

# Ministry of Agricultural Development NATIONAL DIRECTION OF PLANT HEALTH

#### NATIONAL DIRECTION OF PLANT HEALTH

#### **LEGAL BASE:**

Ley No. 12 del 25 de enero de 1973.

Por la cual se crea el Ministerio de Desarrollo Agropecuario y se señalan sus funciones y facultades.

Ley No. 47 del 9 de julio de 1996.

Por la cual se dictan Medidas de Protección Fitosanitarias y se adoptan otras disposiciones. Organización de la Dirección Nacional de Sanidad Vegetal.

Ley No. 48 de 08 de agosto 2002.

Por la cual se Crea de la Comisión Nacional de Bioseguridad para los Organismos Genéticamente Modificados.

Ley No. 72 de 26 de diciembre 2001.

Por la cual se aprueba el Protocolo de Cartagena sobre la seguridad de la Biotecnología del Convenio sobre la Diversidad Biológica.

Decreto Ejecutivo No. 364 de 31 de agosto de 2005.

Por el cual se reorganiza la Estructura Orgánica y Funcional del Ministerio de Desarrollo Agropecuario.

### **VISION:**

A National Direction of Plant Health, who operates sustainably with producers and other entities of the private sector, incorporated in the implementation of actions with an updated legal basis, performing the actions in a efficient and transparent way; thus achieving biosecurity of Panamá agricultural heritage and environmental protection. Similarly, a national system with operating plant information and whose information is internationally recognized. Finally, a Plant Health who supports national production, helping to reduce poverty in rural areas of the country.

#### MISION:

Contribute to make our agriculture more competitive both internally and externally, through the implementation of Rules and technical-scientific procedures, legal, clear and consonant with international Rules; certifying the phytosanitary situation in the country; Ensuring farmers the rational

use of pesticides and fertilizer quality; making reliable and timely diagnosis. Contribute to the development of an agriculture the produces safe food, preserving the environment. Finally protect the national heritage and ensure agricultural exports within the framework of established rules and WTO rules and agreements inherent in the phytosanitary area.

#### **OBJETIVE:**

To prevention and control, in an integrated manner, plant protection problems and achieve the phytosanitary quality of plants and plant products in the production process, grading, packing, storage and transportation, as well as prevent the introduction, establishment and spread of plant pests and plant products in the territory of the Republic of Panama, as well as establish the proper use of plant protection inputs.

- Monitor, diagnose and establish prevention measures, control, eradication of pests and plant quarantine as well as develop campaigns to address phytosanitary emergencies.
- Propose to the Minister the fees for phytosanitary services provided by the Directorate.
- Regulate the registration, control, transportation, handling, application of inputs and phytosanitary equipment, excepting pesticides.
- Regulate, organize and supervise the activities and national phytosanitary services of standardization and regulations, certification bodies, verification units and testing laboratories in the field of plant health, and their accreditation.
- Propose to the Minister the formulation or the adherence to the conventions, agreements and treaties, national and international, which are relevant to the country in accordance to plant health.
- Regulate diagnostic methodologies and pest control to be established, within the scope of its jurisdiction and monitor compliance.
- Regulate quality control of pesticides and fertilizers, as well as maximum residue limits.
- To permanently develop and implement training programs and technical update on plant health.
- To promote and coordinate the plan of action of pest management and monitor the effectiveness of the methodologies used to it.
- To declare free or low pest prevalence areas, according to international plant protection measures, harmonized and scientifically accepted.
- Run the national emergency mechanisms in plant health.
- To attend complaints and impose sanctions for violation of this law.
- Establish measures of phytosanitary inspection and certification of import, export, re-export and transit as well as issue the phytosanitary certificates.

- Establish surveillance and phytosanitary control at laboratories of sexual and asexual reproduction of plants, post-entry quarantine, seed, nursery, greenhouse, plant germplasm, seed production field or other reproductive material.
- Authorize persons, natural or juridical, to certify organic production programs and other similar
  methods of plant protection; execute phytosanitary diagnostic activities, perform quality
  analysis of phytosanitary inputs used in agriculture and analysis of residues of these
  substances; issuing phytosanitary certificates or conducting any other activity required in the
  field of plant protection.
- Manage the resources of the Directorate in order to maintain quality, retention and performance of the services to be provided.
- Report to international and national agencies of changes in the rules, regulations and procedures in this area.
- Other assigned duties.

