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| **Project** | Pacific pest and disease threats |
| **Project name** |  |
| **Year of record** | 2023 |
| **Q 1** | 3.1Test and monitor IPM and IRM strategies for managing Diamondback moth (DBM) in Brassica crops in collaborating countries. i) 100% - Completion of second (2nd) Bioassay on DBM, data entered in excel spreadsheet. Two more bioassay to be conducted in Q2 and Q3 respectively. Bioassay for Q1 completed, for Q3 to be executed after reaching the DBM population required to conduct the Bioassay by august 2022. Results sent to SPC for correspondence to Solomon Island and Samoa Bioassay results. Completed ii) 100% - Successful shipment of entomological supplies requirement by Project partners at UQ to PNG. Completed 3.2 Facilitation of the importation of Bt into countries where it is not currently available i) 100% - Milestone achieved -Bt (Ag Chem Bt) successfully imported from Fiji in 2019 and are now at Aiyura, NARI Centre. –Completed ii) 60% - Field testing of Bt on Brassica and Maize on station and selected farmers sites. Research planning done in Q1.field testing initiated on station and also at Kabiifa Secondary school cabbage farm, Goroka. A lowland field test observation is planned for Humphrey Saese’s farm in Markham. Data collection has been done for Kabiufa; Goroka farm sites in Q4, data has been collated and ready for analysis. For lowland data collection yet to be done. Writing up of the technical report underway for submission. 3.3 Ongoing monitoring of the susceptibility of DBM populations to insecticides i) 20% - Questionnaires for farmer interviews developed ready for survey starting EHP onto WHP by August 2021. (Activity to be capitalized in Q2 2022.) .Due to National election, risky for out station travels, this activity will be conducted in Q3 and Q4. This activity will be moved to the AIP for 2023 to be executed for quarter 3. 4.1 Deployment of pheromone traps to monitor FAW distribution and movement in PNG and conduct pre-invasion surveillance in other target countries in the region. i) 100% - FAW pheromone lures have arrived in PNG from South America via Fiji with successful logistics assistance from partners in SPC-Fiji, Narere Campus, Suva.- Completed ii) 100% - Pheromone distribution has been completed, deployed to all stakeholders namely, RAMU-NBPOL, Rumion Piggery, NAQIA, all NARI centers.- Completed iii) 100% - Deployment of Pheromone traps to border provinces has been allocated to NAQIA with their capacity of monitoring and surveillance.- Completed iv) 100% - data from National survey has been obtained from NAQIA and will be submitted to NARI GIS team to plot the map for FAW distribution in PNG.- Completed 4.2 Determination of the availability of potential natural enemies of FAW in the region i) 60% - Preliminary survey and specimen collection of natural enemies have been collected from the middle highlands region. Upper highlands yet to be surveyed as well as the lowlands and Islands regions. Survey to be implemented in Q3 and Q4. Will have to be done after the elections for safety reasons. This activity will be moved AIP 2023 to be done in quarter 3. 4.3 Preparing an integrated approach to FAW management in the region i) 60% Initial bioassay and field experiment to commence by 2nd quarter of 2022. Q1 has been used to plan out experimental design and field planning. Only Laboratory Bioassay will be conducted for this activity. Preliminary testing has been conducted in AIP of 2023 using Prevathon (AI- chlorantraniliprole) to determine lethal dose. To be done in Q3. 4.4. Determination and assessment of Fall armyworm (FAW) Spodoptera frugiperda baseline sensitivity for Altacor/Prevathon (chlorantraniliprole) pesticide used in control and efficacy under laboratory conditions; i) Mass rearing of FAW in larval instars under laboratory conditions, 40% |
| **Q 2** |  |
| **Q 3** | Preliminary bioassay has been trialled out with FAW population and uniformity of larval stages (instars) causing inconsistency of data recorded, hence standardizing FAW rearing in cages has been successful in Q4 resulting in adult female moths undergoing oviposition simultaneously hence laying egg masses in large clusters which will be the population expected to fully execute the FAW bioassay in Q2 of 2023. |
| **Q 4** |  |