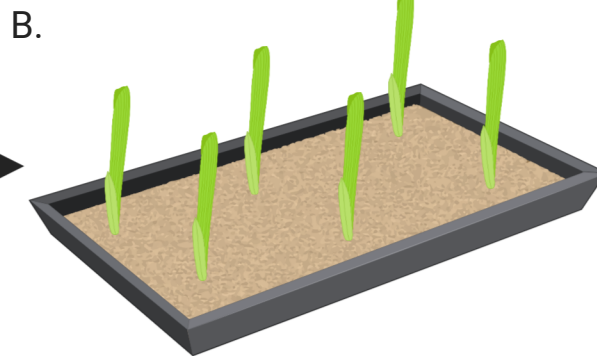


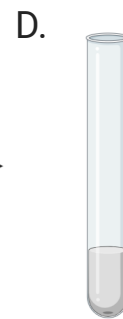
Clone sequence of interest (SOI) into the viral vector and transform into GV3101



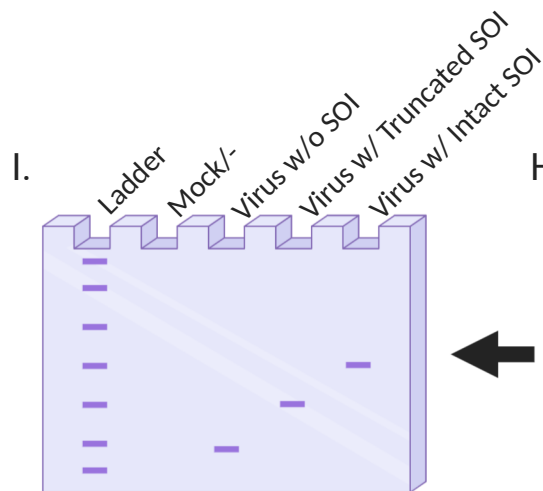
Plant maize and grow for 4-7 days



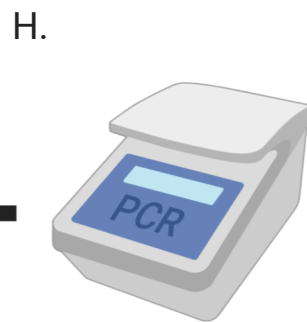
Grow GV3101 in liquid culture overnight



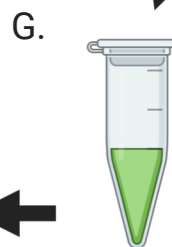
Prepare bacterial suspension for injection



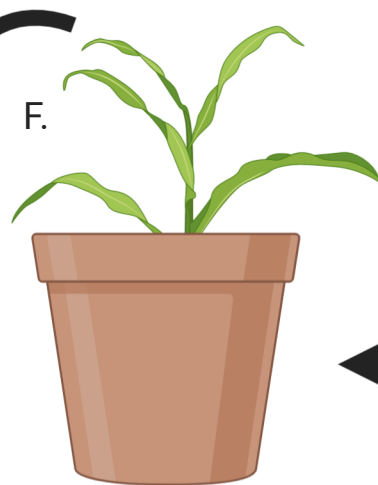
Run on gel for qualitative analysis



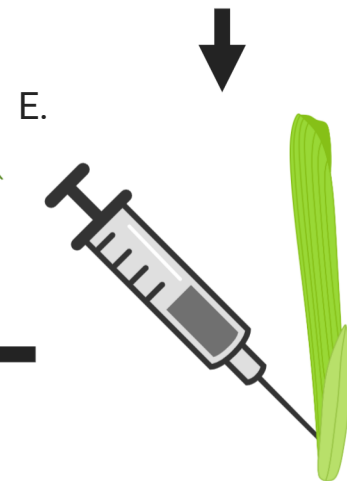
Make cDNA and conduct PCR to amplify virus/SOI



Sample leaf 5 and extract RNA



Transplant seedlings when they are 7 days old to larger pots and grow for 2-3 weeks until the 5th leaf is visible. Phenotype if desired.



Inject seedlings 2-3 mm above the coleoptilar node with 100-200  $\mu$ L of suspension