The National Plant Protection depends on the Minister's Office.

#### **DEPARTMENTALIZATION:**

For the performance of its functions, The National Directorate of Plant Protection has the following administrative units:

# National Directorate National Sub directorate

- 1. Administration Office.
- 2. Planning and Evaluation Office.
- 3. Rules and Regulations Unit.
- 4. Plant Education Unit.
- 5. Agrochemicals Department
  - a) Registration Section.
  - b) Control Section.
- 6. Certification Department of Agricultural Exports
  - a) Agricultural Exports.
  - b) Food Safety Section.
  - c) Organic Agriculture.
- 7. Phytosanitary Surveillance Department
  - a) ARP and Phytosanitary Requirements Section.
  - b) Specific pests Section.
  - c) Nurseries and Internal Mobilization Section.
- 8. Coordination of Technical Services of Chemical Analysis
  - a) Control and Quality Assurance Laboratory of Pesticides and Fertilizers
  - b) Laboratory of Toxic Pesticide Residues Analysis
- 9. Coordination of Technical Services of Detection and Phytosanitary Diagnosis
  - a) National Laboratory and Phytosanitary Reference center (Tapia-Tocumen).
  - b) Regional Phyto-Diagnostics Laboratory (Divisa).
  - c) Regional Phyto-Diagnostics Laboratory (David).
  - d) Phyto-diagnosis Module and Surveillance (Metetí-Darién)
  - e) Phyto-diagnosis Module (Changuinola-Bocas del Toro)
  - f) Phyto-diagnosis Module and Quarantine posts
    - Balboa Port Quarantine posts
    - Cristóbal Port Quarantine posts
    - Tocumen Airport Quarantine posts
    - Paso Canoas Quarantine posts

# **RELATIONS:**

The National Direction of Plant Protection maintains relations with all Directorates, National Offices, Regional Offices, national and international organizations and institutions that compose the public agricultural sector.

#### **ADMINISTRATION OFFICE**

#### **FUNCTIONS:**

- Collaborate with the Office of Planning and Evaluation in the formulation of the budget of the programs according to the orientation, guidelines and regulations of the National Direction and specialized units of the Ministry.
- Arrange the acquisition of goods and services that are necessary for good administrative and technical progress of the programs, with the authorization of the Management.
- To process according to the rules established in the Ministry authorizing leave, vacations, licenses and allowances of staff of the Direction.
- Ensure proper implementation of cleaning, maintenance and surveillance of workplaces, and immovable property of the National Directorate.
- Receive, record and distribute the mail going in and out of the Direction and ensure the safety and reservation of documents according to established rules and procedures.
- Prepare monthly and annual reports of administrative and financial measures for the information of the National Directorate.
- Keep an updated record of vehicles, machinery, office furniture and fixtures and other assets of the Directorate.
- · Other assigned duties.

# UNIT:

The administration office depends on the National Directorate of Plant Protection.

#### **RELATIONS:**

Administration Office maintains relations with all administrative, national and international with the Directorate maintains contacts with.

