

***Candelariella citrina* in the Joshua Tree National Park (California, U.S.A.)**

Map collection



Candelariella citrina. Photo by Jana Kocourková

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Abstract – *Candelariella citrina* is only known in southwestern North America but frequent. It occurs in Arizona through the Colorado Desert to Baja California. In cismontane southern California it occurs in scattered locations in the Santa Monica and Santa Ana Mountains. It generally has a poorly developed thallus in Joshua Tree National Park and it is frequent in the Mojave Desert in Joshua Tree. The map of distribution of *C. citrina* in Joshua Tree National Park is presented. We compiled a detailed list of records based on GPS data.

Key words – *Candelariella citrina*, lichens, map of distribution, Joshua Tree, Mojave Desert, *C. rosulans*

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Candelariella citrina B. de Lesd.

DESCRIPTION. – Westberg 2004.

WORLD DISTRIBUTION. – Southwestern North America.

SUBSTRATE. – Non-calcareous rock, soil in crevices, over mosses and lichens; on monzogranite and rarely gneiss in Joshua Tree.

NOTES. – *Candelariella citrina* is frequent in western North America. It occurs in Arizona through the Colorado Desert to Baja California. It was collected in the washes of Anza-Borrego Desert State Park (UCR Herbarium 2012). In cismontane southern California it occurs in scattered locations in the Santa Monica and Santa Ana Mountains. It generally has a poorly developed thallus in Joshua Tree National Park and can only be distinguished from *C. rosulans* (see below) by the shape of its ascospores which usually have one or two attenuated ends. It is documented by 21 collections in the Mojave Desert in Joshua Tree.

DISTRIBUTION. – Hidden Valley, Hexie Mountains, Juniper Flats, Little San Bernardino Mountains (Berdo Canyon, Eureka Peak, Pushwalla), Lost Horse Mountains, lower Covington Flats, Malapai Hill (on monzogranite), Queen Mountain, Saddle Rock, Skull Rock area, Stirrup Tank, Wonderland of Rocks (Wall Street Mill area, near west entrance).

