

UC SANTA CRUZ CAMPUS NATURAL RESERVE

GOLDEN-GILLED WAXY CAP



Tiffany Thedan

Scientific Name: *Gliophorus flavifolius* (synonym *Hygrocybe flavifolia*)

Common Name: Golden-gilled Waxy Cap

Global Rarity: IUCN Red List: Endangered, Criterion C2a(i)

State Listing: Unlisted

UCSC Rarity: Very rare

General Description

The bright pop of color from the Golden-gilled Waxy Cap is hard to miss in the dark, moist, coastal forests. It is the only waxy cap with both a slimy white stipe and slimy yellow and white cap with yellow gills. The stipe is so white that it can appear almost bluish-white, and the young fruiting bodies have caps that are mostly white with just a rim of yellow around the edge. There is a similar unnamed species in the San Francisco area, but it has whitish gills and a dry stipe.



Identification

Cap: Starts off all white; yellow with white center at maturity, 1-5 cm (0.5-2")

Stipe: Slimy, bright white (almost bluish), 2-5 cm (1-2") long

Gills: Golden-yellow, attached to decurrent

Spore print: White

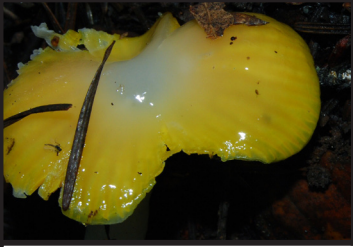
Taste/Scents: No noticeable scent or flavor

Habitat: Coast redwood, California bay laurel, and Douglas-fir forests

Geographic Range

The Golden-gilled Waxy Cap ranges from Santa Cruz County to Humboldt County, California. This waxy cap occurs predominantly in central California in coast redwood, California bay laurel, and Douglas-fir forests along the coast. There has been one unconfirmed occurrence near Olympia, Washington as of January 2021.





UCSC Distribution

The Golden-gilled Wax Cap has been found a few places on campus, including Upper Moore Creek and within Upper Campus redwood forest.

Life History

This sunny little mushroom dazzles against the dark forest floor it calls home. It occurs predominantly in mature coastal redwood forests, fruiting sporadically from as early as October to as late as May. The peak fruiting period is January/February in our area. Like other wax caps, this species is likely edible but flavorless, so it's best to leave it be. It is not known how this species gains nutrition - whether as a decomposer, parasite, or symbiont.

Research Highlights & Fun Facts

- Part of the “West Coast Rare 10” fungi challenge. Go find it!
- Santa Cruz County is the southernmost end of this species’s range.
- Recent DNA sequencing work has shown this species to be in the genus *Gliophorus* instead of *Hygrocybe*, but it’s taking time for everything to be formally updated.
- *G. flavifolius* was first recorded in 1937 and wasn’t recorded again until 1994! Once people knew what to look for, it appeared all over the place - a perfect example of the power of education and community science.



Conservation Status

**IUCN Red List Category:
Endangered**

IUCN Red List Criterion: C2a(i)

The population size of this species is thought to have less than 2,000 mature individuals in total, is probably currently in decline, and no subpopulations have been found that contain more than 200 mature individuals



Threats

Statewide

The main threats are habitat loss and climate change:

1. Drought stress on trees from decreasing summer fog and sporadic winter rain
2. Logging and the resulting fragmentation of the forest habitat this species calls home



Ways you can help

In your community:

1. Take up mushroom hunting as a hobby - you might just find some rare ones!
2. Buy responsibly sourced lumber that doesn't support clearcutting
3. Do what you can to decrease carbon emissions and help slow climate change: ride your bike instead of driving, eat plant-based foods, etc.
4. Raise awareness of rare fungi
5. Document the fungi you encounter with iNaturalist

UCSC campus

1. Development projects that require tree removal
2. Climate change and drought stress



References and Photo Credits

Siegel, N. and C. Schwarz. 2016. *Mushrooms of the Redwood Coast: A comprehensive guide to the fungi of coastal northern california.* (1st ed.). Ten Speed Press, Berkeley. 286 pp.

The Global Fungal Red List Initiative. 2021. *Hygrocybe flavifolia.* Retrieved from http://iucn.ekoo.se/iucn/species_view/298662/ on 03 March 2021.

Vellinga, E. 2015. *Hygrocybe flavifolia.* The IUCN Red List of Threatened Species 2015: e.T75115087A97167815. Retrieved from <https://dx.doi.org/10.2305/IUCN.UK.2015-4.RLTS.T75115087A75115191.en>. on 31 January 2021

Fungal Diversity Survey. n.d. *West Coast Rare 10 Challenge.* <https://fundis.org/resources/blog/133-join-our-west-coast-rare-10-challenge-and-help-us-document-rare-and-threatened-fungi>

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WARNING

Never eat a mushroom you are unsure of. If you think you have eaten a toxic mushroom contact Poison Control at: 1-800-222-1222 or poison.org