

Improving root crop resilience and biosecurity in Pacific Island Countries and Australia



Key details

Location

Fiji, Samoa, Solomon Islands, Tonga

Duration

Start Jan 2022

End Dec 2024

Budget

Commissioned organisation

Queensland Department of Agriculture and Fisheries

AUD 2,050,001

Partners

Australian Sweetpotato Growers Incorporated; Kastom Gaden Association; Ministry of Agriculture; Ministry of Agriculture and Fisheries ; Ministry of Agriculture, Food, Forestry and Fisheries; Ministry of Agriculture & Livestock (MAL) Solomon Islands; Pacific Community; Pacific Island Farmers Organisation Network; Queensland Dept of Agriculture & Fisheries; Solomon Islands National University; The University of Queensland

Project Leader

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Program Horticulture

Project code HORT/2018/195

Overview

This project aims to improve sweetpotato planting material and planting practices as part of a broader program for resilient root cropping systems, responsive to the challenges of pests and diseases and climate change.

Based on the experiences in PNG which commenced with development of pathogen-tested (PT) material and building awareness through field trials and farmer awareness, this project continues to build on existing research, by addressing recommendations to investigate yield penalties from poor planting material and planting practices.

Widely grown in PNG, Solomon Islands and Vanuatu, sweetpotato is increasing in popularity in other Pacific

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countries. Between 2009 and 2014, The Food and Agriculture Organization of the United Nations noted a 61% increase in production in Fiji, 7% in Solomon Islands and 5% in Tonga.

Sweetpotato is identified by all Pacific Islands Countries as necessary in food nutritional security and disaster reduction strategies. Rapid production of planting material (new vines every 3 weeks), ease of planting, early maturity relative to other root crops (3-4 months) and high nutritious yields make it an ideal option in disaster recovery.

Expected project outcomes

- Adoption of PT material and optimised planting
 practices by sweetpotato farmers
- Improving sweetpotato farmer (both genders) livelihoods through improved values on sweetpotato production
- Standardising of Pacific region sampling and viral diagnostic protocols and increased preparedness for biosecurity agencies
- Sweetpotato farmers have greater awareness and knowledge of PT and improved planting practices
- Increasing stakeholder capacity in PT and optimised planting practices
- Sweetpotato PT planting material available to farmers to trial in PICs
- Quantifying benefits of PT planting material and optimised planting practices
- More accurate sweetpotato virus diagnostics.

