





## The Role of The Analytical Laboratory in the Farm to Fork Chain

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### What Is The Role of The Analytical Laboratory From the Farm to Fork ?







## What Happen With The Food Products From Farm to Fork?



POTATOES RICE FRUITS VEGETABLES

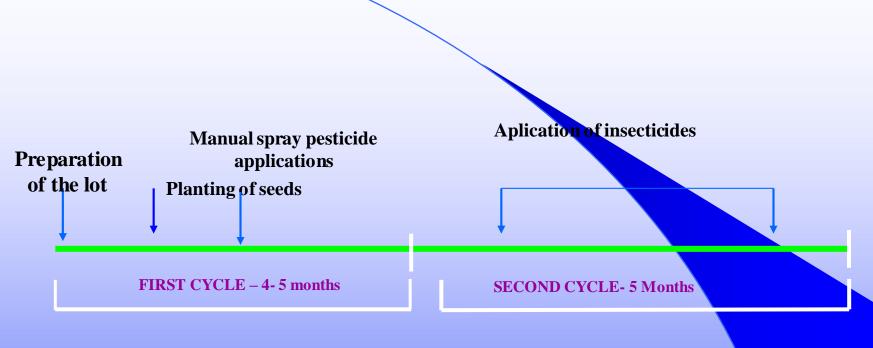
## **Products for Exportation**







#### **CROP MANAGEMET**



#### VEGETATIVE PHASE

#### **REPRODUCTIVE PHASE**

IRRIGATION HARVEST STORAGE • TRANSPORTATION • DISTRIBUTION IRRADIATION PROCESSED PRODUCT





## PLANT DESEASES AND PEST

Bacterial spot Root and collar rot Fusarium wilt Anthracnose Dipteran



# What pesticides are used in the world?

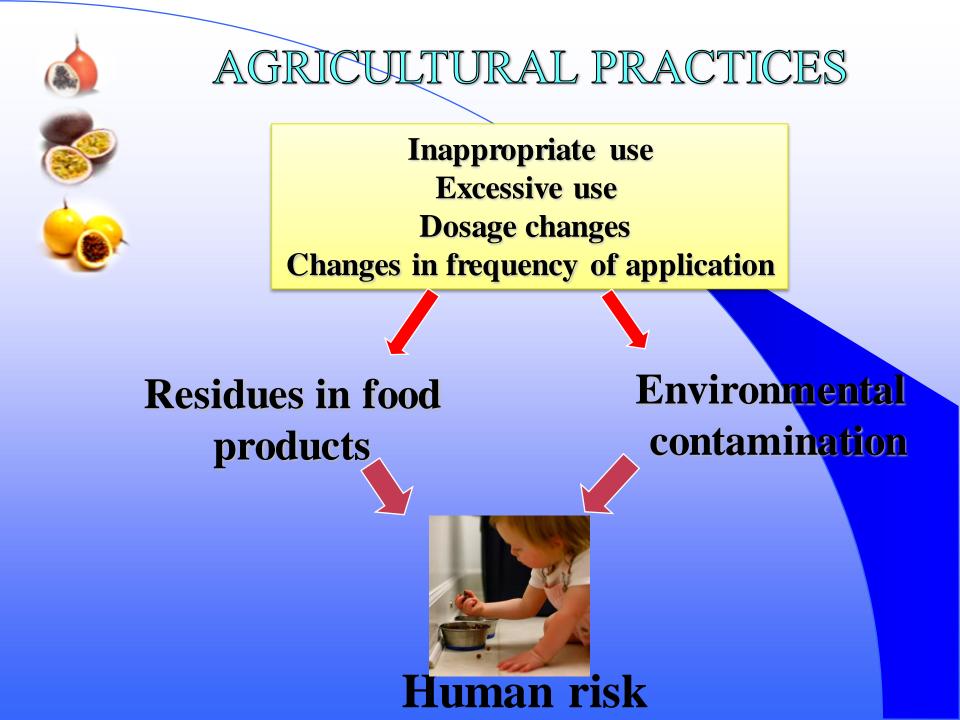
## ORGANOPHOSPHATES ETHYLENBISDITHIOCARBAMATES PIRETROIDS METHYL CARBAMATES HERBICIDES











