

Continuation/Research Progression Projects Form (7)

Required for projects that are a continuation/progression in the same field of study as a previous project.
This form must be accompanied by the previous year's abstract and Research Plan/Project Summary.

Student's Name(s) Sara Mc Sweeney

To be completed by Student Researcher: List all components of the current project that make it new and different from previous research. The information must be on the form; use an additional form for previous year and earlier projects.

Components	Current Research Project	Previous Research Project: Year: <u>2018</u>
1. Title	Increasing the Desiccation Tolerance of Eragrostis tef through Exogenous Application of Absisic Acid to Ensure Food Security	The Effects of Absciscic Acid on the Drought Tolerance of Arabidopsis thaliana: a Dose-Response Study
2. Change in goal/purpose/objective	Does exogenously applying ABA to Eragrostis tef increase the desiccation tolerance of the seedlings	Finding a concentration of ABA that would lead to the healthiest plant after exposure to desiccation
3. Changes in methodology	- three treatments: Control, Water, and ABA (20 μ M) - experimental organism: Eragrostis tef	- six treatments: 0 μ M, 5 μ M, 10 μ M, 15 μ M, 20 μ M, and 1mM - model organism: Arabidopsis thaliana - four strands: wildtype (WT), ABA deficient (ABAd), ABA resistant (ABAr), and drought resistant (DR)
4. Variable studied	Eragrostis tef	Arabidopsis thaliana
5. Additional changes	- stressor assays: relative water content, electrolyte leakage, chlorophyll and carotenoid content	- percent germination, relative water content, electrolyte leakage

Attached are:

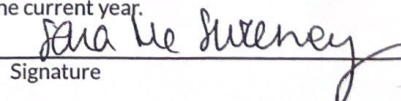
☒ Abstract and Research Plan/Project Summary, Year 2018

I hereby certify that the above information is correct and that the current year Abstract & Certification and project display board properly reflect work done only in the current year.

Sara Mc Sweeney

Student's Printed Name(s)

Signature



12/9/19

Date of Signature (mm/dd/yy)