

Figure 1: Schematic of experimental design and predicted outcomes of Generation 2. For Generation 1, 5 rhizobia strains that provide a varied range of benefits to *T. barbigerum* will be selected and the seeds bulked. In Generation 2, all plant lines will be grown with both the strain they were inoculated with in G1 and an additional strain. Nodules will be collected from the G2 plants to quantify which strain the plants chose, the strain that provides the most benefit or the familiar strain.