Revision to Planting Mother Trees for Two-Tree Orchards

We need to plant mother trees now so we can produce blight resistant nuts as quickly as possible after our blight resistant tree is approved for release.

There are several items that control how and why this is needed and done.

- **First is the fact that American chestnut trees are self-sterile so they need another tree for pollination to produce viable nuts.**
- **Second is the fact that we do not want to plant two of the blight resistant trees adjacent to each other as the resulting nuts will be inbred. Therefore, initially we want to cross the blight resistant trees with nonresistant (also called wild type) trees to get good genetic diversity for the long range health of the American chestnut.**
- **Third, with good sunlight an American chestnut will usually produce male catkins and pollen in about 5 years, but usually start producing female flowers, or burs, only after about 8 years.**
- **Fourth, in order to have "mother" trees producing female flowers by the time the blight resistant trees start to produce pollen, they will need a "head start".**
- **Fifth, if two or more non-resistant "mother" trees are growing close together, and producing pollen, they will mostly pollinate each other and few or none of the resulting nuts will have been pollinated by the smaller and younger blight resistant tree.**
- **Sixth is the fact that we expect to have our blight resistant tree approved for release to the public in 3 to 5 years.**
- **Finally, our recommendation now is to plant several mother trees in a small orchard about 15' apart. Then when your blight resistant tree gets big enough to produce pollen you will need to trim back all the mother trees that are producing pollen, except one and collect nuts from the mother tree. When your blight resistant tree gets big enough to produce burs and nuts you can then let all the mother trees grow and produce pollen and collect nuts from your blight resistant tree.**