Project Timeline

Activity	Year 1	Year 2	Year 3
Project planning and coordination meetings	Q3-Q4	Q1-Q2	Q4 (wrap-up)
Bioformulation preparation and refinement (TEK-based, compost extracts)	Q3-Q4	Q1-Q2 (adjustments)	
Laboratory analyses (pH, EC, DOC, N–P–K, microbial community, enzyme assays)	Q4	Q1-Q4	Q1-Q2 (completion)
Greenhouse and in-vitro germination tests	Q4	Q1-Q2 (validation)	
Baseline soil sampling and Field plot setup	Q3-Q4		
Field applications of bioformulations (UT and farms)		Q2-Q4	Q1-Q4 (demonstration)
Soil and plant sampling (pre-, mid-, and post-season)		Q1-Q4	Q1-Q3 (final verification)
Microbial community sequencing (16S/ITS)		Q1-Q4	Q1-Q2 (summarization)
Crop yield, nutrient uptake, and quality assessment		Q3-Q4	Q2-Q3 (validation)
Data analysis and Partial budgets			Q1-Q3
Outreach: field days, workshops, and videos		Q3-Q4 (pilot field days)	Q1-Q4
Extension publications, conference presentations, and final reporting			Q2-Q4