

Final Report: Evolution of Disease Resistance if California Oaks

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Victoria Sork Lab, UCLA

1. Abstract

The overall goal of the research project was to examine the evolution of disease evolution in California oaks. After completion of sampling on Santa Rosa Island, the needs of the Sork lab changed, and the goals of our project were re-aligned, as described below. Overall, we were able to sample oaks at four locations on Santa Rosa Island. These tissue samples are now housed in the Sork Lab at UCLA. The associated vouchers specimens are housed at the University of California, Davis Center for Plant Diversity. At present, these samples have been used for a population genetic study on California scrub oaks, which is in preparation for publication in the American Journal of Botany. At this time, we do not have plans to use these samples for other studies, including the disease resistance project described in the original application.

2. Samples

The following populations were sampled on Santa Rosa Island. A single sample of young leaf tissue was obtained from a single tree, along with a 10 cm segment of a branch for use as a voucher specimen. All specimens are deposited at the UC Davis Center for Plant Diversity.

Code	Taxon	Date	Locality	Latitude	Longitude
2287	<i>Q. pacifica</i>	27 Aug 2017	Water Canyon, Santa Rosa Island	33.98552	-120.05158
2288	<i>Q. agrifolia</i>	27 Aug 2017	Water Canyon, Santa Rosa Island	33.98500	-120.05050
2289	<i>Q. pacifica</i>	27 Aug 2017	Water Canyon, Santa Rosa Island	33.99017	-120.04879
2290	<i>Q. pacifica</i>	28 Aug 2017	Cherry Canyon, Santa Rosa Island	33.99875	-120.06134

3. Findings

Due to changes in the priorities of the Sork lab, we did not complete research into the evolution of disease resistance, as described in the original proposal. However, we have used the samples in a population genetic study on the evolution of scrub oaks in California. This work is currently in preparation for publication in the American Journal of Botany. We plan to send a copy of this work to the relevant park units when it is published. At this time, we do not have plans to use these samples for other studies, including the disease resistance project described in the original application.