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**REVIEW OF PLANT QUARANTINE POLICIES  
AND REGULATIONS**

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## FOREWORD

Plant Quarantine is a *sine qua non*, for all countries which have an agrarian economy. The main objective of such plant quarantine is to prevent the introduction of pests and diseases which are not indigenous and can have disastrous effects on the plants and animals which have reached an equilibrium with the ecosystem. With this objective in view and having learnt lessons from past experiences where introduction of pests and diseases had deleterious effects on our economy, the government promulgated stringent legislation to prevent the introduction of exotic pests and diseases into the country.

However, with the macro-economic changes that have taken place during the past four decades, culminating in market orientation beginning in 1977 it became apparent that the Plant Protection Ordinance No. 10 of 1924 with the amendments made in 1956 and 1981 required a critical review to ensure that such regulations synchronize with government policy.

Consonant with such changes structural adjustments were initiated in the Department of Agriculture by creating a division under a senior Deputy Director for Plant Protection, which activity had hitherto been an appendage of Research. Recognizing the fact that administrative changes, *per se*, in the Department of Agriculture cannot dramatically change the implementation of the Plant Protection Act passed by Parliament, action was initiated in 1991 to review the laws tailored to meet the newly emerging challenges of a free market economy with a focus on important export of non-traditional agricultural commodities. Based on the Department of Agriculture's initiatives, the Japanese Government is now considering the establishment of a modernised plant quarantine facility.

The review conducted by international and national consultants culminating in a national workshop has crystallized the approach towards meeting the new challenges of import and export agriculture and has made specific recommendations having reached consensus with state, private and donor agencies. The review was made possible with the help of United States Agency for International Development under the Diversified Agriculture Research Project.

These recommendations are indeed a step in the right direction and I am confident that these new recommendations will facilitate agricultural trade while ensuring that the agriculture in this country will not be jeopardised.

In conclusion, the success of such recommendations and the promulgation of laws will only be rewarding if all of us are conscious of and recognize the importance of plant protection. This in my view is paramount.

**Dr. S P R Weerasinghe**  
Director of Agriculture  
Department of Agriculture

## **ABBREVIATIONS, ACRONYMS AND SYMBOLS**

<b>ANRPC</b>	- Association of natural rubber producing countries
<b>APPPC</b>	- Asian and Pacific Plant Protection Commission
<b>ARTI</b>	- Agrarian Research & Training Centre
<b>CARI</b>	- Central Agricultural Research Institute
<b>CARP</b>	- Council for Agricultural Research Policy
<b>CISIR</b>	- Ceylon Institute of Scientific & Industrial Research
<b>CRI</b>	- Coconut Research Institute
<b>DA</b>	- Director of Agriculture
<b>DARP</b>	- Diversified Agriculture Research Project
<b>DEA</b>	- Department of Export Agriculture
<b>DOA</b>	- Department of Agriculture
<b>EPPO</b>	- European Plant Protection Organization
<b>FAO</b>	- Food and Agriculture Organizations of the UN
<b>GATT</b>	- General Agreement on Trade and Tariff
<b>GOC</b>	- Government-owned Company
<b>GOSL</b>	- Government of Sri Lanka
<b>IPPC</b>	- International Plant Protection Commission
<b>ISTA</b>	- International Seed Testing Association
<b>JEDB</b>	- Janatha Estates Development Board
<b>KIA</b>	- Katunayake International Airport
<b>MADR</b>	- Ministry of Agricultural Development and Research
<b>MARD</b>	- Mahaweli Agriculture & Rural Development Project
<b>MISA</b>	- Ministry of Industries and Scientific Affairs
<b>MLMD</b>	- Ministry of Lands, Land Development and Mahaweli Development
<b>MPI</b>	- Ministry of Plantation Industries
<b>NAPPO</b>	- North American Plant Protection Organization
<b>NARESA</b>	- Natural Resources, Energy and Science Authority
<b>NE</b>	- Nuwara Eliya
<b>PC</b>	- Phytosanitary Certificate
<b>PEQ</b>	- Post Entry Quarantine
<b>PGIA</b>	- Post-Graduate Institute of Agriculture
<b>PGRC</b>	- Plant Genetics Resources Centre
<b>POC</b>	- Seaport of Colombo
<b>POG</b>	- Seaport of Galle
<b>PQ</b>	- Plant Quarantine
<b>QO</b>	- Quarantine Officer
<b>RARC</b>	- Regional Agricultural Research Centre
<b>RRI</b>	- Rubber Research Institute
<b>SAPDA</b>	- Silks and Allied Products Development Authority
<b>SAPTA</b>	- Spices and Allied Products Trade Association
<b>SCPP</b>	- Seed Certification and Plant Protection
<b>SCS</b>	- Seed Certification Service
<b>SLSPC</b>	- Sri Lanka State Plantations Corporation
<b>SRI</b>	- Sugar Research Institute
<b>TLK</b>	- Talawakelle
<b>TRI</b>	- Tea Research Institute
<b>TSHDA</b>	- Tea Small-holdings Development Authority

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The team also wishes to express its appreciation of the wholehearted support extended to them by the chairmen, directors and senior officials of government departments, research institutes, state corporations and statutory bodies.

It is a pleasure to acknowledge the assistance and support given by the private sector importers and exporters of plants and plant material. These individuals and associations opened up their establishments to the team, often on short notice, even on holidays, and co-operated fully with the team. Had it not been for this co-operation, it would not have been possible to complete the assignment on schedule.

This review would not have been possible without the sponsorship of the United States Agency for International Development (USAID).

## EXECUTIVE SUMMARY

The GOSL has adopted a vigorously export-orientated policy in recent years for Sri Lankan agricultural and industrial products. In addition to the major agricultural crops--rice, tea, rubber and coconut--several other crops have assumed considerable importance in Sri Lanka's agricultural export sector, including spices, fruits, ornamental plants, and cut-flowers. To service the agricultural sector there is a constant need for new germplasm to augment breeding programmes and for direct exports by the trade.

The private sector is seen as the main vehicle for expansion of exports, with a new thrust in horticultural products. These exports are likely to increase further when private sector management of state-owned plantations expands its activities. Further, the importation of plants, plant products, fruits and vegetables is also increasing, vastly stretching the capacity of the PQ service to deal with the import-export volumes involved.

In this scenario GOSL recognised the need to receive germplasm from abroad without posing risks to the country's agricultural base. The present review of PQ regulations was therefore commissioned by the Department of Agriculture. The review was undertaken by a team of consultants working closely with DOA counterparts in the Seed Certification and Plant Protection Division. The local and expatriate consultants were hired under the Diversified Agriculture Research Project sponsored by USAID.

The mission reviewed five major areas relating to PQ and forecast future requirements as the trade expands. These are listed below:

1. Present PQ policy
2. Future PQ policy
3. Future PQ strategies
4. Future organizational structure and administrative management for the PQ service
5. International co-operation

The terms of reference for the review of PQ policies and regulations are given in Appendix 1.

The mission carried out a detailed review of the procedures and practices adopted in the Plant Quarantine Service at its headquarters at Peradeniya, at the Colombo Seaport and the Katunayake International Airport. It was found that the attention and recognition given to PQ in the past has been quite inadequate considering the important role PQ has to play in protecting the country's agricultural sector against the introduction of unwanted pests and pathogens with imported plant materials, and also in facilitating the smooth flow of exports of plants and plant materials.

Countries which import such material from Sri Lanka have their own PQ laws. Sri Lanka's PQ service must ensure that exporters comply with those laws by assisting with proper inspections followed by issue of phytosanitary certificates. Failure to do so may result in rejection of consignments incurring heavy transport and destruction or return-transport costs,

but more importantly may threaten access to markets. The mission therefore recommends several measures to make certification easier and more effective and to facilitate and expedite the inspection of export consignments especially those needing additional declarations.

Turning back to the import side, there are three categories of imported plants and plant materials:

- a) Enterable material of low risk
- b) Restricted material of manageable risk
- c) Prohibited material of high risk which can only be imported for scientific purposes under specific authority and conditions as laid down by the Director of Agriculture.

The mission emphasises that delays in the issue of import permits causes much difficulty and urges that issues be expedited following prompt risk analysis. It also highlights the measures required for post-entry quarantine especially for restricted and prohibited materials, including fumigation and treatment.

The mission recommends re-organising the PQ Service, its finances, staffing, training and the backing it needs from research both from within and outside the Department of Agriculture. Towards this end the mission recommends that an inter-ministerial committee be set up to meet regularly and discuss problems relating to PQ. No less important is the need to keep importers and exporters informed of developments relating to PQ and also to educate the general public on the importance of PQ in the protection of Sri Lanka's agriculture. With better public awareness infringements of the laws will reduce. This is seen as a vitally important area for PQ to initiate immediate action.

The mission makes detailed recommendations on matters, which are of interest to GOSL, research institutions, the PQ Service, and the import-export trade in plants and plant materials. These are listed below:

- a) The issuance of import permits
- b) PEQ by both DOA and non-DOA organizations
- c) Importations of prohibited materials
- d) The issuance of phytosanitary certificates
- e) Fumigation and treatment policy for plants and plant materials
- f) Inspection of consignments prior to export
- g) Problems associated with certification and treatment
- h) Updating PQ practices
- i) Organisational structure of PQ within GOSL
- j) Finances of the PQ Service
- k) Staffing and training in PQ
- l) Inter-relationships between institutions, regulatory agencies and PQ
- m) International co-operation
- n) Future PQ policy

The areas requiring the most urgent attention are an analysis and assessment of pest risks, pest risk management, revision of the plant quarantine regulations and policies, upgrading PQ and PEQ facilities and the training of personnel.

The mission studied the ordinance of 1924 and the amendments of 1981. The mission was of the view that the ordinance itself needs no amendment at this stage. Proposals for amendments to the 1981 regulations and the revised policy (1991) are also put forward.

It was decided that the recommendations specifically pertaining to matters of interest to the import-export trade in plants and plant materials be given wide publicity and be discussed at a workshop prior to the recommendations being finalised.

## SECTION I

### 1. INTRODUCTION

#### 1.1 BACKGROUND

Sri Lanka's most important staple food crop is rice. Within the last 150 years coconut, tea and rubber cultivation has expanded over large areas. These four crops, together with forests still cover larger land areas than all other crops together. Other important crops are cocoa, cardamom, cinnamon, cloves, fruits and vegetables.

Sri Lanka has a history of pests and diseases of major crops being introduced into the country. In the mid 19th century the coffee rust fungus (Hemelia vastatrix) destroyed the country's coffee industry. In 1946 the blister blight fungus of tea (Exobasidium vexans) caused severe damage to tea following its introduction. In the early 1970's (Promecotheca cumingi) was introduced into the country and devastated large tracts of coconut palms in Sri Lanka. Subsequently various pests have come into the country causing grave concern and financial loss to growers of the affected crops.

The official reaction over the years has been one of extreme caution leading to the prohibition of imports of many plant species because of possible or perceived risks of pest introduction which may pose threats to crops important to Sri Lanka.

#### 1.2 EXISTING LEGISLATION

The Plant Protection Ordinance No 10 of 1924 saw the beginning of the PQ Services in Sri Lanka. Some amendments/regulations have been enacted since that time, the latest being the regulations set out in the schedule to the Plant Protection Ordinance gazetted on 2/11/1981. (See Appendix 13.2) According to these regulations the import of certain genera and families of plants is prohibited, except when imported for scientific research purposes under adequate safeguards specified by the Director of Agriculture. On 24/12/1991, an administrative order was published in the newspapers revising the 1981 regulations. This order is currently being implemented administratively and awaits revision after the present review is submitted.

