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# Nemophila

## THE CALIFORNIA BOTANICAL SOCIETY NEWSLETTER

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### Announcements

Our Botany Speaker Series continues with talks held every 2<sup>nd</sup> Thursday of the month from 7 – 8 pm PT. The next talk will be on July 8<sup>th</sup>, with Maria Jesus, presenting on her floristics work in Inyo County. Her talk is titled: “Worth more than gold: A vascular flora of the southern Inyo Mountains, Inyo County, CA”.

You can now save up to 10% on your CalBotSoc membership by renewing for multiple years. We are also hoping to find new ways for members to bundle and save on membership costs. If cost is a barrier to your California Botanical Society membership, please email us at [membership@calbotsoc.org](mailto:membership@calbotsoc.org) and we will help you find a sponsorship!

Our next grant cycle of the Annetta Carter Grant for Research in Baja California is coming up, with an application deadline on December 31st. This grant is open to anyone conducting botanical research in Baja California. Please spread the word!

Our virtual Graduate Student Symposium went smoothly thanks to our wonderful student coordinators (Niveditha Ramadoss, Alex Adame, Ryan Buck, Nelly Rodriguez, Samantha Mihalic, Carlos Portillo, and Ioana Angel), and Faculty coordinators (Dr. Lluvia Flores-Renteria and Dr. Felipe Zapata). We enjoyed over 40 student talks and keynote by Dr. Ivalú Cacho from the Department of Botany, Institute of Biology, Universidad Nacional Autónoma de Mexico (UNAM). Thank you to all who participated and made it such a wonderful event! We hope to resume in-person events next year, beginning with our mixer at the Northern California Botanists Symposium in January 2022, and our Annual Banquet and Meeting in Spring 2022. More details to come!



## Botany Features

Recent news articles related to the Flora of Western North America:

[Protecting oaks doing conservation genetics with an open heart](#) (En **Español**) By Lorena Villanueva-Almanza

[Solar panels might be good for cities — but what about the plants living underneath?](#) (En **Español**)

By Breanne Palmer

[Species may not always move in the directions we predict under climate change](#) (En **Español**)

By Rachael Olliff-Yang

[A race against time: saving seeds to protect threatened plants in California](#) (En **Español**)

By Lorena Villanueva-Almanza

## Botany Speaker Series

Our Botany Speaker Series continues with talks on a range of botanical topics every 2<sup>nd</sup> Thursday of the month from 7 – 8 pm PT. The zoom link will remain the same for all speaking events this year and can be found at: [www.calbotsoc.org/events](http://www.calbotsoc.org/events).

We are hoping to showcase and promote the work of early career botanists. If you are an early career botanist interested in giving a talk of general interest to our members, or would like to nominate someone, please email us at [membership@calbotsoc.org](mailto:membership@calbotsoc.org).

We have had many wonderful talks so far this year. To catch up on past talks the recordings are linked on our website at [calbotsoc.org/previous-speakers/](http://calbotsoc.org/previous-speakers/).

### Upcoming talks:

July 8: Maria Jesus, California Botanic Garden

August 12: Rachael Olliff-Yang, UC Berkeley

September 9: Brianne Palmer, SDSU & UC Davis

October 14: Daniel Winkler, USGS

November 11: Sarah Jacobs, Cal Academy

December 9: Ryoko Oono, UC Santa Barbara

Our next talk will be on Thursday July 8<sup>th</sup> with Maria Jesus from the California Botanic Garden. Maria's presentation title is: "Worth more than gold: A vascular flora of the southern Inyo Mountains, Inyo County, CA."



July Botany Speaker Maria Jesus. Photo provided by Maria Jesus.

**Talk Description:** The Inyo Mountains in Inyo County, California, are situated in a regionally important transition zone where the Great Basin Desert and Mojave Desert bioregions meet. Much of this arid mountain range remains poorly documented and extensive work is needed to assess the vascular plant diversity via a specimen-based study. In particular, the southern extent of the range had been lacking in botanical collections despite an abundance of distinctive biogeographic features and high diversity in rare and endemic plant species. Much of this ecologically intact and nearly roadless area is urgently threatened by gold mining which would impact numerous rare plant

species and culturally important plant populations. Vascular plant specimens were collected between July 2018 and April 2021 and will form the basis of a published floristic study including an annotated checklist. A total of 360 minimum rank vascular plant taxa were documented during this study. Of these, 26 are possible edaphic endemics and 30 are listed as rare in California. In addition to reviewing these findings, Maria will also discuss how conducting place-based research afforded a unique opportunity to inform conservation action.



Joshua tree from the Southern Inyo Mountains. Photo provided by Maria Jesus.

**Bio:** Maria Jesus is a master's student at California Botanic Garden/Claremont Graduate University where she is completing a vascular flora of the southern Inyo Mountains. Thanks to a chance encounter with a plant identification course during her undergraduate English studies, Maria abandoned plans to become a librarian and found her way to field botany. Just prior to graduate school, she managed a multi-agency vegetation monitoring program aimed at informing adaptive management of public lands. Maria is a Switzer Fellow (2019) and a Gloria Barron Scholar (2020) and is passionate about advancing native plant conservation.

