

Will local adaptation to serpentine soils affect restoration measures in a native California annual plant?

(FY07) Accomplishments

- We have begun a range-wide survey of the native California annual plant *C. sparsiflora*. There are several goals in this survey:
 - Determine the levels of molecular genetic differentiation between populations, particularly with regards to plants growing on and off of serpentine soils.
 - Potentially identify loci associated with serpentine tolerance
 - Establish a range-wide seed collection for this species that will be available for future research, as well as restoration and conservation efforts on serpentine soils
- 7 populations, in addition to the original 6 study populations of *C. sparsiflora* have been located, with seeds and tissue collected where available
- Molecular marker development is well underway. AFLPs have been identified for several primer pairs
- Potential sites to explore next field season are being identified using herbarium records

Due to the timing of when funds became available, and the dry weather in FY07, only a limited number of tissue collections were made. Therefore, the project is going to take longer than originally projected. However, we were able to conserve funds this year by minimizing travel costs and using already available lab supplies. This will mean more funds are available for a full field season starting in February 2008.



***Collinsia sparsiflora* plants growing on serpentine soils.**

Year Awarded: FY07

Project completion: FY09

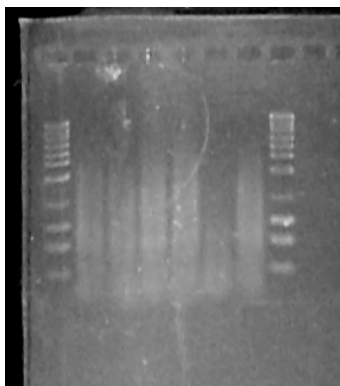
Report number: 1 of 3

Expenditures:

- FY07 funding: 33,000
- Expend: 4290
- Remaining: 28710

Partners/Contractors/Coop:
University of California, Davis

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Gel image showing successful completion of the 3rd step in the AFLP process.



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