#### 1.3 NEEDS FOR REVIEW

In recent years, Sri Lanka's trade in agricultural products has increased beyond the capacity for which the country's PQ was originally established. Export oriented trade policies have resulted in the export and import of plant propagative material in commercial quantities. For example, the annual volume of world-wide trade of cut-flower and foliage plants exceeds US\$ 1,000 million and is expanding further. Sri Lanka's potential of breaking into this market is considerable.

In 1992 the management of 450 tea, rubber, coconut, oil palm and spice plantations belonging to the GOSL and managed previously by the SI.SPC and JEDB was privatised. The private sector management desires not only to increase their exports of agricultural products but to import improved germplasm from sister companies in other countries. This will lead to a further sharp increase in plant quarantine activities.

Also there is a need for new germplasm for further crop improvement in both the private and public sectors. It therefore becomes necessary to take appropriate measures to exclude and prevent the introduction of pests while at the same time causing a minimum of interference to trade.

The private sector is continuously agitating for the present quarantine regulations to be eased. Private sector representatives claim that the current regulations are a barrier to their projected expansion to meet the foreign demand for plant material. Plant material is required in large amounts for rapid multiplication and re-export.

This situation has brought into sharp focus the need to review legislation relating to PQ and PP and to make procedures less rigid and more flexible while at the same time safeguarding the agricultural crops of the country against the introduction of damage-causing pests. There is also a need to ensure that countries importing agro-horticultural products from Sri Lanka do not introduce unwanted organisms which their countries do not have and which are likely to cause damage to their own crops.

Most countries regulate the importation of plants and plant products because of the risk of introducing pathogens or pests. Nevertheless a segment of the private sector does not fully appreciate the risks that are associated with imported plants or plant products. A negative attitude may therefore develop when PQ officials are too conservative. The objective is to bring all parties concerned together to jointly develop safeguards that will ensure the rapid and timely inspection of plants or plant material and minimise risks from pests and pathogens.

#### **1.4 INTERNATIONAL CO-ORDINATION**

No two countries function alike on policies and procedures. Most countries maintain a national quarantine and follow international guidelines in general. They however differ in the legislative process, operations and procedures, not to mention differences in basic administrative systems.

Policies and procedures vary according to a number of very important factors, one of which is experience or the number of years the organization has been in operation. Some nations have had over 100 years of experience in plant quarantine, but others are new to plant quarantine programmes. Countries naturally consider their national interests first. Policies often depend on whether the country is an exporting or importing country.

There are always constraints in plant quarantine. Some of these are listed below :

1. Funds or lack of funds
2. Capabilities (scientific, technology)
3. Manpower
4. Politics
5. Size of country and/or organization
6. Leadership of the organization, etc.
7. Ability to make risk analysis and assessments

Procedures regarding field inspection for phytosanitary certification of plants also varies considerably from one country to another. Plant quarantine organizations tend to find their own threshold which they can depend upon.

The most uniform policies and procedures are found within strong regional organizations. Independent countries, operating outside of a regional organization, tend to differ from conventional systems.

Regardless of what internal influences exist on policies and procedures, more and more countries are learning to operate along standard guidelines. High international standards demanded by the trade are forcing all countries to upgrade their policies and procedures. Exporters must continuously raise their standards in order to be in the trade.

## **1.5 PRIORITY ACTIONS**

Sri Lanka needs to develop clear and concise policies and operations established by FAO guidelines. These must be reviewed and implemented as soon as the changes occur. The most significant areas in which Sri Lanka's plant quarantine is weak are as follows :

1. Need for legislative update
2. Technology and training
3. Personnel and staffing
4. Inspection and operational procedures (field and port of entry inspection).
5. Co-operation with other agencies and trade organizations.
6. Pest risk analysis and assessment

The GOSL has a commitment to strengthening the PQS. Towards this end GOSL expects to expand national PQ services, and to establish a special PQ facility in close proximity to the KIA, with assistance from the government of Japan. It must also be recognized that, because of these restraints, it may take some time for Sri Lanka to achieve all its objectives. There is progress taking place in all of the above areas, but there is a need to accelerate the rate at which improvements are made.

## **1.6 NATURE OF THE REVIEW**

It is in this context that the GOSL has requested that a team of consultants review the plant quarantine policies and regulations. (The terms of reference are given in Appendix 1.)

The present review seeks to provide a strong basis for PQ in the future. It focuses on some of the historical factors which have tended to relegate PQ into the background over the years. It also attempts to provide a sound basis for protecting Sri Lanka's Agriculture where necessary while at the same time facilitating the movement of plants and plant material into and out of the country as trade in agricultural material expands with new developments and trading policies.

The mission consulted with both the State and private sectors on problems and constraints faced by them. Towards this end, a questionnaire (see Appendix 5) was sent out to 173 institutions, companies and individuals (Appendix 6) in the agricultural import-export sector. The responses to the questionnaire are summarized in Appendix 7. Many of the problems relate to delays in obtaining the necessary documentation such as PCs and permits.

The mission interviewed several persons (Appendix 8), visited several state and private sector institutions (Appendix 9), and inspected various facilities (Appendix 10). The mission did not visit ports of entry outside Colombo (Appendix 11) as hardly any agricultural material enters other ports with the exception of wheat grain entering Trincomalee. A further reason is that no permits for import of plants and plant material are issued to ports other than the ports of entry at Colombo.

The review covers existing PQ procedures and also focuses on future needs. It also examines streamlining of regulations and the introduction of new PQ procedures to make the PQ service more efficient, minimize delays and losses while safeguarding vital agricultural enterprises from potential threats posed by pathogens, pests, noxious weeds.

## **2. CURRENT PQ PRACTICES AND TREATMENT**

The seaport in Colombo (POC) is the largest of all entry points into Sri Lanka and handles substantial quantities of cargo imported into and exported from Sri Lanka. The fumigation facility is located in the premises of the Colombo seaport. The primary purpose of the PQ port office is to check that produce concerned complies with phytosanitary requirements. The intensity and frequency vary with the product concerned. PQ officers inspect samples of imports of plant materials to ensure that the imports comply with import specifications.

The cargo is referred to the PQ office by customs for inspection and/or treatment but improvement is necessary. Some basic equipment that is essential for proper inspection is lacking. The facilities available and drawbacks of this station have been documented very comprehensively in the FAO Report of 1986.

## **2.1 COLOMBO SEAPORT**

- a) Ship boarding by PQ officers appears to be satisfactory as there are no reports of any conflicts with customs officials/port authorities on boarding of ships.
- b) Garbage from vessels - There is no incineration facility and garbage collection from vessels poses a great risk.
- c) Fumigation chambers and equipment. The chambers are old and the equipment inoperative or in poor working order. Halide detectors and other equipment are not available.

The fumigant methyl bromide is used very often for the fumigation of cargo meant for exports. Four privately owned fumigation operators have been approved to perform fumigation of export consignments. However, PQ should inspect the facilities of the private sector and closely watch their operations.

## **2.2 KATUNAYAKE AIRPORT**

- a) The OIC and clerk are housed on the upper floor of the cargo building and the PQ office for inspectors is located close to the duty-free shops away from the customs area, making it difficult for officers of the two departments to work together.
- b) No inspection of aircraft, cargo holds and stores is done by PQ.
- c) There is a small laboratory established in a separate building with basic equipment but training given to officers in identification of pests and diseases is inadequate.
- d) PQ should initiate compliance agreements between airport authorities and PQ for handling garbage disposal.

In Sri Lanka it appears that PQ does not apply quarantine procedures to a degree that gives protection to domestic growers, and also does not always enforce quarantine measures to exclude pests that affect market access for plants and plant products.

The principal reasons for the above is the shortage of trained personnel to carry out the duties effectively. There are no fumigation facilities located near the airport to treat infested cargo.

## SECTION II

### 3. THE PERMIT SYSTEM

There are two kinds of permits that can be issued by the DOA: Departmental permits for prohibited plant material, and a general written permit for restricted plant material which is referred to as a "Permit". An oral permit may be issued for small amounts of enterable (not prohibited) plant material.

**Departmental Permits** are issued for the importation of prohibited plant materials which are imported by the DOA for research or experimental purposes. Ultimately, some of this material will be delivered to the private sector. This is one way whereby the growers can legally receive new and valuable germplasm without any pest risk to agriculture. It is a deterrent to smuggling of high pest risk articles.

**Permits** are a standard requirement by almost all countries for the importation of restricted materials. The permit is a written authorization given by an authorized person for the movement of plants, plant products, etc. It authorizes the importation of a specific article, and the conditions under which it may be imported, e.g., PC, treatment, etc.

To receive a permit for restricted articles (other than for food, analytical, medicinal, or manufacturing purposes) an application must be submitted. The application includes the following information :

- (1) Name, address and telephone number of the importer;
- (2) Appropriate quantity, type of materials and botanical designation of articles intended to be imported;
- (3) Country(ies) or locality(ies) where grown;
- (4) Intended port of entry;
- (5) Means of transportation, e.g., mail, airmail, air express freight, air freight or baggage; and
- (6) Expected date of arrival.

After receipt and review of the application by an authorized person, a written permit indicating the applicable conditions for importation will be issued for the importation of articles described in the application, if such articles under the conditions specified in the application appear to be eligible to be imported into the country.

Examples of "restricted" articles which may require a permit may include the following categories :

- (1) Permissible or enterable plants and seeds;
- (2) Articles subject to the post-entry quarantine by non DOA establishments;
- (3) Articles subject to treatment and other requirements;
- (4) Seeds of trees or shrubs;
- (5) Fruits and vegetables, depending on the country of importation, and of course not prohibited;
- (6) Any category or article determined to be necessary by the DOA.

The issuance of a permit is based on a biologically sound risk assessment of the article.

Foreign plant quarantine officials and exporters are guided by the conditions stated in the permit, and consequently it serves to prevent the introduction of pests into the importing country.

In the absence of a permit, importers and exporters, and plant quarantine officials would not be aware of special requirements for the legitimate movement of the agricultural commodity or plants, etc. Since the permit is specific for an importation from a particular origin, it limits the importation from areas determined in advance as having a low pest risk, and therefore protects the country's agriculture from the introduction of exotic pests.

The fact that the permit also serves as a public awareness document and may stipulate safeguards and/or conditions of entry, it tends to instruct the public of the danger of making illegal importations and thus reduce smuggling of restricted articles. No one will want to smuggle articles into the country when it can be done legally and safely.

The permit requirement of enterable material benefits the importer. Accordingly, he would receive what is stated in the permit, and also what he requested in the application. In fact, it facilitates the importation, since he is in compliance with the regulations. The permit gives the importer certain guarantees.

In the absence of a permit, the importation would be subject to possible delays, confiscation, rejection or other legal action.

There is sufficient evidence to support the permit system when it is properly administered. For this reason it has become an intricate part of the plant quarantine systems, internationally.

The two possible restraining factors in the permit requirement are :

- (1) Delays in issue
- (2) Validity periods

Plant protection officials need to set time frames in issuing permits as expeditiously as possible, so as not to interfere with the normal course of trade. Permits should be concise and state only those conditions which are necessary to protect the country from exotic pests. It is found that some permits include conditions not related to plant quarantine or pest risk, making it difficult for foreign shippers and foreign officials to interpret and/or meet compliance.

Permits often have a fixed validity period. Consideration should be given to longer validity periods, when the pest risk is low. For low risk material the validity period may be considered for up to one year, and revalidated automatically, whenever possible.

In conclusion, it can be stated that the Permit requirement should not only be retained, but streamlined and improved upon. Additionally, the regulations should specifically state which categories of plant and plant products require a permit, and where the permit can be obtained, so as not to complicate normal trade.