#### **PLANNING AND EVALUATION OFFICE**

- Liaise with the Marketing Department of Planning and Agricultural Policy, to coordinate the process of budget formulation, creating the blueprint, justifications and related documents.
- Participate in the identification of new projects, applications and potential agreements and develop justification documents to be presented to the sources of cooperation and national or foreign authorities.
- Coordinate the preparation of the Annual Work Plan and its presentation their adjustments and the monitoring of the execution control compliance goals.
- Develop appropriate information systems and documentation files or data, promoting the formation of statistics and evaluation methods adopted to each line of the operations of the Direction.
- Make demarches, procurement and accountability on the use of funds of each convention, working closely with management and staff involved in each project.
- Liaising with local or foreign authorities representing the sources of cooperation for monitoring and enforcement issues of each convention, acting as assistant to the Director or on its behalf when the situation warrants.
- Maintain records and controls budget execution, as well as each of the agreements or projects that apply external resources, to assess plant health management, according to schedule and prepare periodic reports for management and others upon request.
- Record and control of operating funds and investment (local and foreign financial support) of various projects and programs of the Direction.
- Receive and collect data through different administrative units of the Department and field units of the Regional Offices, to process by computer programming to keep count of everything that is done in the country through health programs vegetable.
- Conduct or coordinate the quarterly evaluation of the operations and administration of the National Direction of Plant Protection and the consequent adjustment work plan and / or budget force.
- Maintain appropriate records of the resources used, and required by current management and evaluation studies of productivity, utilization and possibilities of rationalization or replacement.
- Conduct studies, reports or gestation that point the Director to support decision making and institutional development of management in particular.
- Develop, organize, implement and evaluate training activities and training in plant health and provide support to other training activities or performing other agencies promoting MIDA.
- Other assigned duties.

The Planning and Evaluation Unit depends on the National Directorate of Plant Protection.

# **RELATIONS:**

The Planning and Evaluation Office maintains relations with all administrative, national and international with the Directorate maintains contacts with.

#### **RULES AND REGULATION UNIT**

#### **FUNCTIONS:**

- Contribute to the analysis of the current phytosanitary regulations to determine the compliance of themselves.
- Assist in the technical and administrative processes for the preparation and approval of national phytosanitary regulations in accordance with international phytosanitary Rules.
- Ensure and guide actions so that the phytosanitary legislation is based on the principles established in the Agreement on Sanitary and Phytosanitary Measures (SPS), the International Plant Protection Convention (IPPC) and other treaties (NAFTA) and agreements signed by the country.
- Contribute to and carrying out training and outreach to public and private entities, for better understanding and scope of phytosanitary regulations.
- Develop a corresponding plan of work.
- To advise the National Plant Health Direction and other technical departments, in relation to the scope and impact on the agricultural economy of our country of phytosanitary Rules adopted internationally and nationally.
- Assist in the review process and analysis of the international phytosanitary legislation, which has been proposed and is being revised at the level of the International Plant Protection Convention.
- Propose to the National Direction of Plant Protection, the development of new phytosanitary regulations that as a nation can be presented at an international level for review.
- Assist in the formulation of relevant documentation, reports, memory aids and other reports as required.
- Structure the corresponding database.
- · Other assigned duties.

#### **UNIT:**

The Rules and Regulations Unit depends on the National Directorate of Plant Protection.

#### **RELATIONS:**

The Rules and Regulations Unit maintains relations with all departments, employees of the National Directorate of Plant Protection, Regional Executive Directions, national and international bodies and institutions that make up the Public and Private Agricultural Sector administrative units.

#### PLANT EDUCATION UNIT

#### **FUNCTIONS:**

- Prepare the annual work program and the budget that corresponds to the activities coordination in terms of education, communication and disclosure; taking into account the technical staff at the regional and national levels, heads of departments, regional coordinators and National Plant Health Director.
- Coordinate and design a training program in the technical fields of the National Directorate of Plant Protection, based on technical needs in order to strengthen and update their knowledge of plant health, such as to ensure better service for the user.
- Coordinate, design, manage and ensure the training material and / or disclosure (posters, brochures, manuals, newsletters and others), to keep producers informed, technical personnel, National and Regional Offices, national and international organizations on the latest developments or events relating to plant health.
- Coordinate training and outreach events with national and international organizations to be celebrated with the National Directorate of Plant Protection.
- Prepare periodic reports on phytosanitary education activities carried out in the Unit at the request of the National Director.
- Organizing the Direction participation in fairs and others.
- To organize and ensure the functioning of the Library of the National Direction of Plant Protection.
- · Other related duties as assigned.

#### UNIT:

The Plant Education Unit depends on the National Directorate of Plant Protection.

