ORGANIZATION OF PLANT HEALTH SCIENCE-EXTENSION SERVICES IN CUBA AND ITS RELEVANCE TO AGRICULTURAL TRADE WITH THE UNITED STATES

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IMPORTANT DATES FOR PLANT HEALTH IN CUBA

1974 – 75: Creation of the Plant Health System

1977: Organization of the main lines of research (diagnostic, bioecology, control methods) Creation of INISAV.

1988: Organization of the program of biological control

1989–1993: Generalization of MIP programs at national level

Structure of Plant Health System

National Director of Plant Health

INISAV

Departments: Pest Management, Quarantine, Pesticides, Technical services

Provincial Director of Plant Health
Provincial Laboratory of Plant Health (LAPROSAV)

Territorial Stations of Plant Protection (ETPP)

Points of entry (Airports, Nautical and Port installations)

FARMERS
EXTENSION SERVICE STARTED SINCE THE CREATION OF PLANT HEALTH SERVICE IN 1974

MAIN FUNCTIONS

- Education for plant health
- Phytosanitary Innovation for Pest management
- Scientific -technical Services in Plant Health
Diagram of the Phytosanitary Extension System.

INISAV  SSV  Science Director. MINAG

MINAG Institutions

Territorial, Provincial and National Level

Farmers

Others Institutions
Universities
CENSA
INCA
CIGB
Vinculo de las Instituciones Científicas del Ministerio de la Agricultura con los procesos productivos/ Link of the Scientific Institutions of the Ministry of Agriculture with the productive processes.
Human resources in the Plant Health System of Cuba

- Agricultores innovadores
- Activistas fitosanitarios
- Técnicos medios
- Universitarios

Number of individuals:
- Agricultores innovadores: Over 12,000
- Activistas fitosanitarios: 8,000
- Técnicos medios: 4,000
- Universitarios: Below 4,000
Phytosanitary issues in Agricultural Systems (developed since 1975)

PESTICIDES MANAGEMENT

DIAGNOSTIC

EDUCATION FOR PLANT HEALTH

LOCAL PROGRAMS OF PEST MANAGEMENT

SEED CERTIFICATION

PHYTOSANITARY SURVEILLANCE

PHYTOSANITARY LAWS

NATIONAL PROGRAM OF BIOLOGICAL CONTROL
DIFFERENT WAYS OF CONNECTING

NATIONAL MEETINGS

NATIONAL COURSES-WORKSHOPS

PARTICIPATION IN NATIONAL RESEARCH PROJECTS

VISITS AND CONSULTANCIES

NATIONAL SYMPOSIA

PLANT HEALTH SPECIALISTS AT PROVINCIAL LEVEL

APPROPRIATION PROCESS OF SCIENTIFIC-TECHNICAL INFORMATION

Skills interchange
Self study
Territorial and provincial
Scientific activities
Special Courses
Others
Information support to the Extension System

Interchange of scientific literature
Countries: (20)
Institution: (115)

Products:
- Journal “Fitosanidad”
- Books
- Brochures
- Multimedia

Small libraries

Data bases (AGRO, Tesis, Thrips, AGORA y SIDALC, Agrícola.)

Plant Health Information Network (INFOSAV)-new tool
NATIONAL COURSES - WORKSHOPS
METHODOLOGIES THAT HAVE BEEN CONSOLIDATED FOR THE TRANSFER OF TECHNOLOGIES ON PEST MANAGEMENT (SINCE 1974)

FROM THE NATIONAL CENTERS THAT GENERATE TECHNOLOGIES

- Technical instructions by crop (national)
- IPM programs (national, provincial)
- National methodological seminars (specialties)
- Generalization projects (representative areas)
- Brochures, triptychs, video-lessons, compact discs

TOWARDS THE FARMERS

- Plans of production of productive entities
- Territorial IPM Programs
- Seminars pre and post planting of important crops
- Direct visits to farmers
- Local Radio Stations
PARTICIPATORY PHYTOSANITARY INNOVATION (PPI)

- Formation of provincial and territorial facilitators
- Skills in systematizing experiences
- Integration of specialists, grassroots technicians and farmers
- Processes with agroecological basis
- Stratified and Returned Innovation
- Integrated training for the process
Innovative Farmer in Plant Protection

• New Modality of Extension

• This type of farmers show more interest in agroecological alternatives

• They like to experiment on their crops

• They constantly contribute their experiences

• They are able to decide what is the best approach under their own conditions

• They have skills to communicate with other farmers

• They have demonstrated technical leadership in the area
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