#### 4. **POST-ENTRY QUARANTINE**

Herein shall be discussed :

- (1) Post-entry Quarantine Station, and;
- (2) Post-entry Quarantine at non DOA locations

Post-entry quarantine station means a station approved for growing and screening of plants in isolation, and holding them for observation, research, experimentation, or for further inspection after they have been imported.

PEQ growing at DOA facilities is usually reserved for growing prohibited plants at special quarantine facilities under the direct control of the DOA or his delegated authority. Plant material held at such facilities is limited to germplasm otherwise prohibited, for treatment, testing, development, multiplication, etc. for eventual distribution to the private sector.

Because of the higher pest risk associated with prohibited plant material, safeguards are prescribed for the importation, movement, inspection and growing at such a facility. This is necessary to prevent the accidental introduction of a plant pest that might be associated with the plants.

PEQ at "non DOA facilities" generally means the growing of restricted plant material on the property of private growers. The DA requires or authorizes PEQ growing in this manner, if in his judgment the pest risk is considered to be low, yet surveillance is necessary to observe for latent infections such as viruses.

The procedure may be applied to some plant species which are currently prohibited, provided that exotic pests are not known to occur in the exporting country. All import conditions such as PC, Permit requirement, etc. must be adhered to.

Plant species which are permitted, but requiring special conditions as listed in the proposal of 17.12.91 may be considered for PEQ at a grower's property.

It should not be the intent to authorize large quantities of propagative material for PEQ growing in this manner, but only to allow growers to receive new clonal material for increased propagation with the minimum of pest risk to agriculture.

The implementation of PEQ by growers shall require that certain conditions be met as follows :

- o To import PEQ material an importer must sign a PEQ agreement stipulating that the material will be grown on property under his control, labelled, segregated and held until a written release is received.
- o They should also maintain a file of sources of plant species, and on the reliability and the accuracy of Phytosanitary certificates accompanying consignments.
- o PEQ is the third and final phase in a country's effort to prevent the introduction of new and destructive plant pests, the first being the inspection and certification of the plants at the point of origin by foreign officials, and the second being port-of-entry inspection and treatment.
- o It must be remembered that PEQ requires commitment on the part of the grower, reasonable amount of administration, trained personnel in the recognition of exotic diseases, co-operation of the growers, periodic inspections in the field, and timely release of the plants from PEQ.
- o Emphasis must be placed on effective operation otherwise barriers will be encountered to prevent illegal and uncontrolled entry of germplasm possibly infested and infected.
- o Although it is being recommended that PEQ at other than DOA facilities be authorized, it must be recognized that such a programme is not without problems and difficulties. These may include accountability, diagnosis, problems of distribution, segregation, sale of plants prior to release, record keeping etc. Therefore, the amount of material that may be authorized for PEQ growing should be limited to the smallest number for the site or property where it will be grown. It is the practice to screen and approve the

growing site in advance of importation to be certain that the quantity can be satisfactorily grown on the particular property.

- o In conclusion, PEQ growing by non - DOA facilities should be expanded within the limits explained above, and only as staff or personnel is available to perform the growing season inspections. PEQ inspections can be combined with the usual field or growing season inspections required for export certification. (PC requirement)

## **5. PHYTOSANITARY CERTIFICATES**

### **5.1 POLICY AND FACTORS TO CONSIDER**

Importation of restricted articles should be accompanied by a PC at the time of entry along with other documents such as invoices.

- a) The issuance of a PC by the exporting country is an aid in reducing the pest risk.
- b) The PC is the document by which foreign officials communicate conformance and compliance with the requirements of the importing country.
- c) PC is used to convey the "country of origin" to the importing country.
- d) PC is not a substitute for inspection and/or treatment, but a requirement for assisting the importing country in preventing the introduction and spread of unwanted pests.
- e) The responsibility for obtaining a PC is on the exporter of the exporting country, and also the importer.
- f) PCs are not infrequently lost or delayed in transit, or the issuance may have been delayed by PQ of the exporting country for administrative reasons.
- g) Issuance may have been denied by the PQ service of the exporting country for some reason.

### **5.2 POLICY DECISION IN THE ABSENCE OF A PHYTOSANITARY CERTIFICATE**

On the basis of the above constraints when there appears to be justification, and a permit for the importation had been issued, and there are not special Additional Declarations requirements which cannot be met at the time of entry, the consignment may be enterable, subject to a more intense inspection and/or treatment.

PQ should instruct the importer or the broker responsible for the importation of plant material that future consignments must be accompanied by a PC, and the consignment may be delayed or denied in the absence of a PC from a country having an official PQ service.

If the incidence is frequent the PQ service of the importing country may wish to tactfully inform the PQ of the exporting who may apply appropriate measures to correct the situation.

### **5.3 IMPORTATION OF PROHIBITED MATERIAL**

The policy on the importation of prohibited material by scientific institutions in cargo without an accompanying certificate should be to hold the article(s) under safeguard until the DA or his delegated authority has examined all the facts and circumstances. The decision should be based on many factors.

- a) The presence or absence of permit.
- b) Type and kind of material.
- c) Value of the material. (e.g. valuable germplasm)
- d) Country of origin.
- e) Permit requirement (safeguards).
- f) Importer or destination within the country, etc.

### **5.4 IMPORTATION THROUGH PASSENGER AND CREW BAGGAGE**

All of the policies apply to commercial importations, and not to materials brought into the country in passenger or crew baggage. The entry status of these should be determined by inspection and/or treatment for small quantities of enterable or restricted articles i.e. those which are not prohibited. The policy on prohibited articles intercepted in baggage should be evaluated as in no.3 above. There are cases when a scientist travelling abroad discovers new, valuable germplasm, and does not have the time to obtain a permit in advance. In such cases the scientist or researcher should cable, fax, or telephone the DOA that he will be arriving on a certain date, and carrier and state the nature of the article being carried. It is best that such material be handed over to the head of the scientific institution concerned.

## **6. ORGANIZATIONAL STRUCTURE**

At present responsibility for the Plant Quarantine Service is vested in the DA or an officer of the DOA authorised for the purpose in writing by the DA. The DA is not, however, held completely responsible for the entirety of the agricultural activities in Sri Lanka. Several crops such as spices do not even come under the preview of the DOA. Not even the Ministry of Agriculture has responsibility for the entirety of Agriculture in the country. Other ministries are also involved in agricultural activities impinging on PQ.

These responsibilities are summarised below :

<u>Ministry</u>	<u>Responsibilities</u>
M/Agricultural Development & Research	Rice, cereals, vegetables, fruit, spices, beverage crops other than tea,
M/Plantation Industries	Tea, Rubber, Coconut, Sugar, Oil palm, Cashew, Mulberry
M/Lands, Land Development and the Mahaweli Development	Forestry, Agriculture in Mahaweli River basin
M/Tourism and Rural Development	Palmyrah

Other ministries such as Trade, Finance, Shipping etc also have their interests. In addition there are several provincial ministries engaged in agriculture including the recently decentralised extension service. These ministries are under the supervision of Provincial Councils which are supervised by the Ministry of Provincial Councils and Home Affairs of the central government in such a set up the authority of the DOA itself, quite apart from the PQ Service is far from clear. Co-ordination between ministries can be done at two levels; either at cabinet level by the ministers themselves, or at the Development Secretaries level. However the PQ Service is hardly likely to figure prominently with either of these groups. The consultants therefore see the following options as currently available.

- a) The present status quo to continue where the PQ Service is under one ministry with other ministries is also responsible for Agriculture.
- b) One entity to be in overall charge of all agricultural matters such as PQ, needing interministerial co-ordination in Sri Lanka.
- c) The PQ Service to be independent of all Departments, Ministries etc. and to be answerable to the Prime Minister.

The Deputy Director of Agriculture, Seed Certification and Plant Protection (DD SC & PP) who reports direct to the DA, oversees the PQ service. The highest level of officer who supports him is a Research Officer experienced in PQ. There is no Entomologist, Plant Pathologist, Bacteriologist, Virologist or Nematologist qualified at PhD or higher level on the staff of the PQ Service, which is therefore compelled to seek the assistance of the research staff at the CARI who presently reports direct to the DDR, DOA. They have their own work programmes and are therefore not in a position to devote high priority to the needs of the PQ service.

At the Sea Port of Colombo the highest level of officer is an Agricultural Officer (AO) in Charge. He is supported by Agricultural Instructors (AI), and Research Assistants (RA). Here again problems beyond the competence of the Sea Port PQ staff are referred to the specialists at the CARI (Gannoruwa) for report.

At the KIA, the highest level of officer is an Agricultural Officer in Charge. He is supported by another AO, five AIs and two RAs. These officers follow the same practice as that followed in the sea port of referring problems beyond their competence to the specialists at the CARI (Gannoruwa).

The entire PQ service was previously under the direction of the DDR, DOA but was more recently brought under the control of the DD,SC & PP. A series of other changes also took place within the organizational structure of the DOA, resulting in the present structure where the DD SC & PP is held responsible for the regulatory functions connected with Seed Certification and Plant Protection. An additional DD presently supports the DD SC & PP. There are, however, other areas of responsibility within the purview of the DD SC & PP not connected with PQ.

With the decentralisation of the Extension Service of the DOA the links between PQ and the Extension Service were severed. Seed Certification and some aspects of Plant Protection continues to be centralised.

With the establishment of the proposed National PQ Service a new headquarters building and laboratory are expected to be constructed near the KIA. This facility will contain the necessary equipment and facilities to establish a modern PQ Service. It is not the intention of the present consultants to review this project or to make detailed comments on it as this has been the subject of much study in the recent past.

It must be remembered that PEQ is essentially a research activity whereas PQ is a regulatory activity. PEQ and PQ are parallel activities and should be under separate lines of authority under the DD,SC and PP.

The consultants however wish to refer to an important aspect of the National PQ Service which has already been referred to by the Japanese consultants who worked on the project. They clearly state that the GOSL will have to bear the costs of maintenance of the facility. It is a fact that many a government building has suffered from the inadequacy of inputs into maintenance of such facilities. Where expensive equipment is involved, the lack of funds can be a serious drawback.

The consultants examined the question of funding for both the National PQ Service as well as the general activities of the service outside the national facility. We are of the view that the PQ Service must generate at least some of the funds required for its activities without being wholly dependent on the national exchequer for all its resources. It is therefore highly desirable that the PQ Service builds up its own financial resources to fund its activities.

## Organization within the Department of Agriculture

In 1992 a decision was taken by DOA to place all matters relating to research under the Deputy Director, Research, DOA, and all matters relating to regulatory functions under the DD SC & PP. The regulatory arm of the DOA therefore had the following functions assigned to them, coming under the direction of the DD SC & PP.

- 1) Seed Certification
- 2) Control of Pesticides
- 3) Plant Protection

The Plant Protection activities had two basic divisions.

- 1) Plant Quarantine (External - dealing with the entry and exit of biological material)
- 2) Plant Protection (Internal - dealing with the dissemination of biological material within Sri Lanka)

The DOA has to face up to two realities :

- a) The import and export of plants and planting material for the horticulture, fruit and vegetable sector is expanding rapidly and will expand even more rapidly in the near future.
- b) With the privatisation of the management of the state-owned plantations, the demand for the cross-border exchange of plants, planting material will expand rapidly in the future. It will therefore be necessary to upgrade the PQ Service and strengthen it considerably in the future. The officer in charge of PQ must therefore be able to report directly to DD SC & PP to avoid any administrative delays.

## **7. INTER-RELATIONSHIPS BETWEEN RESEARCH INSTITUTIONS, REGULATORY AGENCIES, AND PLANT QUARANTINE**

### **7.1 RESEARCH INSTITUTIONS**

The following research organizations are concerned with the PQ services.

