



*Enhancing Phytosanitary Systems for Healthy  
Plants, Safe & Sustainable Trade”*



INTERNATIONAL YEAR OF  
**PLANT HEALTH**  
2020

## **Import control and Export certification :**

**Integrated management of *Leucinodes orbonalis* on eggplant  
fruits exported to European Union**

ADZE AUGUSTIN :  
NPPO Cameroon



# Introduction

Cameroon is situated between 2nd and 13° latitude North

It has high lands with more 2500 m altitude

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It also bordered in sud by Atlantic ocean

These confer it five agro climatic zones (soudano sahara,

1. The Soudano-Sahelian, with 400 to 1000 mm of rain a year;
2. The High Guinean savannahs;
3. The High Western Trays:
4. The humid Forests with monomodal rainfed: 2500 to 4000 mm rain
5. The humid Forests with bimodal rainfed

*At least one variety of eggplant is adapted to an agro ecological zone*



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# Introduction cont'

Eggplant fruit is the third exporting fruit in Cameroon after pineapple and mango.

Actually 3 varieties are cultivated, *S. aethiopicum*, *S. melongena* and *S. macrodon*

The estimated total world production for eggplants in 2018 was 54,077,000 metric tones, up to 3.0% increase compared with 2017

## The quarantine organisms of eggplants in EU

Thrips palmi

Leucinodes orbanalis

Neoleucinodes elegantalis

Spodoptera frugiperda

Bactericera cockerelli

Keiferia lycopersicella



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# Introduction cont'

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***Leucinodes orbonalis* Guenée** is a lepidoptera, crambidae

Present in Asia China, India, Bangladesh, Indonesia etc., Africa: Ghana, Nigeria Thanzania, somalia, Cameroun etc..

It is a regulated pest in many countries south Africa, USA, Brasil, Argentina

It can cause a reduction in yield ranging from 50-60%

It bores fruits and shoots.



# Problem Statement

Since 2018, Eggplant fruit which has the most notifications of interception due to *Leucinodes orbonalis*

Année	Interceptions of eggplant	Raison of interception	Notifications due to Harmful organisms
2018	16	L. Orbonalis	26
2019	12	L.Orbonalis	17



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# Justification

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Cameroon's NPPO does not have a post treatment method that can guarantee the quality of the eggplant fruits

A system of control and certification compose of monitoring of the population of insect, official inspection in farms, treatment, inspection in pack house and airport can contribute to reduce the number of notifications due to EFSB.



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# Objectives

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The main objective is to reduce the number of notification cause by the presence of *L. orbonalis* ;

- Monitored the evolution of fly in the cropping area
- Treat with homologated insecticides when it is necessary,
- Ensure that fruits are well selected, watched and package
- certify the product taking into consideration the traceability and the level of tolerance which is zero



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# Methodology

The method put in place to reduce notification

## 1- Phytosanitary monitoring of the insect

It is important to:

valid the area to cultivate

Follow the evolution of the population of EFSB insects

Take decision on what type of treatment:

## 2-official control

Ensure that all technical requirements are respected

Observe the signs of presence of some harmful organism

Valid the production that will come from the farm



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# Methodology cont'

## 3- use of chemical

Cypermethrine (cypercal 200) advice to use before fruit set

Bacillus thurigiensis (Rapax) use when the fruit are formed)

## 4-Rigorous inspection at the packing site and airport

Inspection at pack house

Inspection at airport



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# Results

The only result we are looking for is the number of interception.

Year	Number of notification	Harmful organism
2020	0	/
2021	02	<i>Leucinodes africensis</i>

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# Recommendations

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Such system that facilitate traceability of products and ease their certification have to be applied by NPPO on high risk product.

Countries having approach system for some organisms control need to audit the system in for continue amelioration.

Scientific studies on the effectiveness of each method should be done in other to prioritize them



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# Acknowledgements



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