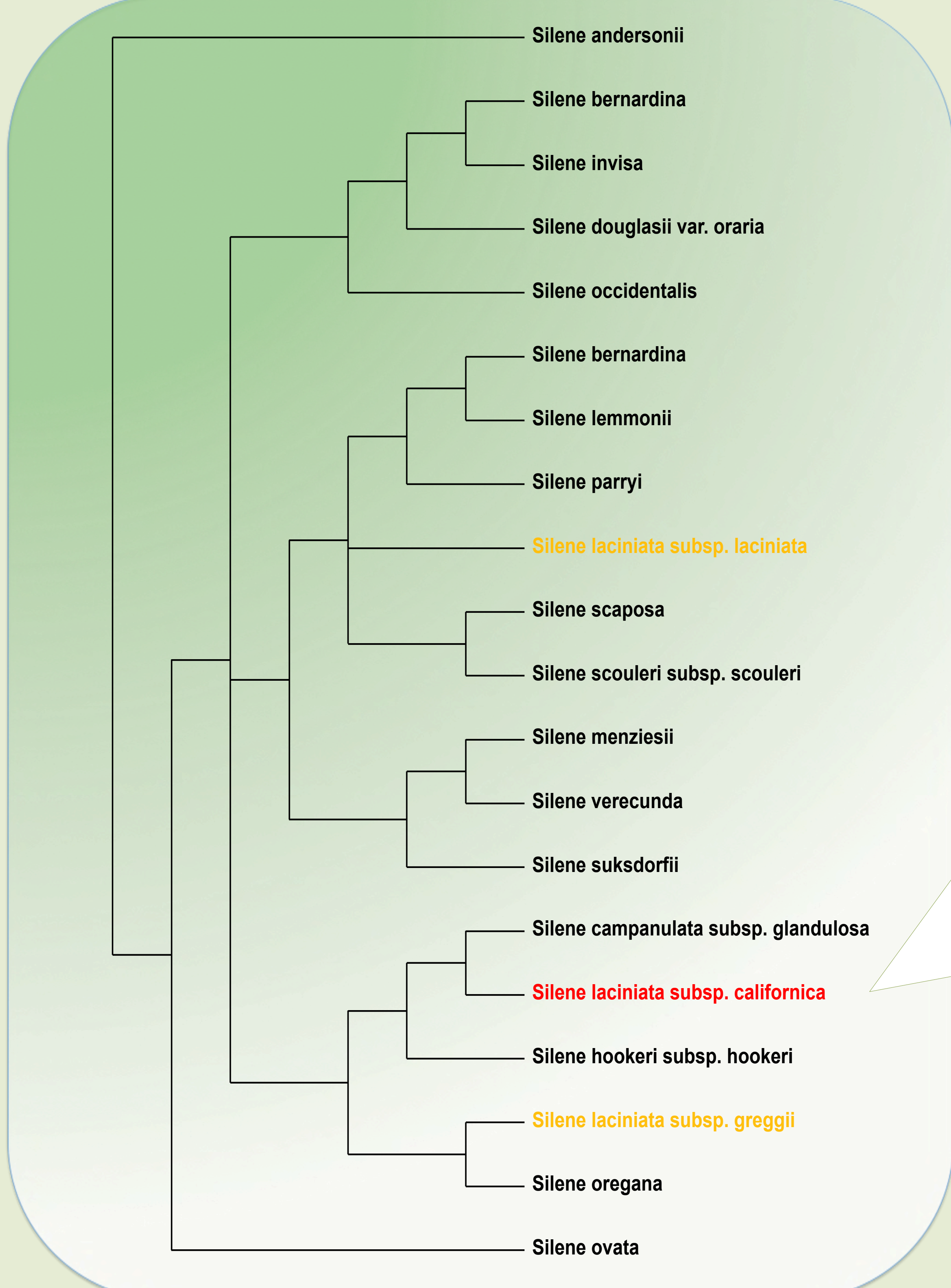
That's me next to the dime. I'm growing in serpentine on the side of a fire road.



S. Laciniata is taller than 25 cm when in bloom, but like *S. serpentinicola* I'm mostly shorter than that and in many of my populations I grow no taller than 10 cm....



To the left is *S. serpentinicola* growing under shrubs among perennial grasses and in the picture above in gravel on the eroded bank of a nearby road. It is endemic to serpentine soils of the Smith River Basin near Gasquet, Del Norte County but it looks a lot like me.



Like *S. serpentinicola* I also have conspicuous petal appendages, 2 mm or more, that form a corona on carmine-red flowers, I'm a glandular plant of small stature, and am most often found on serpentine soils. Unlike *S. serpentinicola* I'm not limited to a small part of Del Norte County... But unlike *S. laciniata* I rarely grow taller than 25 cm and I'm mostly a plant of the mountains of the central and northern California Floristic Province, not of the south western U.S. and northern Mexico.

In a 2007 analysis of multiple genes used to draw my family tree I wasn't closely related to the other *S. laciniata* from Arizona and southern California⁽³⁾. In the example here I'm represented by Mendocino County in a phylogeny based on ITS sequence... So who am I? Since the 2007 study does not define my identity nor the relationship of *S. serpentinicola*, more populations sampled through out northern California for morphological and molecular data will help define the taxonomic identity of and more completely describe the red flowered *Silene* in California.



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