#### State Sector

- a) CARI, Gannoruwa, Peradeniya (DOA, MADR)

- b) DEA Research Station, Matale (MADR)
- c) Central Rice Breeding Station, Batalagoda (DOA, MADR)
- d) Vegetable Crops Research Units, NE, Maha Illuppallama (DOA, MADR)
- e) RARC, Aralaganwila, Bandarawela, Makandura, etc. (DOA, MADR)
- f) Seed Certification Unit (DOA, MADR)
- g) ARTI, Colombo (MADR)
- h) TRI, Talawakelle (MPI)
- i) RRI, Agalawatte (MPI)
- j) CRI, Lunuwila (MPI)
- k) SRI, Udawalawe (MPI)
- l) Sri Lanka Cashew Corporation (MPI)
- m) Silk and Allied Products Development Authority (MPI)
- n) CISIR, Colombo (MISA)
- o) Forest Department, Sri Jayawardhanapura (MLMD)
- p) Mahaweli Economic Agency (MLMD)
- q) Ayurvedic Research Institute, Nawinna
- r) Co-operative Wholesale Establishment, Colombo
- s) Science and Agriculture faculties of the Universities.  
(Ministry of Higher Education)

As all the research institutions listed from a) to g) above come within the purview of MADR, no serious problems are envisaged. PQ makes use of the services of CARI (Plant Pathologists, Entomologists and Nematologists) for identification of pests and for PEQ when necessary. The relationship however is more personal than institutional, and PQ work receives lower priority than CARI's own work.

The research institutions listed from h) to m) above come within the purview of MPI. All matters relating to PQ are referred to the heads of the respective research institutes by the DA. The arrangement works fairly smoothly despite the overlapping responsibilities because the research institutes wish to protect their industries against the introduction of unwanted pests. Plant breeders, may, on the other hand, wish

to import germplasm to upgrade their planting material. The private sector plantation management companies may also wish to do so. In this event it is essential that the research institutes concerned have their own PEQ facilities or that they have access to such facilities. So far as the consultants were able to judge, such facilities were not available with the research institutes under MPI with the exception of the SRI. The Sri Lanka Cashew Corporation's research establishment consisted of only one officer who has no knowledge of PQ. With the impending privatisation of the commercial arm of the corporation it is likely that responsibilities for research will be transferred to either DOA or to DEA, in which case the need to import germplasm (presently banned for the Family Anacardiaceae to which cashew belongs) by the private sector could be handled by an institute coming under MADR.

The import of all plant material from South and Central America are prohibited into Sri Lanka because of the risk of importing South American Leaf Blight of rubber caused by the fungus *Microcyclus ulei*. There are, however, possibilities of importing strains of other fungi from the Asian region which are not found in Sri Lanka. The RRI imports planting material from the Asian region but they do not have PEQ facilities in an area isolated from rubber plantations. The imported material is planted in the nursery at the Institute. The procedure is far from satisfactory. It is possible that new pathogens could enter because of inadequate safeguards and weak PEQ procedures.

The importation of all genera of the family Palmaceae into Sri Lanka is prohibited, because of the risk of introducing unwanted coconut diseases now absent from Sri Lanka such as Cadang Cadang and Lethal Yellowing. However, the SLSPC in 1987 imported 30,000 oil palm seeds and one private sector company imported 30,000 seeds of *Phoenix robelinii*. These plants are still in Sri Lanka and are growing in a nursery in the coconut triangle. As the import of Palmaceae are prohibited, the CRI has not developed PEQ facilities of their own. However, as they wish to import *in vitro* planting material (embryos) for upgrading their breeding programme, care will have to be taken to ensure that viruses are not introduced through embryos grown *in vitro*. All genera of the Palmaceae are prohibited but the CRI takes responsibility only for coconut.

*In vitro* propagation of Sugarcane is possible and this method may become a more important technique whereby planting material can be imported. The SRI has some PEQ facilities isolated from sugarcane - growing areas.

DEA has imported some varieties of coffee (Catimor, IMY Robusta etc) from India and Africa and some pepper varieties also from India in the 1970s. There have been no imports in recent years. Exports of betel leaves are beset with the problem of Bacterial Leaf Spot disease which is difficult to eliminate from export material.

The MARD project which operates under the MEA in systems B and C of the Mahaweli river basin has a collection of imported material, some of it of unknown origin and also of locally selected germplasm mostly of fruits and vegetables. It is possible that in the future they may wish to import germplasm of promising

varieties for their propagation programmes. In this event adequate PEQ facilities will have to be developed.

### **Private Sector**

There are several private research laboratories and nurseries dealing with a wide variety of subjects such as PEQ, tissue culture, plant propagation, plant breeding, cultivar selection and multiplication, fumigation, seed production, plant protection, etc. The PQ service should gear itself to inspect PEQ and phytosanitary conditions prior to issuing PCs if requested to do so by the private sector.

## **7.2 REGULATORY AGENCIES**

The Plant Protection unit of DOA contains, besides PQ, a pest control unit to check movement of pests within the country.

The following regulatory bodies operate under the MPI.

- a) Sri Lanka Tea Board
- b) Rubber Control Department
- c) Coconut Development Authority (CDA)

The Sri Lanka Tea Board issues certificates of a special nature to small markets if such certification is required. As the TRI is a division of the Board the latter has the technical backing to issue such certification, most of which relate to chemical contaminants rather than to biological ones.

The regulatory functions of the Rubber Control Department do not impinge on PQ. The Department has the technical backing of the RRI, which also functions under MPI.

The CDA has technical backing of the CRI and their activities relate mainly to the raising, transportation and distribution of coconut seedlings within the country. They therefore have common areas of interest with PP.

## **7.3 CO-OPERATION WITH OTHER AGENCIES**

It is very necessary that the PQ Service co-operate with other agencies in the interest of the smooth working of the service. First and foremost it must have close links with the DOA itself. In the national interest all branches of the DOA must co-operate with the PQ Service, whenever their co-operation is sought. No Division of the DOA should be in a position to fail to co-operate with the PQ Service as their own fields of interest may be undermined or threatened if the PQ Service fails to fulfil the objectives for which it exists.

The cornerstone of the effectiveness of the PQ Service is its relationship with the Customs Department. The DOA and the Sri Lanka Customs Department must work closely together and it is necessary that the Sri Lanka Customs Department appreciates the objectives of the PQ Service and vice-versa. As the PQ Service is a technical service it is necessary to keep the Customs Department fully aware of matters relating to the PQ Service. Officers in the PQ Service should have a similar status in the public service to that of customs officers to enable them to function more effectively as counterparts.

#### **7.4 LIAISON WITH THE IMPORT EXPORT TRADE**

PQ Service should have close links with importers and exporters of plant material. There is, at present, a wide communication gap between them and PQ. Neither has been able to fully satisfy the other that their needs are being looked into. Some importers and exporters consider PQ as a nuisance and a barrier to smooth trade, while PQ appears to have been unable to wholly convince the trade that PQ is in their ultimate interests. This communication gap must be bridged as fast as possible.

#### **7.5 EDUCATING THE GENERAL PUBLIC**

There does not appear to be literature or audio-visual material to effectively inform the general public of the importance of PQ.

### **8. INTERNATIONAL CO-OPERATION**

Sri Lanka is a signatory to the agreements of IPPC, APPPC and GATT.

#### **8.1 INTERNATIONAL PLANT PROTECTION COMMISSION**

IPPC states briefly that the contracting parties have agreed to cooperate in controlling pests of plants and plant products and in preventing their spread, and introduction across national boundaries. Sri Lanka is a signatory of the convention, but it is not known whether it has accepted the revised amendment(s). There are 94 countries who are parties to the convention which is sponsored by FAO.

As a signatory to the convention Sri Lanka assumes the responsibility for the fulfilment of all the requirements under IPPC.

The commitment requires that Sri Lanka carry out some very important functions necessary in the area of plant protection and quarantine. They include field inspection, inspection of consignments, treatments, certification, distribution of information, research, etc. Requirements relative to imports are also stated. Also important is that contracting parties are urged to cooperate with FAO and with each other.

Responsible persons in Sri Lanka working in PQ should become familiar with the articles of the convention. As Sri Lanka takes on an increasing role in the export and import of plants and plant products PQS needs to understand its responsibility and commitments in plant quarantine enforcement.

The convention was formed so that plant quarantine organizations would adopt similar legislative, technical, and administrative measures in plant quarantine.

Sri Lanka and other contracting partners should take all necessary steps to honour their commitment to IPPC. This will definitely assure the movement of healthier plant and plant products, thus preventing the spread of plant pests globally.

## **8.2 ASIAN AND PACIFIC PLANT PROTECTION COMMISSION**

**APPPC** is a regional organization comprising of the countries located in Asia and the Pacific region. The APPPC is sponsored by FAO. Sri Lanka is a signatory to the Commission and should uphold her commitments to it.

The region grows about 22 major crops which are hosts of a significant number of plant pests not known or reported from the Region, which includes Sri Lanka. These destructive insects and diseases, if introduced into the Region, are likely to have disastrous effects. An introduction into one country may easily spread to a neighbouring country because of their geographical proximities, climatic similarities and trade.

One of the articles of the agreement stipulates that "for the purpose of preventing the introduction into its territory or territories of destructive diseases and pests, and those listed in Appendix A to this Agreement, each Contracting Government shall use its best endeavours to apply, with respect to the importation of any plants, including their packings and containers of plant origin, from anywhere outside the region, such measurements of prohibition, certification, inspection, disinfection, quarantine, destruction or other measures as may be recommended by the commission. "Another article of the agreement states that countries may take similar measures from another territory within the region for pests and diseases of limited distribution within the region.

Sri Lanka's participation in a regional agreement permits it to share in the decisions taken into and within the region. Sri Lanka's active commitment is necessary if the region is to keep out exotic pests, and prevent the spread of those already present.

Knowing that Sri Lanka is committed to what is stipulated in the Agreement, regional trading partners, and those outside the Region will be in a better position to honour the certification of plant and plant products she exports.

Regional agreements are gaining popularity around the world. EPPO and NAPPO are examples of organizations which are now well established and functioning effectively. They all share in their common problems and solutions in their respective regions.

Sri Lanka can contribute to the Region by listing, for example, the pests and diseases known to occur in the country and the steps that are being taken to suppress them. It can further declare which pests are of concern to Sri Lanka and the Region.

Commitments must be multilateral to be effective. Therefore, the commitment of all the partners should be assessed. In this context Sri Lanka needs also to consider its national interest together with its commitment.

### 8.3 GENERAL AGREEMENT ON TRADE AND TARIFF

GATT is an organization under the United Nations. The purpose of the GATT draft agreement on sanitary and phytosanitary measures is to minimize technical trade barriers. One of the principles of the agreement is formulation of laws, requirements, quarantine procedures and standards that are based on internationally accepted standards, guideline and recommendations. It provides for bilateral agreements on certification, inspection, etc. between trading partners. There is a need for standards and certification including quarantine regulations to facilitate world trade, but to seek to minimize their effect as unjustifiable trade barriers. An important part of the agreement includes the right to the settlement of disputes.

GATT should therefore be of concern to Sri Lanka. Unfair quarantine restrictions put on Sri Lankan agricultural imports could be a restraining factor as it expands its overseas market of plants. Also, unreasonable restrictions on imports could have restricting effects on trade and the private sector. Sri Lanka needs to be represented in multilateral GATT negotiations so that she will understand its endeavours.

By being an active partner to GATT Sri Lanka can be in a position to express her concern on GATT issues affecting her trade. The imposition of import duty (ies) on plant and plant products into some countries like Sri Lanka and not to others, makes trading difficult.

Therefore Sri Lanka needs to be aware of trade practices and quarantine regulations and procedures in other countries affecting the export of its products, and be able to exercise its rights under the agreement.

