

FALL ARMY WORM SURVEILLANCE REPORT 2023

PH28/23



*Efate Island, Vanuatu  
September 2023*

*Report Compiled: Patricia Allanson*

## **FAW ARMYWORM REPORT**

### **Introduction**

Fall armyworm is a newly introduced pest in the Pacific. It is native to the central and north America and adapts better tropical climates and highly invasive pest that has the ability to destroy a wide variety of crops. In the past three years it has been established in Australia (Jan 2020) New Caledonia (Dec 2020) Solomon Islands (Sept 2021) New Zealand (2022) and recently in Vanuatu (June 2023).

### **Background**

FAW can fly long distances up to 100KM per night and has six larval stages. In temperate temperatures the life cycle from egg to adult is 30 days. Female lays eggs in cluster of fifty to hundred and one can lay up to 2000 eggs in her lifetime.

### **Impacts to agricultural crops**

Fall armyworm larvae attacks a large number of crops more than 350 plant species but the main targeted crops are corns (Maize), cotton, rice, sorghum, sugarcane, wheat and many other vegetables, fruits including banana, cabbage, capsicum, eggplant, ginger, kumala, onion, potato, tomato and spinach.

(Source: NZMPI Presentation)

## FAW DELIMITING SURVEILLANCE & CONFIRMATION

After a one-week training on 'Fall Army Worm Diagnostic Training' with New Zealand MPI technicians on FAW from 26<sup>th</sup> – 30<sup>th</sup> June 2023 we have carried out surveillance on several corn farms around Efate and also monitor the FAW traps that were established. Areas where FAW traps has been installed area; Wharf, Erakor, Airport, Agriculture and Erangorango.

Below table is the data for surveillance on few areas around Efate.

DATE	AREA	FAW PRESENT / NOT PRESENT?
28 June 2023	Erangorango	YES
29 June 2023	Prima/Samasama	YES
3 July 2023	Erakor	YES
4 July 2023	Teouma	YES
18 July 2023	Mele Bay	YES
18 July 2023	Malapoa	Shows symptoms but collect different larvae
20 July 2023	Etas	Shows symptoms but collect different larvae
21 July 2023	Eratap	Shows symptoms but no larvae present

After monitoring the traps, FAW adult's moths and larvae were collected and confirmed by the MPI senior scientist – Entomology, Ben Boyd to be Fall army worm. Below is the confirmation information.

PLANT HEALTH AND ENVIRONMENT LABORATORY  
TAMAKI

Ministry for Primary Industries  
Manatū Ahu Matua



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### Final Report OVERSEAS INSECT COLLECTION

#### CUSTOMER SUPPLIED INFORMATION

Submitter Reference: -  
Consignment No:  
Investigation Case No:  
Investigator Name:  
Collector: Ben Boyd  
Collector Phone No:  
Collection date: 28/06/2023  
Country of Origin: Vanuatu  
Submitter Comments: Larvae collected in Rangorango at "Jimmy's farm" from maize  
The customer has supplied host and sample reference information

Submitter: Ben Boyd  
Submitter Phone No: -  
Submitter email: ben.boyd@mpi.govt.nz  
Submitter Address:  
Site: Vanuatu, Efate

Sample 1: *Zea mays* (maize, sweetcorn) - Caterpillar (dead)

Sample Reference: -

#### ENTOMOLOGY LABORATORY RESULTS

IDENTIFICATIONS	COMMON NAME	IDENTIFIER
<i>Spodoptera frugiperda</i> (Lepidoptera: Noctuidae)	N/A	Ben Boyd
Life state	Life stage	Number Found
Alive	Larva	4
		Sex
		Unknown

These larvae are fall armyworm

E\_MORPH

#### SIGNED

Entomology

Ben Boyd (Senior Scientist - Entomology)

Dates of Laboratory Activities

03/07/2023 to 03/07/2023

### **FAW Surveillance Santo**

Brief surveillance done on VARTC confirms no presence of FAW on Santo. A market vendor was interviewed mentions that she came to market with Three sacks of corn, all look healthy and no signs of damage. From these two areas, we have confirmed that there is no presence of FAW on Santo, however, a thorough surveillance will be done later.

### **FAW Surveillance on Torba Province.**

A Plant Health Office also carried out FAW Surveillance on Torba province and confirms no presence of FAW up Northern part of the country.

### **FAW Surveillance on Malekula.**

Surveillance for FAW was again done on Malekula during the National Week of Agriculture and again confirm no presence of FAW on Malekula. Again a Thorough surveillance will be carried out again for whole of Malampa province as well as Sanma Province.

### **FAW Surveillance on Tafea Province.**

Brief Surveillance done on Tanna and Aneityum not done very well as there was no corn planted when the surveillance was carried out for Tafea Province down south of Vanuatu.

### **PHOTOS**



Photo 1 & 2: Diagnostic training with NZMPI experts on how to identify FAW under microscope



Photo 3 & 4: Fall army worm larvae found on corn farm in Rangorango and Prima, Efate



Photo 5 & 6: Biosecurity Officers and DARD officers doing surveillance and installing FAW traps on corn farms

**Conclusion.**

We can confirm from this surveillance that FAW is only present on Efate and offshore Islands and not elsewhere in Vanuatu.

