**Leaf Warming Device**

**Heated Treatment:** a heating pad that heats the leaf based on a specified temperature difference.  
**Unheated Treatment:** the same heating assembly as the Heated treatment, but the pad is not controlled/heated  
**Control:** Temperature measurement of an untreated leaf.

**Treatment 1**  
Leaf and heating pad with a temperature controlled by differences between the two temperature readings or desired leaf setpoint.

T1: Thermocouple to measure heating pad temperature.

T2: Thermocouple to measure leaf temperature.

Temperature Difference of ∆t\_treatment1 = T5 - T2 = n°C  
OR Temperature at T2 is a setpoint.  
n will be able to be changed as needed  
*How is heating pad controlled? On/Off, variable control using PWM, other?*

T1

Heated Pad

T2

T4

T3

Non-heated Pad

**Treatment 2**  
Leaf and heating pad without heating

T3: Thermocouple to measure the heating pad temperature. *The heating pad would not be on.*

T4: Thermocouple to measure leaf temperature.

Temperature Difference of ∆t\_treatment2 = T3 - T4  
This is the temperature change due to just the heating pad being present.  
*No heat will be applied.*

T5

**Control**  
T5: Thermocouple to measure untreated leaf.