## 8.4

### INTERNATIONAL PLANT QUARANTINE COMMUNITIES

Sri Lanka's role among the international plant quarantine community may be guided by the following during the import and export of plants:

1. She needs to be aware of the latest plant quarantine requirements of the importing country/countries, especially her trading partners.
2. She should meet those requirements to the best of her ability, by establishing sound inspection procedures.
3. If she cannot meet the certification requirements, certification should be denied, and importing countries should be informed of the reason. If this is done it is possible that the certification requirements may be modified.
4. Sri Lanka should be the official body in interpreting the export requirements for the private sector; but it should be the responsibility of the exporter in meeting the requirements.
5. The PQ service should inform and instruct the private sector of the import requirements; and it should be in a position to interpret clearly and precisely what they mean.
6. It should be the responsibility of Sri Lanka for taking appropriate action as needed in preventing introduction of plant pests.
7. Sri Lanka should within the scope of its agreement convey to the respective partners common problems, and seek assistance as needed in the resolution of these problems.
8. Sri Lanka must be aware of the latest developments taking place in all the international agencies sponsored by FAO, and the quarantine practices and standard procedures of its trading partners.

## SECTION III

### 9. PROPOSED AMENDMENTS/REVISION TO THE REGULATIONS

The Authority for the plant quarantine regulations is found in the Ordinance of 27 June 1924, Chapter 447 and 448 as amended. The proposal to revise the Ordinance relates only to the Regulation, dated 2 - 11 - 81 in the Gazette of the Democratic Socialist Republic of Sri Lanka, No. 165/2. The Regulation was signed by the Minister of Agriculture on 28 - 10 - 81.

On 17 - 12 - 1991, the Director of Agriculture released a "Revised Policy on Import of Seeds and Planting Materials to Sri Lanka". This Policy was published in the Ceylon Daily News on 24 - 12 - 1991, and is discussed separately (Section III, Chapter 10). These proposed amendments are not published in the Gazette of GOSL and have not been presented in Parliament. They therefore have no legal validity. The consultants carefully considered the provisions of the Ordinance of 27 June 1924 Chapters 447 and 448 as amended. The consultants do not see a need at this juncture to amend the Ordinance. They have, however, proposed amendments to the current regulations (Section IV, 11.9).

Because of the many changes in import and trade practice, pest distributions, changing plant technologies, and advanced and sophisticated plant quarantine services around the world, it becomes necessary to revise or update plant quarantine regulations regularly. Guidelines for the preparation of the revision may be found in IPPC, APPPC documents, and the FAO "Report on Strengthening Plant Quarantine Services" dated April 1986.

Many of the requirements are already in place. The revision will however, clarify many of them, and strengthen the basis for the regulations. There are some regulatory changes being recommended which lessen the restrictions, without serious risk to Sri Lankan Agriculture. Wherever it is known that the pest risk remains high there are no changes to the regulations, and they may even be strengthened.

The revision to the Regulations should include several parts:

#### General Introduction

- Part I - Importation of plants, parts of plants and seeds
- Part II - Fruits and vegetables
- Part III - Importation of insects, pathogens, snails etc.
- Part IV - Noxious weeds
- Part V - Post-entry action

## 9.1 GENERAL INTRODUCTION

The regulations should contain a brief introduction citing the authority for the Regulations, and the need for them.

The general section should include with a brief description of the terms used, so that persons reading the regulations are able to understand and interpret them. Any term not defined by FAO (See Appendix 12.7) should be defined in the Regulations. They should conform to standard FAO definitions.

## 9.2 PART I - IMPORTATION OF PLANTS AND PARTS OF PLANTS

This part must contain the conditions relative to the importation of plants and plant products given as accurately as possible. The various sections should include in descending order, whenever possible, high risk to low risk articles.

There are a number of policies, rules and requirements etc. for the importation of plant and plant products which must be specifically included in the regulations, and as nearly as possible following FAO standards.

- A) Prohibitions of plants, plant products, and seed
- B) Special restrictions relating to Hevea (Rubber)
- C) Restricted plants and plant products
- D) Unrestricted Plants and Plant Products
- E) Changes in policies that might be considered without increasing the pest risk
- F) PEQ by non-DOA facilities or by growers
- G) Application for plant importation permits
- H) Phytosanitary certificates
- I) Ports of entry
- J) Soil as a prohibited article
- K) Packing material
- L) Importation by DOA for experimentation or research purposes (PEQ)

## A) Prohibitions

Section 2 of the regulations lists prohibited and restricted plants by 1) Genus 2) Genus and related plants 3) Family names 4) Restricted articles with conditions of entry 5) Aquatic plants and 6) Some weeds listed by name.

The prohibitions of plants and plant products, including seeds should be as far as possible listed to the generic level. The family name should be listed only when it is determined by a risk assessment that it contains almost all the genera that are host plants of the same pest(s) common to them all. The same can be said for the term "related plants", which is even more vague. The known host plants should therefore be listed. The families listed are Musaceae, Rosaceae, Vitaceae (1981 Regulations), to which have been added Gramineae, Myrtaceae, and Palmaceae etc. (1991 PR).

Weeds which are listed as prohibited should be reported in a separate section; and the term Aquatic Plants defined and placed in the appropriate part of the regulations. The prohibition of plants and plant products should be listed by botanical name (genus) and common name(s) in parenthesis, the country(ies) from which it is prohibited, and the reason(s) why they are prohibited. It would be biologically sound to prohibit only from the country(ies) where the pest(s) are known to occur. This can be broadened to include adjacent countries, when it is determined that a pest risk occurs. The prohibitions should be supported by a standard pest risk assessment, and be in conformity with GATT proposals.

For guidance in the preparation of a prohibited list of articles of concern to Sri Lanka, one can refer to the format found in appendix xii of the FAO report of 1986. It must be borne in mind that the list was developed over five years ago, and this should require that a more recent pest risk assessment be made, and amendments to it should be made as necessary.

These are plants which carry with them the greatest pest risk to Agriculture in Sri Lanka. Consequently, these prohibitions must be rigidly enforced, and must apply to everybody. Possible pathways such as baggage, cargo, mail etc must be included.

### Importations of Prohibited Articles

The following is the internationally accepted PEQ arrangement regarding importation of prohibited articles. Any article listed as prohibited may be imported or offered for entry into Sri Lanka by the DOA, if it is

- a) imported for experimental or scientific purposes
- b) imported at the plant quarantine facility approved by DA (give name and address)

- c) imported pursuant to a permit issued for such article, and kept on file at the port of entry
- d) imported under conditions specified on the permit and found by the DA to be adequate to prevent the introduction into Sri Lanka of tree, plant or fruit diseases, injurious insects, and other pests i.e. conditions of treatment, processing, growing, shipment, disposal
- e) imported with a departmental tag or label attached to the outside of the container.

**B) Special Restrictions for Hevea (rubber)**

This regulation (No 15) applies to the importation of Hevea plants and seed under approved DOA permit. The regulation is part of the APPPC agreement, and no change is recommended.

**C) Restricted Plants and Plant Products**

Any restricted article, other than those specifically prohibited, or enterable only under special conditions requiring treatment or other special requirements, may be enterable subject to permit requirement, PC, and inspection and/or treatment at the first port of entry. This category covers the largest number of plant and plant material that may enter. These would include herbaceous plants, cuttings, rhizomes, bulbs, corms, tree seeds, etc.

The policy should be to limit the entry of the plant material to the smallest possible propagative unit, and in many cases to the age of the plant.

This category of plants and plant products relies strongly on permit requirement, PC and inspection.

**Cut-flowers:** Imported cut-flowers should require that a notice of arrival be given to PQ for enterable cut-flowers. In addition the following requirements are necessary:

- a) If the plant is prohibited the cut-flower should be prohibited
- b) If the plant is restricted, the cut-flower is treated like the restricted article and a permit and PC are required
- c) If the cut-flower is capable of propagation and not prohibited, it would be handled as a restricted article
- d) The entry of other cut-flowers may be allowed subject to inspection only.

**Tree seeds:** The importation of woody plants should preferably take place in the form of seed. Seeds of trees and shrubs (if not prohibited) should be enterable from any country under a plant importation permit. The policy should be to deny a permit of a tree or shrub if the plant can be produced from seed, which has a lower pest risk.

#### **Vegetable and Flower Seeds and Grass Seeds:**

The policy should be to allow the entry of these, unless they are subject to special conditions or restriction. Seed Acts of most countries are aimed to improve grade and quality standards of seed, which have a beneficial impact on plant quarantine, by reducing or eliminating weeds and other extraneous material etc.

Permits and PC requirements should be lessened or done away with whenever possible, but required for seeds which are known to carry a specific pest risk.

All are subject to inspection for pathogens, insects and weeds.

#### **D) Unrestricted Plants and Plant Products**

These are articles which are intended for medicinal analytical and manufacturing purposes etc and which pose no risk.

#### **E) Changes in Policies That Might be Considered Without Increasing the Pest Risk**

Some important constraints to trade regarding prohibitions and restrictions, as reported by the private sector may be evaluated in the preparation of the revision. The most important types of plants/plant material are listed below.

- Anacardium
- Aquatic plants
- Beet seed
- Glycine
- Gramineae
- Helianthus seed
- Lactuca seed
- Lycopersicum seed
- Onion seed
- Palmaceae seed (other than coconut)
- Plants from countries where South American Leaf Blight of Rubber occurs
- Potato seed
- Seeds in general
- Zea (corn)

Anacardium (Cashew): This was discussed above under PEQ. There is considerable expansion of this industry taking place. There may be a need for new or additional germplasm. Other fruit and nut plants not specifically prohibited, of which there are only a few listed in the regulations, may be subject to PEQ on non-DOA sites.

Aquatic Plants: The prohibition against the entry of Aquatic Plants was probably enacted to protect the waterways and surely rice growing. There are aquatic weeds that pose a risk and a threat to Sri Lanka, because of its special environment.

A list of the known noxious aquatic weeds should be identified for proper implementation of this part of the regulations. Some of the most serious noxious aquatic weeds are within this region.

Beet Seeds: The seeds of Beetroot have been entering the country over a long period of time, so there has been ample time for the introduction of diseases and pests that may be associated with beet seed. The disease and nematode referred to in the 1991 revised regulations may be introduced with beet root plants, soil, and/or other host plants. There are many pathways by which Heterodera sachactii may be introduced, and beet seed may not be the most important.

Decortication, in view of the pest risk, appears to be causing restraints. If the disease causing agent, Peronospora farinosa (downy mildew) is not seed borne, the regulation may be revised to allow the importation of beet seed as before. If it is seed borne the importers of beet seed should be so advised.

Glycine (Soybeans): Glycine is not listed in Appendices A and B of the Technical Document No. 139/1991. The assumption might be made that most of the serious pests of soybean are already in the region, including Sri Lanka.

A policy could be considered to place Glycine on a restricted list, instead of the prohibited list, or just subject it to permit and PC requirement, and inspection.

There is the possibility that new varieties or clones are needed in Sri Lanka. The seed of Glycine may be allowed to be imported for growing in an area away from soybean, cultivations for observation. The most important factor is that the seed is so processed that it is free from any plant debris. This can be determined by inspection.

Gramineae: This is a very large family of plant genera to which many agronomic crops belong. Some of these are already listed as prohibited. Many genera of the family Gramineae are hosts of diseases of the prohibited genera listed in the quarantine, therefore, there is good reason and sound policy to prohibit the vegetative parts of the plants, including rhizomes, stolons, and the

plants themselves. A list of prohibited genera of the Gramineae should be prepared.

