

Project	Banana Wilt Associated Phytoplasma
Project name	
Year of record	2023
Q 1	M1: Confirmation of insect vector • Insect collection and sucrose feeding • DNA extraction and LAMP Assay M2: BAP Cage screening trial • Collection of banana suckers for screening • Cage construction and planting of trial plants • collection and release of insects into trial cages 3: Clean Kalapua materials • In vitro propagation of kalapua and diploid bananas for distribution • Collection of kalapua stumps for macro-propagation of seeds as source of explants • Hardening of rooting cultures in the nursery M4: Optimization of tissue culture protocols • Conduct in vitro trials to optimize banana tissue culture protocol for both diploids and triploids • Collection of banana suckers for in vitro trial
Q 2	M1: Survey report drafted and sent for publication under New Zealand Journal of Crop & Horticultural Science M2: In Q1, few other insects were collected and tested, but during this quarter, only derbids were fed sucrose. The DNA extraction from samples will be done at a later date. M3: 3x field trips to Orori (Mutzing) were done and collected a good population of derbids, that were released into the screen cage at MRC. To date, no symptoms have been expressed yet. The bananas are now growing tall, so need to remove the white screens and allow them to grow under the nursery. Observations will be done over time till mature, for any symptom expression. M4/M5: Kalapua is been maintained and propagated for further distribution at end of the year. 11 plantlets hardened in nursery. Yet to bulk new seeds for optimization studies, for confirmation and and finalize existing protocols, i.e, combined in vitro trial with IAEA.
Q 3	M1: BWAP Cage screening trial • Monitoring and data observation M2: Clean Kalapua materials • Ongoing subculture and maintenance of explants in the laboratory. • Hardening of rooting cultures in the nursery *11 Nursery plantlets for planting in field. *Existing TC plantlets with clean suckers are also available at MRC plots. M3: Optimization of tissue culture protocols •Ongoing subculture and maintenance in the laboratory: In vitro trials planned and to be re-done in the coming quarter.
Q 4	