

# New Weed Found in Borrego Valley— The Long Story

by Larry Hendrickson

Ruth Ehly, a park volunteer, a member of the ABDSP Botany Society, and an active parobotanist for the San Diego Plant Atlas project, has been assisting other parobotanists and staff in the field to further document plants within the park.

On March 18, 2011, Whitney Meier and I accompanied Ruth on a visit to her adopted plant atlas grid square F24, which also includes the area where she lives. Because much of the land in the nine-square mile grid square is private, she has been collecting within County road easements, and with permission, on private property.



The eastern boundary of her grid square is Borrego Valley Road, so we stopped a short distance north of the intersection with Palm Canyon Drive at the Borrego Valley Substation and noticed a plant that none of us had seen before growing in the road shoulder. We saw only a few plants there, but it didn't appear to be flowering yet, so Ruth said that she would revisit the site and make a collection and pull up the plant and dispose of it in case it might be a—new weed.

Whitney and I thought it might be a type of star thistle in the genus *Centaurea*, none of which are native to this continent. This group includes some very invasive species such as Yellow Star-Thistle, *Centaurea solstitialis*. It just had the look of a star thistle. After checking the Jepson Manual and the Flora of North America

identification keys, the plant didn't fit any of the descriptions for members of this genus or a closely related genus *Volutaria*. As a last resort, Whitney searched for images of plants of this group and came up with a photo that looked like a match. It appeared to be White Volutaria, *Volutaria canariensis*, a native species of the Canary Islands. At the time, it seemed strange that the species was not in any of the regional or American floras.

In April, Chris McDonald, who is the Desert Natural Resources Advisor for the University of California Cooperative Extension, was in town to present the results of the experimental plots that he had set up on private land to test different types of herbicide use on Sahara Mustard. There was time before the presentation so Paul Johnson and I invited him out to check on this unknown plant in hopes that he might know what it was. Ruth had already made a collection of the plant and removed them, but we did find hundreds of plants on the east side of the road a short distance away from the road at the margins of bare, silty depressions adjacent to the substation within grid square F25. I collected several more specimens for the San Diego Natural History Museum, and Chris did the same and would submit specimens to the herbarium at Rancho Santa Ana Botanical Gardens.



I visited the San Diego Natural History Museum, and left the specimens with Dr. Jon Rebman. Since it isn't in any of the floras, he sent the scanned images of the plant to Dr. David J. Kiel at California Polytechnic State University, San Luis Obispo, who is

an authority on the Sunflower Family, Asteraceae. In the meantime, Jon had found the same image that Whitney had found online ([GlobalTwitcher.com](http://GlobalTwitcher.com)).

Dr. David J. Kiel sent the scanned images of the specimen to an authority on the genus *Volutaria* in Germany, Gerhard Wagenitz who said that it looked to be White *Volutaria*, *Volutaria canariensis*. Bingo.

Other species of the genus *Volutaria* are known to occur within California and elsewhere in the U.S., some are lovely ornamentals which can escape from cultivation. There is one record of

*Volutaria muricata* from Sunset Cliffs in San Diego.



Because the second edition of The Jepson Manual is about to be published, Dr. Keil said that he would add a note under the genus stating that White *Volutaria* occurs within Borrego Valley.

Whitney told me that she saw what looked like the unknown plant as she drove along Palm Canyon Drive (S-22) east of Christmas Circle between the elementary school and the airport. Ruth, Paul and I made a trip out there not far from the intersection with Borrego Valley Road and saw scattered plants in the roadside along with a weedy star-thistle called Tecalote, *Centaurea melitensis*, which had not been documented before in Borrego Valley.

One can only speculate how widespread or invasive this plant might be or even how it got here. If anyone sees this plant, please notify me ([larry.hendrickson@parks.ca.us](mailto:larry.hendrickson@parks.ca.us)), and of course, if you are a plant atlas parobotanist please make a collection if it is at a

new location. Both local and state agricultural departments have been notified.

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