Helianthus (sunflower): The seed of sunflower is prohibited, though the pests and diseases for the prohibition are not mentioned. There is considerable interest in the importation of sunflower seed, because of its economic food value. The exclusion retards the development of this important commodity. Plasmopara helianthi is a disease-causing agent of concern to many countries. Exporting countries should be required to certify freedom of the disease(s) and or pest(s). An option in lieu of prohibition could be certification and Additional Declarations statement requiring a treatment with an approved fungicide.

Lactuca (lettuce) seed: As lettuce mosaic virus listed in the regulation is of worldwide distribution, a PC may be required. Countries may find it impossible or difficult to certify and meet the Additional Declarations requirement.

Lycopersicon (tomato) seed: Certification should be the first option. Blotter tests may be carried out to determine the effectiveness or adequacy of certification, and whether organisms are present.

There can be problems associated with the kinds of treatments listed. They can affect germination, quality, etc. and there is always the question of effectiveness, reliability of treatment, efficiency of equipment, supervision, etc.

Onion Seeds: Honest certification as to the freedom of the pests listed might be very difficult to perform. None of the pests listed are believed to be specifically seed borne, except perhaps those associated with the seed as contaminants like Dietylenchus dipsaci. To ask certifying officials to certify freedom of pests unrealistically does not help create a better certification system. They are more likely to ignore the whole thing. The certification process which includes field inspection and exit inspection needs to be considered by importing countries. PQ could monitor some of the importations by conducting field checks of the growing crop.

Seeds of the Family Palmaceae: The family includes many species of palm of interest to Sri Lanka including coconut. Plants, seed and seedlings of Cocos nucifera must be prohibited. In vitro embryos may be permitted for research purposes.

The seeds of the Palmaceae may be enterable, except coconut, subject to an import permit, PC, and PEQ on growers' property, unless it can be shown that the seeds are carriers of seed-borne diseases not reported in Sri Lanka.

Plants Other Than *Hevea* (rubber): Where the disease causing agent *Microcyclus ulei* (South American Leaf Blight of Rubber) occurs the APPPC recommends the prohibition of all plants from places where the above disease is reported, or the area where it is endemic.

Plants and seeds other than *Hevea* from South American Leaf Blight of Rubber countries are moving internationally, therefore they can come into the region anyway, and there is no satisfactory way to monitor their ultimate movements into Sri Lanka.

The pest risk of introducing South American Leaf Blight of Rubber with plants other than with *Hevea* has not been studied in depth. *M. ulei* is believed to be an obligate parasite which restricts the mycelium but not the spores to the living host plant.

Restricted or enterable articles, not prohibited, may therefore enter as from other sources subject to import permits, PC, inspection and/or treatment. As an added safeguard, a fungicidal- insecticidal- acaricidal dip is recommended. PEQ at a grower's property may be another safeguard, such as requiring that the planting be authorised at a certain specified distance from rubber plantings.

*Solanum* (potato) Seed: The importation of potatoes should be strictly regulated. Safeguards should be such that they can be properly and adequately implemented. An additional safeguard to the ones already required is the following:

An accurate additional declaration that potatoes were grown on land which has been sampled and microscopically inspected by the plant protection service of the country in which it was grown within 12 months preceding issuance of the certificate and found free from potato cysts nematodes, *Globodera rostochiensis* and *G. pallida*. This additional declaration may be required for other field-grown crops where these nematodes occur.

*Zea* (corn seed): The regulations do not specifically state why corn is prohibited. Corn seed is the propagule or plant part that is generally traded and needed for planting by the private sector. The seed may be imported from specific locations or countries where diseases of concern to Sri Lanka do not occur. If for example, *Erwinia stewartii* is the main disease, plus any others, of concern to Sri Lanka then corn seed may be imported from that country or locality where the disease(s) do not occur.

The more biologically sound the policies and procedures, the less likely are they to be seen as technical barriers.

## F) Post Entry Quarantine by Non-DOA Agencies

A section on PEQ growing at non-DOA facilities was discussed in the FAO report referred to above. This section should be reviewed. It is further discussed in Chapter 8 of this report.

There is considerable interest in the growing of PEQ at non-DOA sites on the part of the private sector. This is a principle in quarantine that could be expanded, when the risk is low and adequate safeguards and procedures are applied. This would benefit the private sector who need new germplasm without increasing the pest risk.

The policy behind PEQ at non-DOA sites may be as follows:

1. Prohibit plants and seeds because of pest risk from specific countries but,
2. Authorize the growing at PEQ in non-DOA sites of plants or seeds from the countries where the pest(s) are not known to occur. All other conditions such as permit, inspection and / or treatment must be met.

This can be illustrated by the following: The USA prohibits *Fragaria* spp. from 14 foreign countries on account of *Phytophthora fragariae*, a serious disease not found in the USA, but it is enterable for PEQ growing at non-DOA sites from other countries which are not specifically prohibited. The same rationale or plant quarantine strategy may be applied in Sri Lanka.

In Sri Lanka this strategy may be applied for example in the case of *Anacardium*. The genus is currently prohibited by the regulations. PQ could consider the policy stated above in Nos. 1 and 2 above. If there are no serious pests which warrant a prohibition from any country, then only no 2 can be implemented for either seed or the plant or both, depending on the pest(s). The seed may be released without any PEQ, if seed borne diseases are not found on this genus.

This policy should not apply to prohibited plant material of great economic importance and having high pest risk potential such as rice, rubber, coconut etc. Importation of needed germplasm of such articles must be imported only by DOA at approved PEQ facilities.

## G) Application for Import Permits

Application for a permit and issuance of a permit must be strictly adhered to and compliance is absolutely necessary. The procedure should however be streamlined so that the purpose of the permit system can be accomplished without serious hindrance to the trade. The main purpose is to determine eligibility and serve as a safeguard in preventing the introduction of the unwanted pest(s) and its host(s) (see Chapter 7). The application and permit should contain only information relative to plant quarantine and list conditions as accurately

as possible. The permit is one of the best tools a country has in regulating the movement of agricultural products into the country.

#### **H) Phytosanitary Certificates**

Every effort should be made to obtain a valid PC from the exporting country. It is to serve as an additional safeguard in preventing the movement of pests internationally. The absence of a PC could mean that the exporting country refused to issue one. Material unaccompanied by a PC will be destroyed unless the importer can provide authenticated documentation from the exporting country as to why the PC was not issued. PQ may then decide whether or not to destroy the consignment.

#### **I) Ports of Entry**

Seven ports of entry are listed in the regulations. Since Colombo is the only port (seaport and airport) which maintains a plant quarantine station, it should be indicated as a station by placing an asterisk next to it.

Plants and plant products may, therefore, enter only where there is a plant inspection station, and where there are facilities for inspection and treatment, and where there are personnel to carryout them efficiently and effectively without undue delay.

#### **J) Soil**

Soils must be completely prohibited, but may enter under safeguards for scientific purposes as approved by DA. It should be clearly stated that it is prohibited from all sources.

#### **K) Packing Material**

Prohibited and approved packing material should be a part of the regulations. They are known to have a high potential for the introduction of plant pests. A complete list of prohibited and approved packing material may be found in the FAO report dated April 1986. They must be specifically listed and incorporated in the regulations.

#### **L) Importation of Plant and Plant Material in Vitro**

The requirement for the importation of plants in vitro needs to be included in the regulations. The importation in vitro or agar culture must not include prohibited articles. Prohibited articles in vitro must be handled in the same way as the prohibited article itself, and requires special safeguards. Viruses are not always eliminated by tissue culture.

The importation of restricted articles *in vitro* may enter subject to permit, PC, and visual inspection of the medium.

### **9.3      PART II - FRUITS AND VEGETABLES**

The section on fruits and vegetables is referred to in Part I, No. 2 - XII of the regulations of 2-11-81. It states, "Fruits and vegetables for consumption, from countries where fruits flies not reported in Sri Lanka are known to occur unless the fruits and vegetables are certified by the exporting country to have been grown in an area where fruits flies are not known to exist, or that the fruits and vegetables have been treated in a manner approved by the Director of horticulture to kill all fruit fly larvae,"

The statement should be rewritten or reprocessed to emphasize the prohibition. Certification needs to be based on surveys. Prohibition for fruit flies must be rigidly enforced. Certification does not give adequate protection, nor does inspection. The fruits are either prohibited or subject to internationally approved procedures and treatment schedules.

The entry status of any fruit or vegetable must be determined after a pest risk assessment of each vegetable and fruit, and the conditions for entry shall be stated in the permit. There should not be any exceptions to the procedure.

There are many destructive plant pests which can be carried with fruits and vegetables. The permit system, inspection, and/or treatment done under proper supervision are the best safeguards. Inspection of fruits and vegetables at points of origin is gaining popularity. If there is no satisfactory treatment for a pest the commodity should be prohibited. Although it is not within the scope of this report, it must be mentioned that plant quarantine inspectors must be in possession of manuals outlining inspection procedures, requirements, entry status, treatment schedules, etc. relating to fruit and vegetable imports.

### **9.4      PART III - IMPORTATION OF INSECTS, PATHOGENS, SNAILS, ETC**

Section 13 of the regulations permits the importation by the DOA. The section should be strengthened prohibiting the entry of all classes of pests, including weeds, Mollusca, etc., except by the DOA, and under proper safeguards. The PQ service should develop a set of guidelines for the importation of pests by the DOA. The most important safeguards for shipping and packing, and the destination in the country should be mentioned as part of the regulations.

## 9.5 **PART IV - NOXIOUS WEEDS**

The term should be defined. A definition may be found in the FAO Report of 1986.

The weeds of concern to Sri Lanka should be as follows, and listed under these categories.

- a) Aquatic weeds
- b) Parasitic weeds
- c) Terrestrial weeds

## 9.6 **PART V - POST-ENTRY ACTION**

The regulation provides for the following and are adequately covered, but may be evaluated for content.

- Treatment
- Inspections
- Destruction and disposition
- Referral by Customers and Postmaster
- Ship boarding
- Importation of insects, pathogens
- In-transit shipment
- Costs and fees for treatment
- Denials for damages resulting from inspection or treatment

The regulations further provide for inspection and the issuance of a phytosanitary certificate, and that it conforms to the plant quarantine laws of the importing country.

## 9.7 **ENDANGERED SPECIES OF TERRESTRIAL PLANTS**

The policy on endangered species needs to be determined, and what role PQ will play in the implementation of such policy.

## 9.8 **CONCLUSIONS**

Prohibit only those plants and plants products, including soil, fruits and vegetables, and any other article that could be a threat to Sri Lankan Agriculture.

Prohibit entry only from countries where the pest occurs, except soil which must be prohibited from everywhere.

Entry of non-prohibited articles may be permitted under a managed risk policy when there are adequate safeguards, i.e, inspection, Additional Declarations, PC, permit, treatments, etc.

Entry may be allowed for most tree seeds and plants that are not specifically prohibited subject to special conditions of entry, i.e. inspection, permit, PC, and or treatment and/or PEQ at non-DOA sites.

Entry may be allowed of cut-flowers no. prohibited or subject to special conditions.

Entry of vegetable, flower and grass seeds are enterable subject to inspection and/ or special requirements if necessary.

Deny entry or treat or destroy any article found by inspection when pest is of quarantine importance.

Bring in plant and plant material under safeguards by the government to help introduce needed germplasm for the private sector.

Exercise the permit system as much as possible and utilize such strategies as inspection, PC, and treatment to allow the safe movement of plant and product.

Regulations sometimes inadvertently act as technical trade barriers. Those responsible for the promulgation of regulations must make every effort to ensure that they are biologically sound.

## **10. REVISED POLICY ON IMPORT OF SEEDS AND PLANTING MATERIAL INTO SRI LANKA (Published 17 - 12 -1991)**

Much of the subject matter on the Revised Policy on the import of seeds and planting material Revised Policy (1991) has been covered in Chapter 10, on the Proposed Amendments/ Revision to the Regulations. Nevertheless the revised policy is reviewed in a somewhat different context.

