Romanzoffia californica

JACOB R DEAVER

Taxonomy & Geographic Distribution^{2,4}

- Romanzoffia californica Greene; Boraginaceae family, originally Hydrophyllaceae
- California Mistmaiden
- Synonym: Romanzoffia suksdorfii
- Etymology: Count N. von Romanzoff, led Russian expedition to CA (1816)
- Endemic to southern Oregon and coastal California (especially Northern)
- < 800 meters
- Mediterranean climate



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Habitat²

- Ocean bluffs, road banks, mountain forests, wet cliffs, & other moist, rocky areas
- Winter rains = early spring growth
- •Dry summers = sparse growth, dormancy
- •Underground tubers
- Varied plant community



Photo courtesy Scot Loring¹

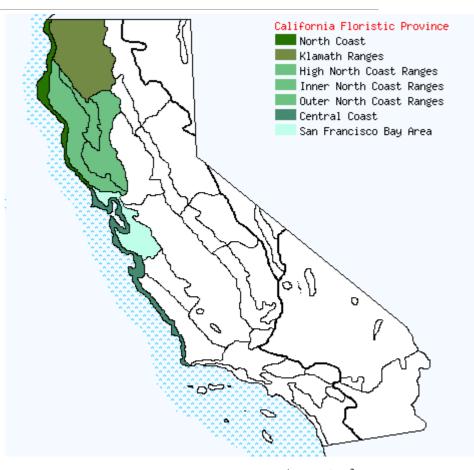


Image courtesy Jepson Flora Project²

Description^{1,2,3}

- Growth Habit
- Tubers
- Leaves
- Flowers
- Fruit
- Bloom Time
- Cultivars



Image courtesy Bart and Susan Eisenberg¹

Seed Propagation

- Generally seed propagated
- Veg?
- Two treatments
- Cold stratification versus mist house
- Slow process
- Death
- Life
- Hope?



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Results

Treatment	Number of Seeds Planted	Number of Seeds Germinated	Percent Germination	Leafing Data
Cold Stratified	56	6	10.7%	Cotyledons emerged week 14; true leaves emerged week 16
Not Cold Stratified	56	0	0.0%	N/A



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Marketing^{2,4}

- Small plant, small flowers
- Easter
- •Full to part shade
- Limitations
 - Poor Germination
 - USDA Zones 8 & 9
 - Cool Season Growth
- Annual
- Houseplant



Image courtesy Bart and Susan Eisenberg 1

"THIS BEAUTIFUL LITTLE MAIDEN WOULD LOOK GREAT IN A FAIRY GARDEN OR TERRARIUM!"

Anticipated Cultural Requirements^{2,3,4}

- Cool, moist soil in the spring
- Dormant = heat and drought tolerant in summer
- •Ideal growing temperatures: 10-18°C (50-65F)
- •10 hours at 150 μmol of light
 - Likely a short day plant
- Light feeder: 125ppm N CLF 15-5-15 Cal-Mag
- No PGR's
- No observed pest or disease issues



Image courtesy Dr. Dean Wm. Taylor¹

Production Schedule

Prior to Sow	Week 4	Week 8	Week 9	Week 11	Week 14	Week 17
Store seeds in seed vault; length of viability unknown	-Sow in 288 plug trays -Moist LC8 Sunshine Mix -Cover with vermiculite -Store in cooler @7°C	-Move plug trays to mist house -21°C day/night temp -16 hours at 150 µmol of light -Mist for 7 seconds every 10 minutes	-Germination -Move to cap mat -21°C day/night temp -16 hours at 150 μmol of light -Water daily -50 ppm N CaNO ₃	-True leaves appear -Transplant to 606s -Moved off cap mat -Same temp and light -Water daily 125ppm N CLF 15-5-15 Cal-Mag -No PGRs	-Once 606s fill out, transplant to final 4" pots	Easter!

Save time by using tuberous cuttings instead of seed?

Looking Ahead³

- -Ample potential for breeding
- Speed up germination time
 - May take several months
- •Increase germination %
- Longer growth period
- •Increase drought tolerance
- •New colors?



Image courtesy Dana York¹

Literature Cited

1 – University of California, Berkeley. 2014. CalPhotos. *Romanzoffia californica*. UC Regents. 3 May 2014. http://calphotos.berkeley.edu/cgi/img_query?query_src=photos_index&where-taxon=Romanzoffia+californica

2 – Jepson Flora Project. 1993. Jepson Herbarium. *Romanzoffia californica*. University of California Regents, Berkeley, CA. 3 May 2014. http://ucjeps.berkeley.edu/cgi-bin/get_JM treatment.pl?4518,4716,4717

3 – Plant World Seeds. 2014. *Romanzoffia californica*. Plant World Seeds, U.K. 3 May 2014. http://www.plant-world-seeds.com/store/view_seed_item/2767

4 – USDA Plants Database. 2014. *Romanzoffia californica*. United States Department of Agriculture. 3 May 2014. http://plants.usda.gov/core/profile?symbol=ROCA6