ROOT GORELICK

Hesperoyucca whipplei

1. Hesperoyucca whipplei at Julia Pfeiffer Burns State Park, Monterey County. Note flowering shoots with dying leaves, but living offsets, and waterfall at left.

The "chaparral yucca", *Hesperoyucca whipplei* is fairly common plant throughout the mountains of the southern third of California, at least in the western half of the southern portion of the state, and the northern two-thirds of the state of Baja California (Haines 1941). I first saw this plant growing along the highway in greater Los Angeles, if that is any indication of its commonness. While this species only grows on hills, it does so from sea level up to over 2,500 meters above sea level, but usually below 1,500 m.a.s.l. (Haines 1941). To the north, this species ranges along both the Coast Range to Monterey County (Fig. 1) and in the Sierra Nevada to Tulare County (Ingram 2008). The Calflora website (http://www.calflora.org/cgi-bin/species_query.cgi?where-calrecnum=9995) reports the range extends a bit farther north, to western Merced County in the Coast Range and to eastern Fresno County in the Sierra Nevada, but I have not looked for specimens or herbarium records from those locales.

I leave it to others to decide whether *Hesperoyucca newberryi* is a distinct species or a subspecies of *H. whipplei*. *H. newberryi* is endemic to Mojave County in Arizona, below the South Rim of the Grand Canyon and down to the Colorado River. The *Flora of North America* (Clary 2002) states that both morphological and genetic differences between these two taxa are still inconclusive for supporting separate species status. By contrast, *Hesperoyucca* seems to be distinct from *Yucca*, based on both morphological and genetic differences, such monocarpy of shoots (see below) and more robust inflorescences in *Heperoyucca*.

The Calflora website reports a disjunct specimen of *Hesperoyucca whipplei* that appears to be in the Providence Mountains of northeast San Bernadino County. This locale is approximately equidistant from the ranges of *H. whipplei* and *H. newberryi* and would be substantial range extension for either taxon. If this reported locale is valid, it should be studied.

2. *Hesperoyucca whipplei* inflorescences at Julia Pfeiffer Burns State Park, Monterey County. Note waterfall at right.

All *Hesperoyucca* (there are either one, two, or three species) have monocarpic shoots. That is, immediately after a shoot forms an inflorescence and fruits, that shoot subsequently dies. However this is not true semelparity insofar as many specimens of *Hesperoyucca whipplei* sensu stricto offset, hence the individual plant may live after a shoot flowers. But, because a shoot diverts all its resources to form an inflorescence and these plants have extensive root systems, the inflorescences are truly spectacular.

Sometimes the scenery in which *Hesperoyucca whipplei* grows is also spectacular. I took the accompanying photos at Julia Pfeiffer Burns State Park on 21st June 2013, which is about halfway along the dramatic stretch of the Pacific Coast Highway in Monterey County, i.e. about halfway between Big Sur and the San Luis Obispo County line, overlooking the waterfall that descends into the Pacific. This species typically flowers in May and June in habitat.

3. Close-up of inflorescence in Figure 2.

References

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