# Dr. Dhingras Genomics and Biotechnology lab: My work with Tissue Culture in *Bienertia*

*Dr. Dhingra's Genomics and Biotechnology Lab*
*Pullman, WA*
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**Intro: Dr. Dhingra's Genomics and Biotechnology lab's research is focused on understanding important biological phenomenon in horticultural crops. They integrate transcriptomics, molecular biology, plant physiology, functional and translational genomics approaches to identify genes participation in a biological process.**

**Responsibilities: My responsibilities included making MS media, transferring explants, explant tissue sterilization, and regular tissue culture practices. I worked mostly with the *Bienertia sinuspersici*, a plant that conducts C4 photosynthesis, but lacks the Kranz anatomy, C4 is done in bundle sheath and mesophyll cells. I worked with Dr. Sharpe, and Bruce to develop a regeneration protocol.**

**Figure1. This is a trial with Bienertia, we attempted to use the leaves of the plant instead of the stem to regenerate**

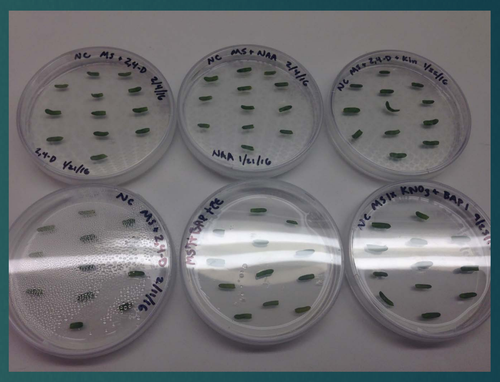


**Figure 2. Explant material being surface sterilized.**


**Figure 3. Part of our experiment to establish a kill curve for the plant.**

**Summary: This internship has given me very valuable experience working with tissue culture,and although I may not work with tissue culture it was very interesting to work with a unique plant like Bienertia, and seeing the research that goes into different ag technologies.**