#### **RELATIONS:**

The Plant Education Unit maintains relations with all departments, employees of the National Directorate of Plant Protection, Regional Executive Directions, national and international bodies and institutions that make up the Public and Private Agricultural Sector administrative units.

#### AGROCHEMICALS DEPARMENT

- Comply and ensure compliance with the established in the Law No. 47 of July 9, 1996, with emphasis on the relation to regulation, rules, registration, quality control, import, distribution, trade, application, use, handling and proper disposal of phytosanitary inputs as well as guidance on their biological effectiveness, which will contribute to environmental protection, health and our plant heritage.
- Propose to the National Direction of Plant Protection the rates or fees for services provided by the Department, in order to be included in the periodic review of the statute regulating the matter. It should take into account their impact on unit costs and products for their competitiveness in the domestic and international markets.
- Develop and submit for approval of the National Direction of Plant Protection, plans, programs, projects, budgets, regulations, manuals, procedures and instructions aimed at implementing the law on phytosanitary inputs. The needs of national and international training of national and regional staff with the aim of providing quality service are included.
- Propose to the National Direction of Plant Protection, signature or accession of the Ministry of Agricultural Development to conventions, agreements, treaties, national and international, related to phytosanitary inputs and environmental protection and health.
- Addressing complaints and denunciations related to the use, handling, application and disposal of plant protection inadequate inputs and propose appropriate sanctions for the violation of legislation on the subject.
- Provide all the information and support that is required promptly to the attention of phytosanitary emergency arising.
- Propose to the National Direction of Plant Health with the support and coordination of the Technical Working Group on Pesticides (GTTP) and the Technical Committee of Pesticides, Technical Matters, additives and fertilizers for use in agriculture (COTEPA), among others, proven scientific restriction, prohibition, repeal, import, manufacture, assembly, formulation, repackaging, repacking, storage, mixing and use of plant materials for use in agriculture, when justified by technical reasons.
- Coordinate and support actions aimed at checking and monitoring maximum pesticide residue limits established in plant products for human and animal consumption.
- Certify that plant protection inputs and processes, methods, facilities, services and related activities comply with the provisions of Law No. 47, its regulations and other relevant phytosanitary standards. Control actions through the oversight of formulating companies, packaging, distribution, dispensing houses, among others, related to chemicals are included.
- To advise the National Plant Health Directorate, its departments, like the rest of the technical and administrative units of the MIDA, and other ministries, NGOs, general public, government institutions for policy decisions, legislation, activities actions, consultations in the field of agrochemicals and related substances for agricultural use in the country.
- Perform the registration, evaluation and business records of the products used in agriculture in Panama. Similarly, their renewals, marginal notes, certificates of registration and free sale.
- Keep a record of the companies engaged in agricultural activities related to crop protection chemicals and other inputs related to in the country.

- Keep a record and control of signatures, stamps and certificates of suitability of the professionals responsible for records of chemicals and other substances used in agriculture in Panama. This includes only Agricultural Engineers and lawyers.
- Develop and implement training programs for all entities related to the use, manufacture, registration and marketing of phytosanitary inputs commonly used in Panamanian agriculture. To this end it may coordinate its action with other agencies of the MIDA, ministries and other entities, including the private sector.
- Carry out post-registration check, so that compliance with the approved by the respective process is corroborated. Similarly, verify that the information provided to consumers by various means, meets the purpose of proper guidance, be truthful and objective.
- Develop and make available information related to the registration, importation, distribution, marketing, restriction, prohibition, application, use, handling and proper disposal of plant protection inputs.
- Develop and submit for consideration of the National Direction of Plant Protection for review and approval by the Directorate General of Standards and Industrial Technology (DGNTI) of the Ministry of Trade and Industry (MITI), related rules agrochemicals, own its competence and ensure compliance.
- Develop and submit for consideration by the National Direction of Plant Protection for review and approval of the General of Standards and Industrial Technology Direction (DGNTI) of the Ministry of Trade and Industry (MITI), related rules agrochemicals, own its competence and ensure compliance.
- Perform quality control of chemical pesticides formulations, with guaranteed results, to improve the ability of farmers in the current market, minimizing the risk of possible contamination of formulas for the plant, environmental and human protection.
- Perform safety control and crop residues concerning chemical pesticides plant products, with guaranteed results, improving the competence of the Panamanian producers in the international market, minimizing the risk of possible contamination of agricultural products and protecting plant, environmental and human health equity.
- Implement and support other actions and responsibilities as assigned.

