

Propagation Database for Home Gardeners:  
developing access to the extensive propagation records of the  
University of California Botanical Garden at Berkeley

Final Report  
for work performed from July 1, 2009 to June 30, 2010

**Principal Investigator:**

A. Christopher Carmichael  
Associate Director for Collections and Horticulture  
University of California Botanical Garden  
200 Centennial Drive #5045  
Berkeley, CA 94720-5045

**Project Participants:**

Holly Forbes, Curator, UC Botanical Garden  
Barbara Keller, Assistant Curator, UC Botanical Garden  
John Domzalski, Propagator, UC Botanical Garden  
Debra Kelly, Computer Programmer, UCB

Introduction:

The University of California Botanical Garden (UCBG) is a collection of over 12,000 taxa from around the world, the majority of them of wild origin. Many of these taxa are new to horticulture and are potentially exciting additions to the horticultural trade in support of the home gardener. The project will provide an electronic archive for ca. 22,000 records of propagation and provide staff time to continue the process of entering these records into the Garden's plant record data base; and it will provide valuable propagation information for professionals and home gardeners on the UCBG web site: <http://www.mip.berkeley.edu/bgpw/IndexPage.action>

Objectives:

Our plan was to accomplish significant data entry during this second year.

Discussion: (see last year's report for more detail)

<http://slosson.ucdavis.edu/newsletters/2008-200929160.pdf>

Nearly every propagation card requires data entry into multiple tables.

As of June 30, 2010, data entry was completed of propagation records for all of the rare plants in the garden, the Californian plants, the *Rhododendron* collection, and for maples (*Acer*). The breakdown of numbers is as follows:

6,721 propagations  
1,293 medium records  
19,878 prop history records  
20,395 treatment records  
232 other (smaller parts of the database)

Total: 48,519 records

Web site design was completed in collaboration with the campus' Information Systems & Technology unit. Data entered to date, and thence forward cumulatively, is available via the Garden web site's collection page (Fig. 1)

Through this work we will increase the knowledge base of propagation techniques for a wide range of plants of known and potential horticultural interest. The enormous amount of data from UCBG propagation experience is available through the web to the home gardener and professional horticulture communities.

The screenshot shows a Mozilla Firefox browser window displaying the UC Botanical Garden at Berkeley website. The page title is "Plant Propagation Site". The URL is "http://mip-ga.berkeley.edu/bgpw/PropDetailSearch.action?propId=1363&currentRowId=4". The page features the UC Botanical Garden logo and navigation links: "Propagation Home", "New Search", "Collections", and "Botanical Garden Home".

The main content area is titled "PROPAGATION INFORMATION" and "Summary Detail for id# 1363". A link "Back to Scientific Name Search Results" is visible. Below is a table of propagation details:

Scientific name	Ceanothus confusus
Accession number	2006.0595
Collected from	Sonoma County, California, U.S.A., North America
Current location	28B, Chaparral, Californian and 29, Chaparral, Californian
Propagation date	Oct 17, 2006
Propagation type	seed
Result	X
Number started	25
Activity #1	Oct 17, 2006: pretreat to 25 propagules
Treatment	soak in water
Treatment note	hot water until cool
Activity #2	Oct 17, 2006: started 25 propagules in perlite mixed with sand and UC Davis mix (peat, firbark and sand) over perlite in a plastic 4" pot
Treatment	Oct 17 2006 - Dec 4 2006 cold stratification
Treatment note	in refrigerator
Activity #3	Dec 4, 2006 to Mar 28, 2007: results for 25 propagules 56% successful in perlite mixed with sand and UC Davis mix (peat, firbark and sand) over perlite in a plastic 4" pot
Activity comment	14 plants
Activity #4	Mar 28, 2007: changed pot to 14 propagules in perlite mixed with sand and UC Davis mix

**Figure 1: Example of web page search results for propagation for the California Native Plant Society List 1b species Rincon Ridge ceanothus (*Ceanothus confusus*). Additional information would be revealed by scrolling down.**