



Sugarstick *Allotropa virgata*

June 2015

Field Notes

General Description

Allotropa virgata gets its common names (sugarstick or candystick) from the distinct red and white stripes running up its stem. This perennial plant's flowers are white, pink, or brown and are arranged in a terminal spike-like raceme; they have five sepals but no petals, with prominent reddish stamens visible when the flowers bloom in early- to mid-summer. They often occur as a cluster of flowering stalks. After they dry out and die, the brownish stalks remain for a good time afterwards. To differentiate this plant from pinedrops, which is also reddish and persists long after dying, remember that sugarstick's flowers open outwards from the stem, as opposed to downwards as in pinedrops. No part of the plant is green since it has no chlorophyll and does not photosynthesize.

Ecology

If you're a Matsutake mushroom fan, you might already be familiar with this plant. Sugarstick gets its nutrients and carbohydrates exclusively from Matsutake mycelium (which associate with the roots of both the sugarstick and the roots of nearby conifer or hardwood trees). Sugarstick seeds rely on this mycorrhizal association to even start germinating. However, mushroom hunters raking and digging in the duff may cause soil compaction that can harm the mycorrhizal networks, thus harming sugarstick populations. Bumblebees also love *Allotropa virgata* for the nectar pools that accumulate near its flowers' ovaries.



Candy-cane like stripes of *Allotropa virgata*.
Photo Justin Rohde

<https://www.flickr.com/photos/forestfreedom/2062737287>



Range of *Allotropa virgata*. Photo: USDA Plants Database.

Habitat and Distribution

Sugarstick is an endemic western North America species ranging from California to British Columbia. Its preferred habitats are mature and moist closed canopy forests (coniferous, mixed, or tanoak) with plenty of decaying woody plant debris. Its largest populations are

found in old-growth. Sugarstick can be found along the coast up to elevations of approximately 3000 m (9800 ft). The Forest Service has identified sugarstick as a sensitive species, with threats from habitat fragmentation and soil disturbances from forest management, recreation, and livestock grazing.

Where to find in the Klamath Network

Sugarstick can be found in closed canopy forests at Crater Lake, Lassen Volcanic, and Redwood.



Sugarstick flowers have prominent red stamens. Photo © Nancy Cotner

More Information

<http://www.blm.gov/or/plans/surveyandmanage/MR/VascularPlants/section1.htm#NATURAL%20HISTORY>

http://www.fs.fed.us/wildflowers/plant-of-the-week/allotropa_virgata.shtml