The Agrochemicals Department depends on the National Directorate of Plant Protection.

# **DEPARTAMENTALIZATION:**

To fulfill its functions, the Department will have these Agrochemicals Sections: Section Records and Control Section. The sampling unit within the control section is included.

#### **RELATIONS:**

The Agrochemical Departments maintains relations with all departments, employees of the National Directorate of Plant Protection, Regional Executive Directions, national and international bodies and institutions that make up the Public and Private Agricultural Sector administrative units.

#### **FUNCTIONS:**

- Develop and enforce phytosanitary regulations relating to exports, food safety and organic farming.
- Develop and enforce respective procedures manuals.
- Issue the corresponding phytosanitary certificates and others that are required, based on the requirements of the import markets.
- Register the entities involved in the export process of both conventional and organic products; such as producers, certifiers, traders, packers and others.
- Structuring and managing the corresponding database.
- Contribute to the review and updating of regulations and phytosanitary rules inherent to the export and ensure their equivalence with respect to other international standards.
- Represent the National Direction of Plant Protection in commissions and working meetings related to this issue.
- Carry out training and dissemination.
- Prepare monthly reports and others that are required.
- Develop profiles and projects related to agricultural exports and the Work Plan.
- Implement and enforce export protocols and other agreements to be endorsed by the country in this area.
- Other related duties as assigned.

#### UNIT:

The Agro Export Certification Department depends on the National Directorate of Plant Protection.

# **DEPARTAMENTALIZATION:**

The Agro Export Certification Department, to fulfill its functions, has the following programs:

\*Agricultural Exports Section, Food Safety Section and Organic Agriculture Section\*

#### **RELATIONS:**

The Agro Export Certification Department maintains relations with all departments, employees of the National Directorate of Plant Protection, Regional Executive Directions, national and international bodies and institutions that make up the Public and Private Agricultural Sector administrative units.

#### **FUNCTIONS:**

- Gather, keep updated and interpret (in time and space) records and phytosanitary data base (endemic and exotic pests).
- Raise phytosanitary occurrences records (for incidence and severity) in the country.
- Develop, interpret and distribute periodic reports on the records of the current phytosanitary problems (emerging and non-emerging).
- Develop based on survey and other records, lists of quarantine agencies in the country.
- Establish, through precise monitoring activities (monitoring and simulation tools), the situation of absence of occurrence and / or confinement and declaration of countries or free areas without sanitary problems.
- Keep maps of plant population dynamics national and regional (district level), endemic pests and / or newly introduced to the country.
- Supervise the activities of projections, monitoring and surveys derived from the action of phytosanitary surveillance.
- Supervise and coordinate the actions of periodic review of traps for the early detection of quarantine pests.
- Establish with other components of the phytosanitary area, the mobilization checkpoints of plant materials within the country.
- Establish the official record, monitor and coordinate the actions of periodic review of plant propagation areas (greenhouses, growing houses, nurseries and others) and phytosanitary certification for marketing.
- Coordinate the National Plant Emergency System within the National Agricultural Protection
- Other related duties as assigned.

#### **UNIT:**

The Phytosanitary Surveillance Department depends on the National Directorate of Plant Protection.

#### **DEPARTAMENTALIZATION:**

Phytosanitary Surveillance Department to fulfill its functions has the following programs:

\* ARP Section and Phytosanitary Requirements, Specific Pest Section (Endemic Pest Surveillance and Exotic Pest Surveillance) and Nurseries Section and Internal Mobilization\*

#### **RELATIONS:**

The Phytosanitary Surveillance Department maintains relations with all departments, employees of the National Directorate of Plant Protection, Regional Executive Directions, national and international bodies and institutions that make up the Public and Private Agricultural Sector administrative units.