## **Govermental Institutions must work together** with the Laboratories

Ministry of Agriculture Ministry of Environment

Ministry of Health

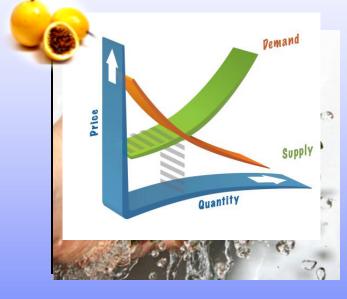


#### **Implement GAP**

**Monitoring programs** 

MRL's

## WHAT THE LABORATORIES CAN OFFER?



✓ To guarantee the quality and safety of the food products

✓ To verify requirements for national consumption

**To verify requirements for international trade** 



#### **HOW THE LABORATORIES CAN OFFER THESE ACTIVITIES?**



NACIONAL



#### ACCREDITED:



Bajo la 

17025 Acreditación de laboratorios de calibración y ensayo

## INFRASTRUCTURE

## SAMPLE PREPARATION LABORATORY



## SUITABLE INSTRUMENTATION



## PERSONNEL



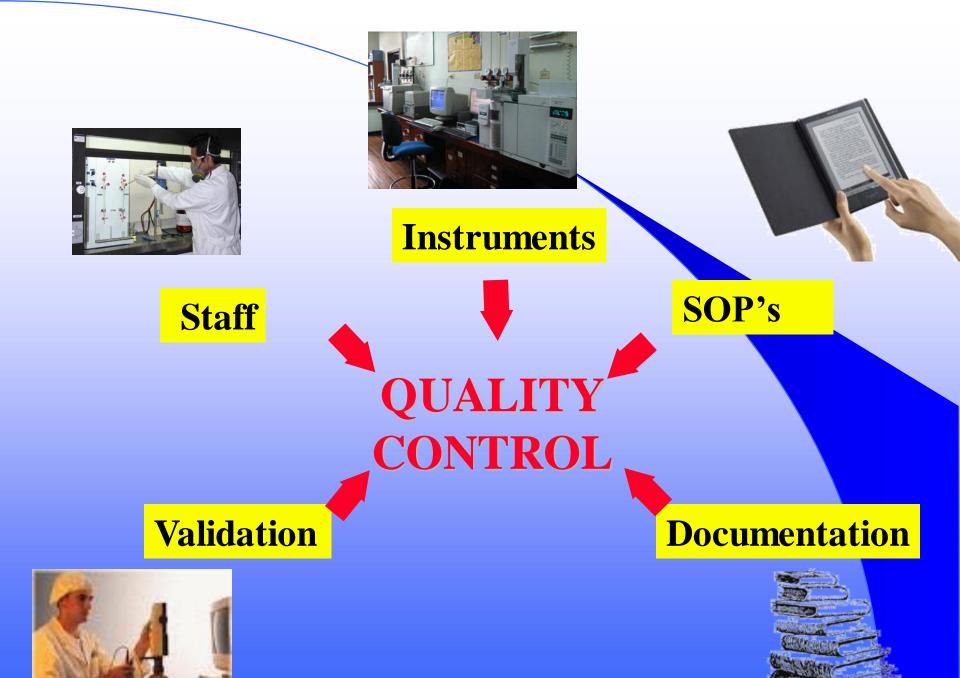
## ANALYTICAL METHODOLOGIES

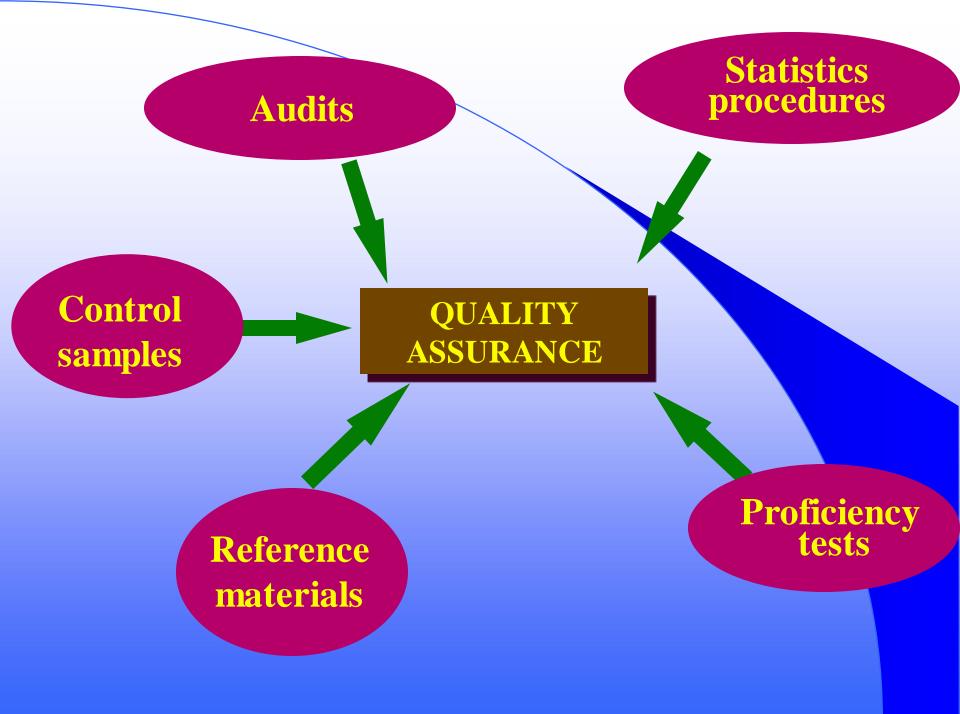


- Quechers method
- Ethyl acetate method
- Luke method
- S-19
- Specific methods



## QUALITY SYSTEM









#### QUALITY

#### MANAGEMENT

## ACCREDITED LABORATORIES UNDER ISO 17025

What is the role of the analitical laboratoryin the farm to fork chain?



## What is the quality and safety of food products?

The food products fulfill the requirements for national and international trade?

The laboratory results is an indication of how the farmers are using the agrochemicals?

## THANKS! GRACIAS!

## Acknowledgements







## **PAGINA WEB**

## www.unal.edu.co/larp





# ALIMENTOS Y MEDIO AMBIENTE / FOOD AND ENVIRONMENT

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Abstracts submissions dead line

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