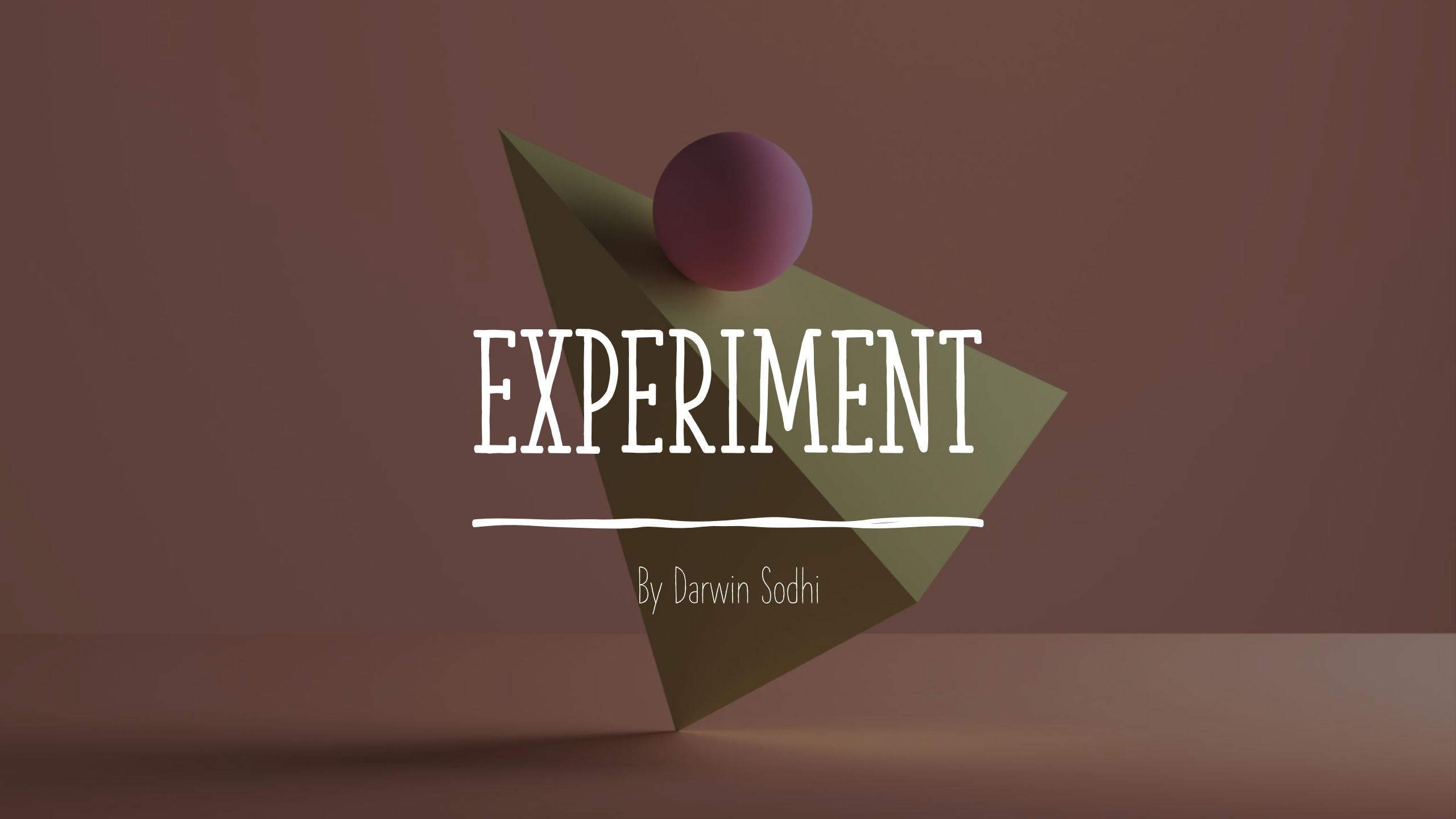
EXPERIMENT
By Darwin Sodhi

EXPERIMENTAL METHODS

- 2 species
- 2 types of soils (conspecific vs heterospecific)
- 2 types of treatments (sterilized vs non-sterilized)
- Varying densities of each species (1 vs 3 vs 5)
- Number of replicates: 10
- Collect soil from the field, sieve soil and mix with sterile potting mix at a ratio of 1 to 1
- To sterilize soil, it will be autoclaved for 4 hours at 211 degrees Celsius
- To measure performance above ground and belowground biomass will be collected after a 4-month growing season

PREDICTIONS IF JANZEN-CONNELL IS DRIVING PATTERNS

- Species will have lower performance in unsterilized conspecific soil compared to unsterilized heterospecific soil
- Species will have higher performance when planted in lower densities regardless of sterilization treatment
- Species will have equal performance in sterilized soil regardless of soil type (conspecific or heterospecific)

PREDICTIONS IF ECTOMYCORRHIZAL FUNGI IS DRIVING PATTERNS

- Species will have higher performance in unsterilized conspecific soil compared to unsterilized heterospecific soil
- Species will have higher performance when planted in lower densities regardless of sterilization treatment
- Species will have lower performance in sterilized conspecific soil relative to unsterilized heterospecific soil

IF NUTRIENT FLUSH DRIVE PATTERNS

- Performance of seedlings would be expected to be highest for sterilized soils regardless of soil type (conspecific vs hetrospecific)