# COORDINATION OF TECHNICAL SERVICES OF CHEMICAL ANALYSIS

- Coordinate and manage scientifically and technically the Control and Quality Assurance and the Laboratory of Pesticides and Fertilizers and the Laboratory for Pesticide Residue Analysis.
- Develop and submit for approval by the National Directorate of Plant Protection, plans, programs, projects, budgets, regulations, manuals, procedures and instructions aimed at implementing the legislation on pesticides and plant quality. The needs of national and international training of national and regional staff, with the aim of providing quality service, are included.
- Propose to the National Plant Directorate, fees or fees for services rendered, in order to be included in the periodic review of the statute regulating the health field. It should take into account their impact on unit costs and products for their competitiveness in the domestic and international markets.
- To promote and develop the assurance the analytical quality of the tests through investments in the last technology and/or new generation technology to ensure the security benefits, credibility, verification and sustainability of results, according to established standards and General mandatory, safety, labor protection and risk mitigation.
- Make requisitions or requests to purchase services and supplies that require the Laboratory of Pesticides and Fertilizers and the Laboratory for Pesticide Residue Analysis.
- Support the implementation of Interinstitutional projects that are approved on behalf of the agricultural sector.
- Perform quality control of chemical pesticides formulations, with guaranteed results, to improve the ability of farmers in the current market, minimizing the risk of possible contamination of formulas for the plant, environmental protection and human.
- Making chemical determinations of pesticide formulations containing ureic fenóxicos herbicides, triazine, piridílicos, EBDCs, organophosphates, carbamates and other pesticides.
- Perform physical and chemical analysis of pesticide formulations by conventional analytical techniques (gas-liquid chromatography, liquid chromatography High Efficiency Molecular Absorption Spectrometry UV-Visible, system for generating H2S formation of xanthates, and iodometric titration).
- Perform physical testing on surface tension properties, particle size, fragmentation, adhesion and dispersion, emulsification and re-emulsification.
- Perform safety control and crop residues concerning chemical pesticides plant products, with guaranteed results, improving the competence of the Panamanian producers in the international market, minimizing the risk of possible contamination of agricultural products, and protecting the plant, environmental heritage and human health.
- Perform analysis of residues of pesticides by conventional techniques (Gas-Liquid Chromatography, Liquid Chromatography High Efficiency, Post column derivatization, Gel Permeation Chromatography, Molecular Absorption Spectrometry UV-Visible).
- Perform analysis of organochlorine pesticide residues, organophosphates, carbamates, nitrogen in plants and plant products for domestic consumption and export.
- Schedule training for technical personnel in techniques of analysis of pesticide residues in vegetable matrix and training in sampling techniques of plants and plant products.
- Implement and support other actions and responsibilities as assigned.

The Coordination of Technical Services of Chemical Analysis depends on the National Directorate of Plant Protection.

#### **DEPARTAMENTALIZATION:**

To fulfill its duties, The Coordination Technical Services of Chemical Analysis will feature these laboratories:

\*Control and Quality Assurance Laboratory of Pesticides and Fertilizers and Laboratory of Toxic Pesticide Residues Analysis\*

# **RELATIONS:**

The Coordination of Technical Services of Chemical Analysis may maintain relations with all technical-administrative units that compose the National Directorate of Plant Protection, National Directorates and Regional Executive of the Ministry of Agriculture as with the other institutions of the Public and Private Sector Agricultural and non-agricultural sector.

