

FOOD SECURITY AND BIOSECURITY IN MELANESIA:

Land snails as pest agents of decline of self-sufficiency in healthy food production and potential for utilizing edible native snails

Project team:

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Manaaki Whenua
Landcare Research



Scoping visit, IAC, New Caledonia



Stakeholders meeting, USP, Suva



PACE-NET Regional meeting, Nadi

Objectives

Establish baseline evidence and launch dialogue and build collaborative relationships

- Land snails as pest agents (including biosecurity risks)
- Decline in self-sufficiency in healthy food production
- Potential for utilizing edible native snails (including sustainable resource use)

Preliminary findings

- Land snails pose risks
 - as agricultural pests - negatively impact food production & safety
 - Invasive species (existing and exotic)
 - Decline of native biodiversity
 - Vectors of disease affecting humans and domesticated animals
 - Could affect market access for fresh produce
- Snail vectored rat-lungworm disease prevalence and awareness lacking
- Little awareness on snails as potential food resource in Fiji
- Biology and ecology of native snails poorly known, some maybe endangered or extinct

Scoping – framework for future collaboration

“A Melanesian Collaboration - Addressing Invasive Land Snail & Slug Impacts on Food Security and Safety and on Unique Cultural and Biological Heritage”

Project 1. Addressing invasive land snails as threats to food and cash-crop production



Project 2. Food safety: snail-vectored pathogen *Angiostrongylus cantonensis* & medical parasitology **Vinaka**



Project 3. Native *Placostylus* snails as a sustainable food source

Project 4. Placostyliinae systematics, extinction risk & traditional knowledge

