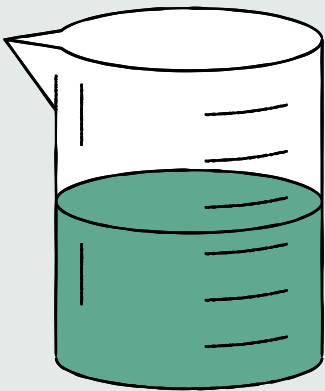


PROCEDURE



DETERMINING PATTERN RECOGNITION RECEPTOR CONSERVATION



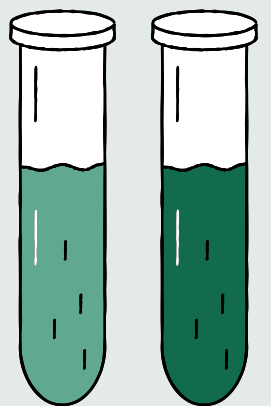
RNA ISOLATION

The amount of RNA and the purity of the RNA in each plant species and the positive control and was obtained through RNA isolation.



RT-qPCR

This experiment utilized RT-qPCR to determine the expression of three pattern recognition receptors (PRRs) in the plant sample. The PRRs were FLS2, CERK1, and LYM1.



IMMUNE RESPONSE IN PLANT SPECIES TO PEPTIDOGLYCAN



RECOMBINANT ARABIDOPSIS

A genetically engineered Arabidopsis Thaliana plant that expresses the Beta Glutaminase reporter gene will be used to demonstrate the immune responses of plants.



MUROPEPTIDE APPLICATION

Muropeptides will be applied to the recombinant Arabidopsis in a series of functional assays to determine the ideal concentration and application point.