This is probably the first attempt to revise/amend the section of the Regulations dealing with propagative material.

In reviewing the Revised Policy (1991) it is assumed that all the other regulations not written into the requirements of the 1981 regulations are still in effect. These comments will therefore, refer only to the Revised Policy (1991).

It is stated that a permit is required for importation but the procedure for obtaining a permit is not stated. Importers should be told that an application for a permit must be submitted and to whom.

The fact that a pest risk analysis should be conducted need not be stated in the regulations. That must be standard procedure in determining eligibility for importing plant and plant products.

The plant quarantine requirements should be specified. One way would be to refer to the sections in the regulations dealing with inspection, PC, treatment, etc. (The section numbers pertaining to these requirements may be quoted).

Post entry quarantine as stated therein does not clearly distinguish between the conventional PEQ by the DOA of prohibited material and the lower risk material that can be imported and grown in PEQ at non-DOA sites.

There is a question concerning the requirement that "the facilities with the importer including net houses, screen houses, trained manpower, etc.". The intent of this statement may be good. There are instances when such facilities may be required, because of the pest risk. Usually PEQ by growers is for lower risk plant material and does not require stringent safeguards, except when an insect vector may be involved to prevent the spread of insect-transmitted viruses.

The conditions and/or safeguards for PEQ growing should be stated in an Agreement. The conditions should be standard for everybody, and special safeguards applied or required as the case may be.

The Revised Policy (1991) statement makes no reference to the authority of the DA. The role of PQ and/or inspection stations is not mentioned. Notwithstanding the capabilities of the "institutes", PQ should, at least, be able to monitor the importation of prohibited articles.

The statement implies that only institutes will be permitted to import prohibited material. The safeguards required are not mentioned. The responsibility appears to be completely delegated to the institutes. The right of DA to specify conditions of import and to inspect and monitor the imported material is not indicated.

## 10.1 CLASSIFICATION OF PLANT MATERIAL

It is good to categorise plant material by grouping them according to pest risk. The three categories named in the revision are unrestricted, restricted, and prohibited.

It would be more logical and better to list the prohibitions first in the regulations, as they are in the old regulations. This could be followed by those articles enterable subject to "Special Requirements" then followed by other restrictive articles. The latter includes all the plant material, including those not prohibited or subject to special conditions. This class may include perennial and herbaceous plants, cuttings, rhizomes, bulbs, corms, seeds of all kinds, etc. not specifically prohibited but subject to the requirements of permits, PC, inspection, and/or treatment etc. It is not clearly specified what is meant by unrestricted. The location where each category is to be inspected should be mentioned, i.e. inspection station vs port (dockside).

## 10.2 PROHIBITIONS

There is some improvement in the format of the section on prohibitions. However, with the exception of *Carica* (papaya) for which the prohibited countries are given, all other plants are prohibited from "all" countries. All seeds are prohibited of the listed genera and families in section "B". There must be a sound biological basis for including seed in the prohibition. The pests and the countries should be named for each prohibition.

There are prohibitions listed for 1) "plants, planting material, plant products, and seed from 'Tropical America'" and for 2) "plants, plant material and plant products of forest trees from all countries". These regulations are discussed in the proposed revision of the regulations. Both statements need review to make them biologically sound, and in accordance with IPPC and GATT standards and guidelines.

Basically, there is the same number of prohibitions in the revised list as there are in the regulations of 02-11-81. Therefore, maximum protection against introduction of pests by excluding the host is still in force. In the revision of the regulations of 02-11-81, there needs to be an overhaul of the regulations, mainly in pest risk analysis and assessment.

The "regulation 3" prohibits aquatic plants. The term needs to be defined. This prohibition also includes seeds of aquatic plants. The regulation should specifically state whether seeds are included or not, and as stated elsewhere they should be placed in a separate section.

Regulation A4 of the prohibited list does not mention seed. One needs to know whether seeds are included, or whether they were inadvertently omitted. Every item must be thought out carefully before it is released for publication to avoid misunderstanding and frequent revisions. Regulations are usually subject to close scrutiny.

Regulation B:5-45 must be reviewed carefully and the biological basis for the prohibitions both for the vegetative parts and seeds should be clearly specified. The common names should be in parenthesis next to the generic or family name.

## 10.3 REASONS FOR THE PROHIBITIONS

This can be done in either one of two ways.

- a. Name the pest(s) for each prohibited article (the preferred method),  
or
- b. List the pest(s) of concern to Sri Lanka cited in published pest lists,  
but they should be listed in the regulations.

Whichever approach is taken, the names of major pest(s) of quarantine concern and threat to Sri Lanka should be named.

#### **10.4 PROHIBITED COUNTRIES/LOCALITIES**

The prohibitions of plant material from all countries and regions must be justified (risk assessment or otherwise).

Prohibitions should be the result of a sound biological review or assessment or they may be misconstrued as technical trade barriers. Countries that are free of the pests of concern to Sri Lanka or have eradication or control practices to eliminate pests should have a status other than prohibition.

#### **10.5 PLANT FAMILIES**

The revised policy adds three more families to the list of prohibited plants : Gramineae, Myrtaceae and Palmaceae.

Gramineae was not listed in the 1981 Regulations and has probably been added to protect other economic crops like sugar cane and corn. It is believed to be a new APPPC recommendation. However, the prohibition is too broad and extends to all parts including seeds of the family. This prohibition should be re-evaluated to determine whether only vegetatively grown parts should be prohibited. There are agronomic crop genera of plants that are known to be hosts of very serious pests, such as *Triticum* (wheat), sorghum, etc. The prohibitions also extends to these and others. There are species, however, whose seeds are used for turf or ornamental, which may not pose a threat. They may be removed from the regulations and allowed entry under permit, etc.

The addition of Myrtaceae and Palmaceae were listed earlier as Clove and related plants, and coconut and related plants, respectively. As a developing country these designations may be acceptable until such time that these families are analysed. Entry status of individual genera within a family may be determined by a risk assessment as the need arises.

#### **10.6 PLANT AND PLANT PRODUCTS OF WHICH THE IMPORTATION IS ONLY PERMITTED WHEN THE SPECIAL REQUIREMENTS ARE FULFILLED**

The items listing special requirements is an accepted approach in Plant Quarantine. Rather than prohibiting the article, it permits the entry subject to a treatment (safeguard), or certification with Additional Declarations. This concept is adopted by many countries. This is a good policy, but it should be exercised with reason and based on a sound biological basis.

However, requirements should include only those pests which can be realistically certified. For example, seeds of Annona and Asparagus must be certified free of Cercospora spp. and/or certain nematodes which are either pests of leaves or roots respectively. To require certification as to freedom of pests not found in seed leads to inaccurate or incomplete certification by PQ officials.

Plants of the Family of Bromeliaceae. They are permitted, except Ananas which is prohibited, or in vitro culture. Bromeliads are not mentioned as a prohibited article. The entry status of plants should be qualified (see below). If they are enterable " in vitro" they would be enterable as plants, because in vitro does not always eliminate pests, except under special techniques. In vitro is an excellent method for the transfer of germplasm. It is not yet common practice to require certification of cultures free of specific pathogens of quarantine importance, except when the germplasm comes from approved laboratories who have all the facilities for eliminating all the pathogens successfully. If the pathogen is a prohibited one, there needs to be a reliable method for monitoring, testing/indexing, etc. after implementation.

Roses are sold as rooted plants and as budwood for propagation. In consideration with the list of pathogens listed in No. 15, of the section, Rosa spp. should be prohibited from countries which have an internationally recognized serious disease such as Rose Wilt Virus, and allowed entry for PEQ growing from other countries. The minimum requirement for importing roses should be PEQ by growers. There is nothing wrong with the requirement to permit entry of unrooted cuttings, but most of the pathogens listed are carried in the plant and cuttings. Therefore this section should not be used to allow for the entry of plant material which is known to have pests of high risk. Too much responsibility is being placed on the foreign certifying officials, who may find that they are not able to meet the requirements, thus making the requirements a technical trade barrier.

If Sri Lanka had the capability for testing and indexing and the facilities for the application of proper safeguards, the rose budwood could be brought in for research/experimentation, etc under PEQ by DOA for eventual release to the private sector.

In summation, the policies of this section should be reviewed together with those commented on in the proposed revision for the 1981 revision/amendment, and an uniform, standard, and biologically sound regulation developed.

#### 10.7 VEGETABLE SEEDS OF WHICH IMPORTATION IS PERMITTED WITHOUT RESTRICTION ON QUANTITY

The statement that the importation of seed is permitted without restriction on "quantity" is not relevant and has some implications. This is contradicted by the quantity restriction placed on bean seed, which has no biological basis. There can be a biological basis to limit the quantity of imported articles, but it must be biologically determined, i.e. limited space or risk, manpower restraint, etc.

Special requirements, if they are applicable to seeds, should be listed under "special requirements", they should be grouped with those in Column 2.

There are 18 kinds of vegetable seeds listed which are enterable and 3 requiring special conditions for entry. They include most of the commonly traded vegetable seeds. Of course there are others which are not listed, e.g. parsley, chicory, endive, chives, and many herb seeds, etc.

The policy should be to authorize the entry of all vegetable seeds, and list only the exceptions requiring special conditions.

Seed Certification officers and PQ could help each other in some areas of PQ.

## **10.8 FRESH FRUITS, ALL SEEDS WITH ADHERING PULP, AND FRESH VEGETABLES**

Allowing the importation of fruits, and seeds with pulp and fresh vegetables greatly increases the risk of introducing fruit flies and other pests into Sri Lanka.

Fresh fruits, all seeds with adhering pulps, and fresh vegetables should be prohibited from all countries, and authorized only after a pest risk assessment and issuing of a permit for those that enter with treatment or inspection or both. A PC may also be required.

Seeds in pulp should be prohibited except under an approved treatment, provided the seed is not specifically prohibited or subject to special requirements.

Fruit of fruit fly hosts must be prohibited from all countries and may be enterable from countries or areas where fruit flies are not known subject to all the conditions of an approved treatment.

Australia, New Zealand, USA listed under Special Requirements are not free of all fruitflies.

## **10.9 CONCLUSION**

In conclusion it would be desirable to suspend further processing of this document, and administratively implement those parts which facilitate the advance of trade in the private sector without adding any significant pest risk to Sri Lanka's Agriculture.

The prohibitions, if properly and adequately implemented, are particularly strong to protect Sri Lanka's major economic crops. Legislation alone will not be sufficient, if enforcement of the legislation is inadequate. It is important that the policies and standards dealing with operational procedures be strengthened.

## SECTION IV

### 11. RECOMMENDATIONS

The following recommendations which are of interest to importers and exporters of plants, planting materials and plant products, have been drafted for consideration by the Government. Prior to finalization of the recommendations, the draft is circulated by the observations/comments of importers and exporters. These draft recommendations were discussed at a workshop to be held on Wednesday, the 23rd September 1992.

#### 11.1 IMPORT PERMITS (See Section II, Chapter 3)

The location for the issuance of permits for the importation of plants and plant products and other regulated articles should eventually be Colombo, and PQ must gradually gear themselves to perform this task. It can not be done overnight especially for restricted material. The issuance of permits from other locations, can however, be decided upon by the DA as the need arises.

The following should be considered in issuing permits.

