NEW CROP GUIDLINES

Collinsia childii

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Collinsia childii A. Gray

- Taxonomy (Newsome, 1929)
  - Family: Scrophulariaceae (Figwort)
  - Common Name: Child's collinsia or Child's blue eyed Mary
  - Asa Gray in 1886 (Gray Herbarium)
  - 47 species published in *Collinsia*, but only 18 currently recognized
  - Most recent revision of genus by Newsom 1929
  - Main genus distinction: keel shaped middle lobe,
  - Main species distinctions: length of pedicles-(sessile or pedicle flowers), size of corolla and arrangement of stamen filaments

Collinsia childii

- Native Habitat: Shaded Slopes, open oak and coniferous woodland, 3000’-7000’
- Distribution: Sierra Nevada foothills and high land, San Bernardino Mountains and So. CA ranges
- 36-32 lat.
- Winter Annual

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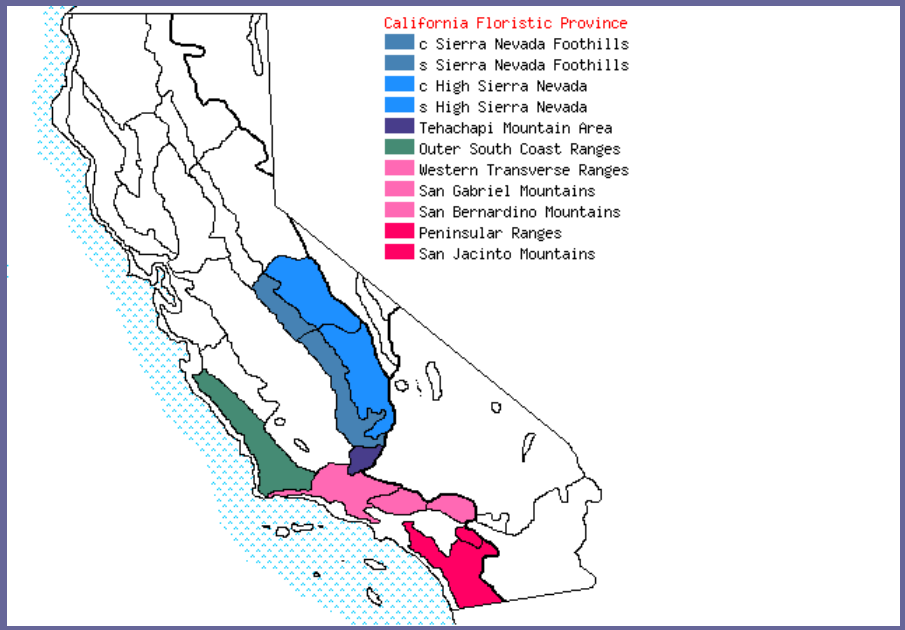

Collinsia childii

- Distinguishing Characteristics (Newsome, 1929)
  - Pediceled flower
  - Erect plant habit
  - Well Branched
  - 10-40 cm tall

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  - Leaves oblong to lanceolate 1-5 cm
  - 2-4 flowers at a node
  - Calyx lobed, corolla lavender to white, upper lip can be spotted, keel, 6-8 mm

Field Propagation

- Infer from closely related *Collinsia parviflora* Lindl. (Skinner, 2005)
  - Collect seed in May (difficult), sow in fall
  - Cover very lightly to germinate
  - 14-21 days to germination after fall rains
  - 2-4 true leaves before winter
  - Plants resume growth in early spring
  - Active growth phase is 2 months
  - Flowering April- June
  - Spring sown seeds only germ following cool wet conditions, but are less vigorous
  - No disease or insect problems

C. childii Trial Propagation

- 25 seeds
- 288 plug, light vermiculite cover (2/12)
- 21 days in mist house (summer)
- 21 days in cooler (fall) 22/25 germ-88%

C. childii Trial Propagation

- 16 days in 369B to transplant (2-4 leaves)

- 9 back in cooler (14 days)
- 9 remained in 369B (4/12)
- 9 back in 369B on 4/26

Possible Production Schedule

- Pre-treatment: soak seeds for 24 hrs, warm?
  6-12 hr GA soak or 2 week cold stratification
- Phase 1: 7-14 days, 40-45F or 60-65F depending on pre-treatment. 288-512 plug, cover with vermiculite
- Phase 2: 14 days, low fert(50-75ppm) 20-10-20, low to medium light 1000f.c
- Phase 3: Vernalization: 21-28 days 41F, then into cool house 21-28days(65day/55night. 75-100ppm 20-10-20, trans into 804, 606
- Phase 4: 21-28 days, increase light to 2500 f.c., temp to 68day/60 night, fert to 100-150 ppm
- Total crop time: 12-15 weeks

Some Guesses

- Vernalization required to initiate flowering
- GA treatment possible for germination
- Seed collection difficult
- Facultative Long Day

Breeding History

- Ahloowalia and Garber 1967
- Hybridization testing between sessile and pediceled flowers in *Collinsia*
- Not able to get any successful crosses with *C. childii*
- Attempted crosses with 8 other *Collinsia* species including *C. grandiflora*

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Desired Genetic Improvements

- More flowers
- Larger flowers
- Longer bloom time
- More robust growth

Possible Marketing Niche

- Container size – 606 or 804
- Season – Spring flowering accent
- Where to use- as filler for perennial beds, or shrubs

"Minimalist Gardens"

"Micro baskets"

Literature Cited

Ahloowalia, B.S. and E.D. Garber. 1961. The Genus Collinsia. XIII Cytogenetic Studies of Interspecific Hybrids Involving Species with Pedicled Flowers. Botanical Gazette. Vol 122, No 3, pgs. 219-223

Newsom, Vesta Marie. 1929. A revision of the genus Collinsia (Scrophulariaceae) Botanical Gazette. Vol. 87, No. 2 pgs. 261-295

Skinner, David M. 2005. Propagation Protocol for Production of *Collinsia parviflora* Lindl. Seeds; Pullman Plant Materials Center, Pullman, Washington. In: Native Plant Network. University of Idaho, College of Natural Resource pgs. 1-5

www.cnplx.info

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www.calflora.net