# Buellia spuria in the Joshua Tree National Park (California, U.S.A.) Map collection



Buellia spuria. Photo by Jana Kocourková.

## Kerry Knudsen, Kocourková Jana\*

\*Czech University of Life Sciences Prague, Faculty of Environmental Sciences, Department of Ecology, Czech Republic © 2012

**Abstract** – *Buellia spuria* is known in Asia, Europe, and North America. It is infrequent in California and frequent only in the Mojave Desert in Joshua Tree where it was documented by 13 collections. Specimens of *Buellia spuria* with eroded thalli can be mistaken for *B. abstracta*. The map of distribution of *B. spuria* in Joshua Tree is presented. We compiled a detailed list of records based on GPS data.

Key words - Buellia spuria, distribution, map, Joshua Tree, Mojave Desert, stictic and norstistic acid

**Authors –** Kerry Knudsen<sup>1</sup>, Kocourková Jana<sup>2</sup>

<sup>1</sup>The Herbarium, Department of Botany & Plant Sciences, University of California Riverside, California 92521, U.S.A. – e-mail: Knudsen@ucr.edu

<sup>2</sup>University of Life Sciences Prague, Department of Ecology, Faculty of Environmental Sciences, Kamýcká 129, Praha 6 – Suchdol, CZ – 165 21, Czech Republic – e-mail: kocourkovaj@fzp.czu.cz

### Buellia spuria (Schaef.) Anzi

DESCRIPTION. – Bungartz et al. 2007.

WORLD DISTRIBUTION. - Asia, Europe, North America.

SUBSTRATE. – Non-calcareous rock; on granite in Joshua Tree.

NOTES. – Buellia spuria is infrequent in California. It is only frequent in the Mojave Desert in Joshua Tree where it was documented by 13 collections. Specimens of Buellia spuria with eroded thalli can be mistaken for B. abstracta, which differs in having slightly broader ascospores and an epihymenium turning violet in nitric acid. The thallus of several specimens was sometimes negative with spot tests and levels of secondary metabolites could only be ascertained with thin-layer chromatography. Norstictic acid occurred in all specimens and was usually minor. Stictic acid aggregate was major (Michalová 2012). Norstictic or stictic acid tended to be most concentrated beneath the apothecia. It usually has a distinctive orbicular thallus.

DISTRIBUTION. – East of Quail Mountain, Little San Bernardino Mountains (Pushwalla Pass), Lost Horse Mountains, Lost Horse Valley, Saddle Rock, upper Juniper Flats, Wonderland of Rocks (Keys Ranch, Wall Street Mill).

#### LITERATURE CITED

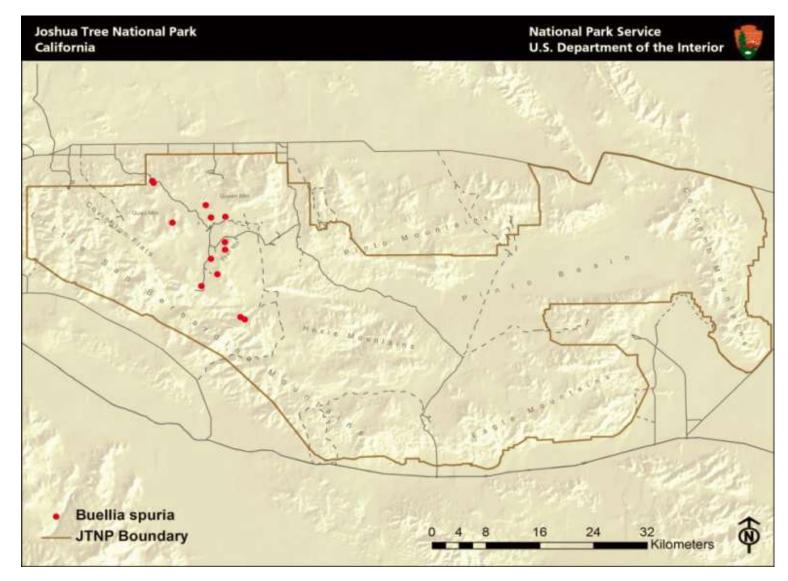
Bungartz, F., A. Nordin and U. Grube. 2007 [2008]. *Buellia. In:* T.H. Nash III, C. Gries and F. Bungartz (eds.). Lichen Flora of the Greater Sonoran Desert Region 3: 113–179. Lichens Unlimited, Tempe, AZ.

Michalová M. 2012. Chemistry of lichens of southwest Mojave desert. 101 pp., Ms [Dipl. Th.; depon. *In:* Faculty of Environmental Sciences, Czech University of Life Sciences, Praha]. Duplicate copy in library of New York Botanical Garden.

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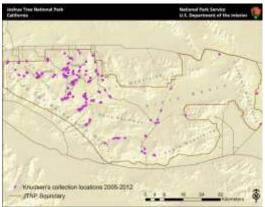
## Buellia spuria



Known distribution of *Buellia spuria* 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.