

Project Title: Electronic Data Collection/Labeling for the USDA *Rubus* Genebank

Progress Report 2015

Principal Investigators

Joseph Postman, Curator and Information Manager

Kim Hummer, Research Leader

Organization:

USDA Agricultural Research Service

National Clonal Germplasm Repository

33447 Peoria Road, Corvallis, Oregon 97333-2521

Telephone: 541-738-4201

FAX: 541-738-4205

Email: Joseph.Postman@ars.usda.gov , Kim.Hummer@ars.usda.gov

Objectives:

- To improve the visible plant label information of the *Rubus* collection at the NCGR.
- To make plant data accessible to electronic data gathering devices (such as tablets or smart phones).

Procedure followed:

1. Purchased a printer, tablet computer, with barcode reader and Excel compatible software. (Using other collaborative funding sources).
2. Inventoried the blackberry collection in Screenhouse 5.
3. Generated barcode labels with barcode 39.
4. An inventory app for iPhone was used (from a separate commercial source) that reads the barcode and allows comments to be placed in an excel file.

Results:

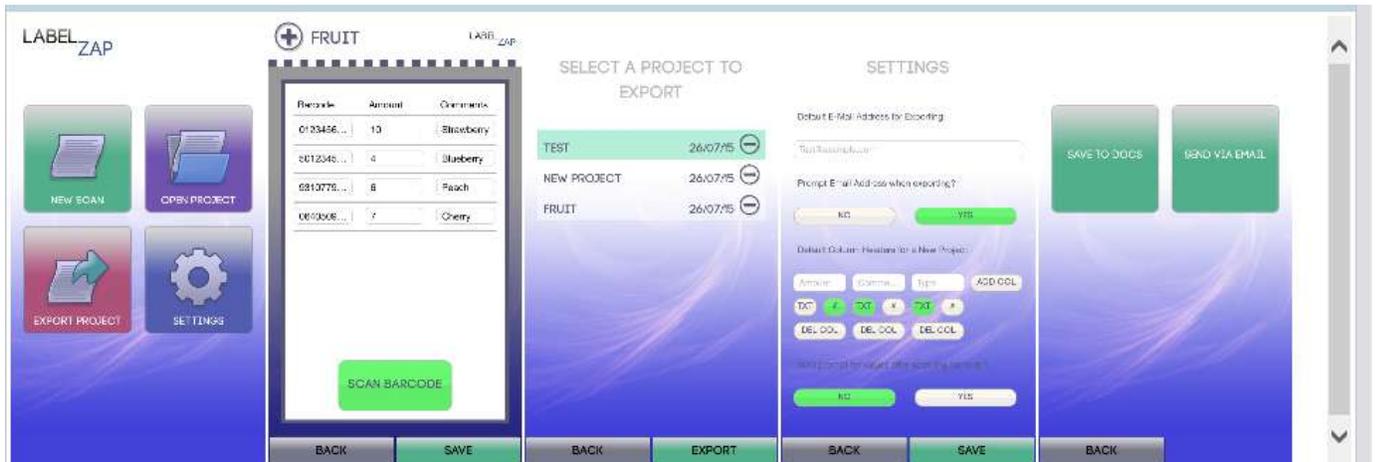
The \$1,000 funding provided funding in 2015 for temporary student help to prepare and attach barcode labels for 200 blackberry cultivars (2 clonal replicates each) for the USDA collection. These plants are growing in 4-gal deep containers in a screenhouse in Corvallis, Oregon. The usual NCGR screenhouse plant identification labels are computer generated and printed on plastic paper. These 2 x 4 labels are affixed with a zip-tie to each plant container. Barcodes were printed on weatherproof 1.25” square adhesive labels using a Datamax P1129n thermal transfer printer (Fig. 1) (Westmark Industries, Inc., Lake Oswego, Oregon). The labels were affixed to plastic plant stakes and inserted into the containers similar to last year’s report for raspberries.

The funding from NARBA in 2015 enabled the blackberry cultivar collection to be labeled. We greatly appreciate this assistance from NARBA for this funding.

To test out the QR and barcode labels we used a new iPhone app called Label_{Zap} found at the following website:

<https://filedir.com/ios/utilities/label-zap-15624403.html>

This iPhone app reads the barcode or QR code and initiates a record in excel. Associated data can be taken on the inventory item. When the data has been completed, the excel file can be exported to the user through their email. Below are some screenshots from the phone app.



The QR or the barcodes are a quick way to take inventory or prepare evaluation lists using an iPhone as a remote data gathering device. This app also works on iPad.

Here are the tools that we are using to generate labels:



Fig. 1. Datamax printer, Westmark Industries Inc.

Fig. 2. Assorted labelling options