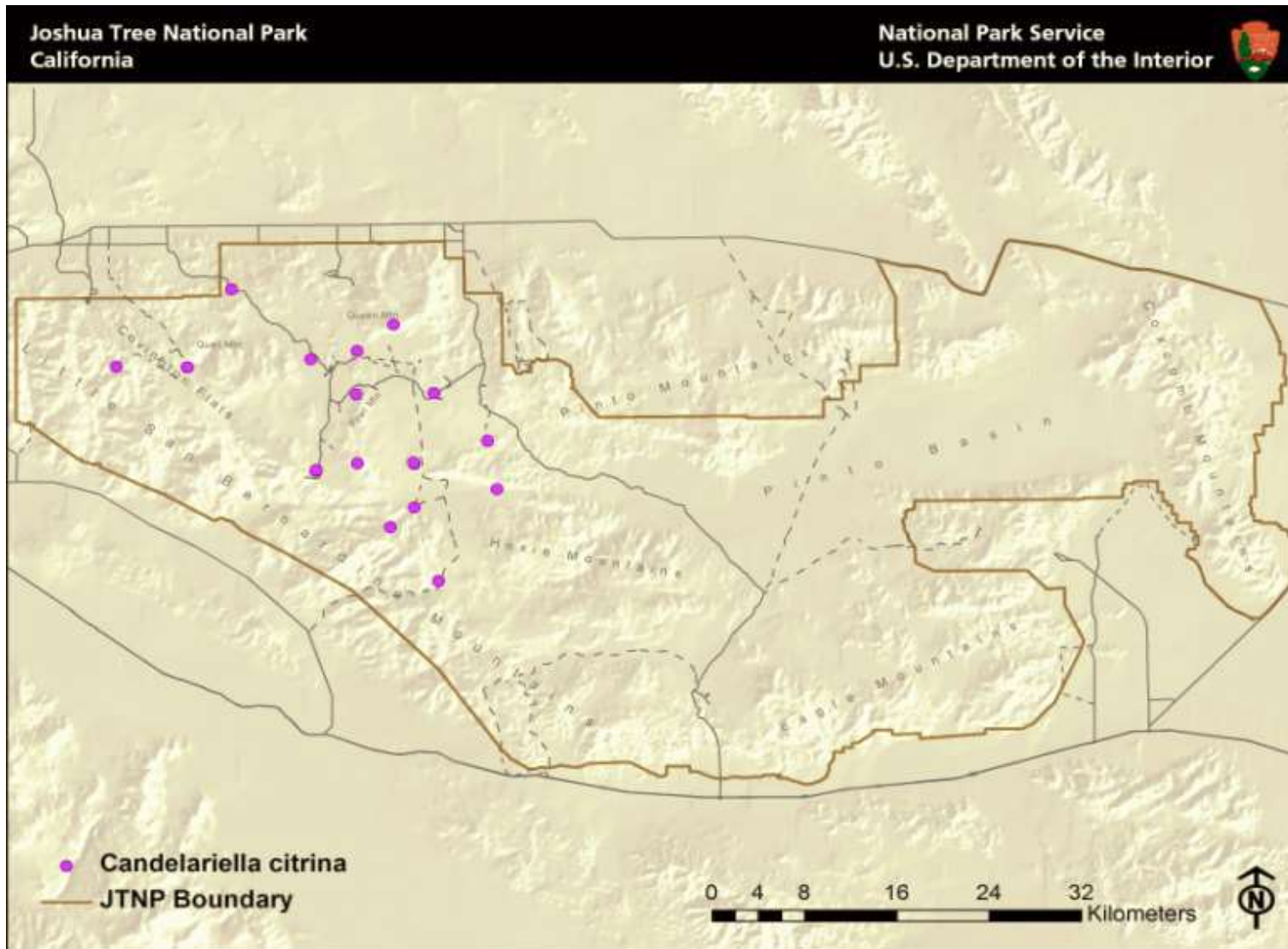
LITERATURE CITED

Westberg, M. 2004. *Candelariella*. In: T.H. Nash, III, B.D. Ryan, P. Diederich, C. Gries, and F. Bungartz (eds.) Lichen Flora of the Greater Sonoran Desert Region 2: 46–53. Lichens Unlimited, Tempe, AZ.

ACKNOWLEDGEMENTS

The work of Kerry Knudsen was funded by a co-operative agreement between Joshua Tree National Park and the University of California at Riverside (UCR). The work of Jana Kocourková was supported financially by the KONTAKT II, Program of International Cooperation in Research and development for scientific cooperation between the CR and USA, LH 11057 from Ministry of Education, Youth and Sports of the Czech Republic.

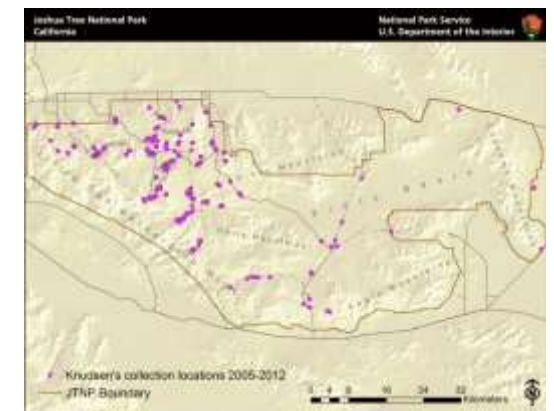
Candelariella citrina



Known distribution of *Candelariella citrina* in JTNP.



Location of Joshua Tree National Park in Southern California



All 238 of Knudsen's and Kocourková's lichen collection sites throughout Joshua Tree National Park between the years of 2005 and 2012.

Map collection, maps made in software ArcGIS, 10.1; electronic form, file type pdf.