# COORDINATION OF TECHNICAL SERVICES OF DETECTION AND PHYTOSANITARY DIAGNOSIS

- Implement diagnostic techniques and protocols for the identification of causal agents of damage to plant organisms (plants) through procedures and methods of sampling and processing of the affected plant material, soil, insects and other vectors of transmission of pathogenic agents analysis.
- Create and organize all Plant reference collections that are required to reference, corroborate and support the detection and diagnosis of opinions issued by the laboratories of the National Phytosanitary Diagnostic Laboratory.
- Establish technical standards for operating areas and ensuring conditions in greenhouses and "bioassay" to test the pathogenicity of an isolate obtained from samples arrive at the laboratory via Quarantine stations or samples obtained in the Regional Executive addresses.
- Establish mechanisms technician administrative for coordinating and supervising the national laboratory system phytosanitary diagnostics nationally and inter-agency coordination with other laboratories inside and outside the industry, and support activities to the diagnostic investigation.
- Develop and monitor the Annual Work Plan (PAT) and the programming budget (operating and investment) of the Coordination of Technical Services in Plant Detection in close coordination with the planning and programming unit of the National Directorate.
- Analyze, review and support in coordination with the Departments of the Directorate action plans prepared in case of an emergency plant, through the appropriate sections of each department.
- Guide and review strategies for control and prevention of epidemic plagues (endemic or exotic) that are made in sections of the Departments of the Directorate.
- Advise on any phytosanitary emergency, in conjunction with the Departments of Management.
- Coordinate with the Directorate and the Departments, national and international programs for diagnosis, surveillance, prevention and control.
- Participate in the analysis phase and consolidation of the information captured in the database periodically, provided by the different sections at the national level, while maintaining information exchange with national and international entities.
- Participate and collaborate in the area of competence in the programs of the Regional Offices and other dependencies of the National Directorate of Plant Protection.
- Provide timely the most recent phytosanitary data to National (Research, Transfer) and International (Bilateral Agreements, Plant Protection Organizations, Trade Agreements, etc.) levels, around the Taxonomy and Pest and Disease Diagnosis of emerging economic importance or not emerging.
- Review, consolidate and ensure compliance with the standards and phytosanitary requirements, as well as the required procedures related to plant protection in the country.
- Contribute to the development and ensure compliance with the relevant laws of both the Technical Services Coordination detection and diagnosis and the National Directorate of Plant Protection.
- Review, analyze, approve and submit profiles and projects relating to actions carried out by the Coordination of Technical Services in Plant Detection and Diagnosis and analytical areas that comprise it.
- Collaborate in the elaboration of the rules of procedure for accreditation of natural or legal persons that provide plant protection in particular in coordination with the Departments of Management.

Other duties as assigned by the National Directorate.

#### **UNIT:**

The Coordination of Technical Services of Detection and Phytosanitary Diagnosis depend on the National Directorate of Plant Protection.

#### **DEPARTAMENTALIZATION:**

To fulfill its duties, The Coordination of Technical Services of Detection and Phytosanitary Diagnosis will feature these laboratories and the following technical areas:

National Laboratory and Phytosanitary Reference center (Tapia-Tocumen).

Laboratory Coordination

Sample Reception Area

Bacteriology Analytical Area

Mycology Analytical Area

Virology Analytical Area

**Entomology Analytical Area** 

Nematology Analytical Area

Malacology Analytical Area

Molecular Biology Support Area

Auxiliary and supporting areas (Greenhouse washing and sterilization)

Regional Phyto-Diagnostics Laboratory (Divisa).

Plant Patology Analytical Area

**Entomology Analytical Area** 

Mycology Analytical Area

**Bacteriology Analytical Area** 

Nematology Analytical Area

Regional Phyto-Diagnostics Laboratory (David).

Mycology Analytical Area

Virology Analytical Area

**Entomology Analytical Area** 

Nematology Analytical Area

- Phyto-diagnosis Module and Surveillance (<u>Metetí-Darién</u>)
- Phyto-diagnosis Module (Changuinola-Bocas del Toro)
- Phyto-diagnosis Module and Quarantine posts
  - o Balboa Port Quarantine posts
  - Cristóbal Port Quarantine posts
  - Tocumen Airport Quarantine posts
  - o Paso Canoas Quarantine posts

#### **RELATIONS:**

The Coordination of Technical Services of Detection and Phytosanitary Diagnosis may maintain relations with all technical-administrative units that compose the National Directorate of Plant Protection, National Directorates and Regional Executive of the Ministry of Agriculture as with the other institutions of the Public and Private Sector Agricultural and non-agricultural sector.