

## **DentataBase Utility for GA-TACF**

**Main value:** Data in central location, available to multiple users; modules integrated (relational database) as opposed to flat files; bulk uploads available for several modules.

### **Wild Tree Module:**

- 1) Mapping and locating trees that serve as the basis of the TACF program.
- 2) Integrating with TreeSnap can be done using bulk upload
- 3) Facilitated Landscape Genomics project – helps us ID important trees to use for breeding or areas to focus future searches

### **Crosses Module:**

- 1) Permanent record of all crosses made and seeds available for planting
- 2) Helps establish pedigrees (useful in genetic analyses)

### **Orchards Module:**

- 1) Permanent record of all trees planted and all observations on those trees
- 2) Integrates with Crosses, so full pedigree of all planted trees is available.
- 3) Allows for quick generation of field data sheets and uploading of new observations
- 4) Facilitated chapter-wide analysis of backcross program, which is now informing the chapters of the various utilities of individual surviving backcross trees and helps guide future crossing (e.g., Best X Best program)

**Main difficulties:** Setting up a new orchard planting is a little tricky, but if data are already in a spreadsheet it is rather easy to upload the planting once the orchard design is set up. Replants require “killing and removing” trees from dentataBase prior to planting the new trees into dentataBase.