## Annetta Carter Research Grant

Applications Due December 31<sup>st</sup>, 2021

The Annetta Carter Memorial Fund honors Annetta Carter, who devoted the last 40 years of her life to the study of the Baja California flora. Her special interests were floristics, history, biogeography, and ethnobotany of the Sierra de la Giganta.



Annetta Carter in 1932 on the Calypso Club trip to Ft. Bragg

The review committee will consider proposals from members of the California Botanical Society who are conducting or proposing to conduct botanical research on the green plants of Baja California. Studies of populations outside Baja will also be considered if they elucidate problems in Baja California.

The next application deadline is December 31<sup>st</sup>, 2021. More details and application forms are available at [calbotsoc.org/grants](https://calbotsoc.org/grants)

Those interested in supporting this grant can donate at: <https://calbotsoc.org/membership/>. Donations allow us to increase the number of awards given each year.

## 2021 Botany Science Fair Awards

The Society awards prizes to outstanding botany projects presented by budding K-12 scientists at recognized California science fairs. The program was initiated in 2018 and aims to encourage our next generation of botanists.

2021 Synopsys Championship (Santa Clara County, California) (Virtual due to Covid-19)

- Sia Agarwal, Valley Christian High School, San Jose, CA: The Effect of Metal Pollution on Zoospore Development of Giant Kelp *Macrocystis pyrifera* (1st place High School division)
- Alisa Grebin, The Harker School-Upper Campus, San Jose, CA: Can Mulch be Effective Against Stopping the Spread of Wildfires and Prevent the Growth of Additional Flammable Material? (Runner Up High School division)
- Swara Ruchirkumar Shah, Challenger School-Berryessa Campus, San Jose, CA: Wonderful Wood: What is the effect of sapwood on the purity of water? (1st place Middle School division)



Alisa Grebin & Swara Ruchirkumar Shah

- Hima Thota, The Harker School-Middle School Campus, San Jose, CA: Detecting Nutrient Deficiencies and Optimizing Plant Health Using Machine Learning (Runner Up Middle School division)

2021 Santa Cruz County Science & Engineering Fair (Virtual due to Covid-19)

- Bethany Mansfield: Horse Poop Planting! (1st place Middle School division)



Bethany Mansfield & Caleb Cmaylo

- Nolan Wilson: Are more Monarch butterflies passing through Santa Cruz in the fall or spring? (Runner Up Elementary School division)
- Caleb Cmaylo: Flame Resistant Wood in the Santa Cruz Mountains (Runner Up Middle School division)
- Farrah Hartje: How do Wildfires Affect the Growth of New Plants? (Runner Up Middle School division)
- Levi Tabor: Does Lettuce Grown Hydroponically Grow Taller than Lettuce Grown in Soil? (Runner Up Middle School division)



Levi Tabor

Interested in judging or helping in your county's science fair? Please contact Justen Whittall at [jwhittall@scu.edu](mailto:jwhittall@scu.edu), who can help connect you with your local science fair and coordinate judging and awards. Please volunteer and spread the word!

### Online Access to *Madroño*

*Madroño* is available to our individual members online through [BioOne](https://www.bioone.org/) (Volumes 52, 2005 to current). All issues of *Madroño* are available through [JSTOR](https://www.jstor.org/), a digital library for scholarly journals, and through the [Biodiversity Heritage Library](https://www.biodiversitylibrary.org/).

Your membership includes access to all issues held on the BioOne website:

<https://bioone.org/journals/madro%C3%B1o/issues>

Please use the following membership credentials to log into BioOne:

**Email:**madrono

**Password:**access2019

### Reading *Madroño* online helps the Society

The California Botanical Society is the oldest natural history society in North America and has been publishing *Madroño* for over 100 years. We offer research scholarships and science fair

awards, and publish the digital newsletter *Nemophila*. We host an annual banquet and meeting, as well as a student symposium every other year. The cost of these services is largely offset by royalties from *Madroño* article views and downloads from [JSTOR](https://www.jstor.org/) and [BioOne](https://www.bioone.org/). We are a small not-for-profit organization so everything counts!

### Here's how you can help:

1. When sharing *Madroño* articles, please provide links to [BioOne](https://www.bioone.org/) or [JSTOR](https://www.jstor.org/) whenever possible (instead of emailing or posting PDFs). Share widely and often.
2. Put [BioOne](https://www.bioone.org/) or [JSTOR](https://www.jstor.org/) links in your blog, and on your website and webpages (e.g. ResearchGate) rather than PDFs.
3. If you are an instructor, consider including a relevant *Madroño* article or two in your syllabus and have your students access it directly through the [BioOne](https://www.bioone.org/) or [JSTOR](https://www.jstor.org/) portals.

### Contribute to *Nemophila*

*Nemophila* is a digital newsletter compiling and disseminating information and announcements for the members of the California Botanical Society, as well as highlighting and sharing member news and stories. We are seeking lay summaries of recent *Madroño* articles, short articles, photos, botanical art, and other items of interest to the members of the California Botanical Society concerning the Western North America region.

For more information, please email our editor Rachael L. Olliff Yang at: [membership@calbotsoc.org](mailto:membership@calbotsoc.org).