- a) Include in the permit only pertinent conditions which are relevant to the entry status of the article to be imported.
- b) The permit requirements must be concise and clearly stated and list only conditions necessary to safeguard the country against pests.
- c) Extend the validity period whenever possible to avoid repeated requests for permits, especially for low risk material.
- d) Streamline the permit process to alleviate the constraints on the private sector without weakening the permit system.
- e) Permits should be issued within a reasonable time frame, and without any unnecessary delays.
- f) First-time applicants for an import permit should be given an instruction sheet explaining the responsibilities of the importer.
- g) PQ should consider the special circumstances involved in the occasional event of importation of enterable material without a permit. In the absence of a permit, the importation could be subject to possible delays (until a permit can be obtained and/or all other conditions can be met), confiscation, rejection, or other legal action.

## 11.2 POST-ENTRY QUARANTINE (See Section II, Chapter 4)

The policy on importation of prohibited plant materials, soil, and pests and diseases including bio-control agents (See Section II, Chapter 4) must be strictly regulated and enforced.

- o Importations of prohibited plant materials etc. should be authorized only by the DA or his delegated authority.
- o All importations must be accompanied by PCs and any Additional Declarations that are strictly necessary.
- o Importations must first go through the PQ Station for screening, recording, inspection and/or treatment, etc. before release for PEQ, to ensure that the entry is in accordance with the safeguards given in the permit.
- o Importations of prohibited articles may, at the discretion of the DA, be directed for PEQ by the following:

RRI	- Rubber budwood, <u>in vitro</u> material
SRI	- Sugar cane
CRI	- Coconut and other palms
Other Research Institutes	- As appropriate
Organizations under MADR	- Fruits and nuts
Laboratories approved by DA	- Soils and pests

All the institutes, laboratories, and stations approved for PEQ should be under the supervision of and monitoring by PQ.

- o Importations of all other prohibited material for which there is no institute or laboratory will be directed for growing, testing, research, or experimentation, etc. at the PQ facility of DOA, provided that there is no duplication, and that adequate facilities and personnel are available.
- o When applicable or appropriate third countries or intermediate quarantine stations should be used for articles having high risk potential and for which isolation is not adequate within Sri Lanka. Examples of these could be cassava (Italy), coffee, cocoa, rubber, tea, etc.(USA, UK) and others.

Every advantage should be taken of the funds provided by international agencies for these programmes. The consequence of this policy is to shorten the PEQ period in Sri Lanka and to lower pest risk.

- o Sri Lanka should evaluate the certification systems in effect in developed countries regarding plant materials prohibited by the regulations. There are "approved nurseries" and government stations in Belgium, Germany, Netherlands, UK, USA, etc. for plant materials such as *Vitis*, *Cydonia*, *Malus*, *Pyrus*, etc. that can be imported with a minimum of risk. The policy should be to grow the plants in PEQ on non-DOA property for observation and sample testing as necessary, and under PQ supervision and monitoring.
- o The DA may authorize by agreement other competent person(s) to grow plant material in PEQ when he ensures that appropriate safeguards can be met to prevent the introduction of pests, but under strict supervision and monitoring by PQ.
- o All sites approved for growing prohibited plants, or other prohibited articles imported for research and/or experimentation at approved laboratories, must have facilities which measure up to the safeguard conditions prescribed in the permit by DOA.
- o The safeguards should include segregation and/or isolation in glasshouses, net-houses, screen houses, and secure laboratories for containment of high risk pests and diseases.
- o Research projects of prohibited material should not be located in the centre of production areas. Research on imported rice should not be in a rice-growing area, rubber in a rubber-growing area, coconut in a coconut-growing area, etc. unless a completely safe containment facility is available.
- o PQ policy should be to permit the entry of the prohibited material for PEQ, only when it is determined in advance that the facilities are adequate and that there are qualified personnel to man the facilities.
- o The policy on the importation of prohibited material must be to limit the quantities to the smallest numbers possible, that can be safely handled by the facilities by the available personnel.
- o The policy for holding seed, cuttings, and plants in PEQ (DOA) can vary depending on the incubation period. It may be four months for *Puccinia horiana* rust of *Chrysanthemum*; 18 months for *Gynosporangium fuscum*; and several years for citrus viruses. It can therefore be only a few days for some herbaceous plants but several years for woody plants. A lot will depend on indexing and other techniques and the type of organism being investigated. Most incubation periods are relatively short, but the problem of isolation is greater when the incubation period is long. A blanket recommendation on holding all plants in PEQ cannot, therefore, be given.

- o DOA must gear itself for dealing with more in vitro material in the future, including genetically engineered material.

### **11.2.2 PEQ by Non-DOA Organisations**

PEQ by the private sector should be expanded to help them receive the needed germplasm having a perceived low pest risk. (Chapter 6).

- a) Restricted plant material which is not prohibited may be approved for growing in PEQ on growers' premises.
- b) PQ can authorize PEQ on non-DOA property of plant material imported from countries or localities where prohibited pests do not occur or are not known to occur.
- c) The importer should sign a PEQ agreement specifying the conditions and responsibilities of each party. These conditions should have the approval of the PQ service.
- d) PQ must develop an inspection and administrative policy for the implementation of PEQ by growers.
- e) PQ must establish guidelines for inspection officials to follow in the inspection, release, or destruction of diseased material, etc.
- f) Personnel must be trained in field inspection, recognition and diagnosis of disease symptoms etc.
- g) The policy on growing plant material in non-DOA facilities must not include articles specifically prohibited.

### **11.3 PHYTOSANITARY CERTIFICATES** (See Section II, Chapter 5)

#### **11.3.1 Inspection and PC for Imports**

Policy should be to require a PC for prohibited (See also 11.2) and restricted articles to the extent that there is a probability that a pest risk exists. The exporting country certifies freedom from the pests in the consignments concerned.

- o The PC must be available at the time of entry of the material, and be delivered prior to the inspection of the material.
- o PC should be carefully reviewed for compliance, including Additional Declarations.
- o PC should be used as a guide in determining the degree of the inspection which should be performed.

- o PC should never be considered as a substitute for inspection.
- o The exporter should be responsible for obtaining a bona fide PC.
- o As there are often constraints with PC, there should be a policy for handling consignments in the absence of a PC. On the basis of the above constraints when there appears to be justification, and a permit for the importation has been issued, and there are no special Additional Declarations. requirements which cannot be met at the time of entry, the consignment may be enterable, subject to a more intense inspection and/or treatment.
- o PQ should instruct the importer or the broker responsible for the importation of plant material that future consignments must be accompanied by a PC, and that the consignment may be delayed or denied in the absence of a PC from a country having an official PQ service.
- o If the incidence of imports without PC from a particular country is frequent the PQ service of the importing country may wish to tactfully inform the PQ of the exporting country who may apply appropriate measures to correct the situation.
- o The policy on the importation of prohibited material in cargo without an accompanying certificate should be to hold the article(s) under safeguard until the DA or his delegated authority has examined all the facts and circumstances. The decision should be based on many factors.
  - a) The presence or absence of a permit.
  - b) Type of material.
  - c) Value of the material. (e.g. valuable germplasm)
  - d) Country of origin.
  - e) Permit requirement (safeguards).
  - f) Name and address of the importer or destination within the country, etc.

All of the above policies apply to commercial importations, and not to materials brought into the country in passenger or crew baggage. The entry status of these should be determined by inspection and/or treatment for small quantities of enterable or restricted articles i.e. those which are not prohibited. The policy on prohibited articles intercepted in baggage should be evaluated as in a-f above. There are cases when a scientist travelling abroad discovers new, valuable germplasm, and does not have the time to obtain a permit in advance. In such cases the scientist or researcher should cable, fax, or telephone the DOA that he will be arriving on a certain date, and carrier and state the nature of the article being carried. A permit may be authorized to move the material to the nearest quarantine facility and PEQ.

### **11.3.2 Fumigation and Treatment Policy**

PQ may want to adopt a policy requiring mandatory fumigation/treatment, as a condition of entry for certain classes of nursery stock and seeds, as a safeguard against the introduction of living stages of insect pests, which cannot be readily detected, or when it has been determined that pests are commonly found in those classes of nursery stock, seeds, etc. Mandatory fumigation should be required for prohibited material because of the risk of introducing insect vectors.

- o The policy should recognise that not all plant species will tolerate fumigation/treatment. Information on plant tolerances may be obtained in advance from agencies like FAO and some countries which maintain such files.
- o It is recommended that information on plant tolerances be available at the facility where fumigation/treatments are done.
- o PQ should keep careful records of fumigation/ treatments and document any reports or complaints of alleged plant injury for future reference.
- o The policy might be applied to plants and plant products imported into Sri Lanka and not on those offered for export.

### **11.3.3 Inspection and PC for Export**

The PQ policy on the export of agricultural commodities, including plant and plant products, fruits and vegetables, etc. should be based on the importing countries' regulations and requirements (on file with PQ and made available to the exporters). Sometimes, it could also be based on an agreed policy established bilaterally between countries.

PQ should develop a set of procedures and methodologies to meet these requirements.

- o PC for export should be given on application submitted by the exporter to PQ.
- o The issuance of a PC should be limited to only plant and plant products, and not for manufactured or processed foods which should be exempt.
- o Attention must be given to Additional Declarations requirements of the importing country.
- o Exporters should be required to co-operate with PQ in fulfilling the certification requirements.
- o PQ certification should also include field inspection and surveys as required.

- o Exit inspections should be done at a location, agreed upon by both exporter and the PQ inspector, which will result in a minimum of delay and reduced costs to both PQ and the exporter.
- o PQ inspection procedures should be developed to include biometrically determined samples and general monitoring of consignments.
- o All pests not of quarantine importance found by PQ should be reported to the exporter for his information and disposition.
- o PQ should adopt a policy of treatment for articles persistently found infested or infected during the course of inspection. When it is found that inspection alone is not a reliable methodology, treatments should be required, and they should be supervised by PQ. Treatments (precautionary) may be recommended for exports to countries that are "very strict" on import inspection.
- o PQ may authorize the exporter to complete the PC, and submit it to the PQ inspector, at which time the inspector will endorse and stamp the PC with the official seal. Any additional declarations must be added on by the PQ official.
- o PQ must maintain, preferably in a data base, a careful record of the numbered certificates issued to the exporter, who should be made fully accountable for all the certificates issued to him.
- o Exporters or brokers must know where they can obtain application forms.
- o Exporters or brokers must know exactly whom they must contact and where to obtain PQ inspection.
- o PQ should centralize the administration of the Export Certification System
- o The policy on fumigation/treatment concerning the exportation of plant and plant products must be based on the requirements of the importing country, pest findings, and/or agreement by the exporter for certification purposes.
- o The authority for such action is found in the Ordinance/Regulations 165/2 of 1981, Part I, 10.

#### **11.3.4 Problems Associated with Certification and Treatment** (See Appendix 4)

Almost all countries experience problems with certification and treatments from exporting countries. Each case is resolved differently by different countries.

There are certain approaches that can be adopted.

- o Enter into a co-operative agreement to inspect/monitor the pre-clearance or release of agricultural products in the country of origin, without interfering with the country's policies.
- o Arrange for on site visits to the exporting country and review procedures and practices of that country, and on the basis of this assessment, a determination can be made on how well the certification and treatment procedures are implemented, and make recommendations accordingly.
- o Make on site recommendations which will satisfy the entry requirements of the importing country.
- o Always inform the exporting country through appropriate channels of the real problems that exist, and elicit their co-operation in solving the problem(s).
- o Trust, reliability and credibility needs to be developed between the importing and exporting countries. This can be achieved by direct and open communication and stating the facts precisely, and without delay.
- o There should be good exchange of the technical data relating to the problem.
- o The problem(s) must be clearly defined and the frequency of the incidence(s) should be made known.
- o The source of the problem needs to be identified. The competence of the exporter/importer has got to be evaluated, and the capabilities of the PQ service of the exporting and importing countries must be assessed. The responsibility can then be allocated accordingly.
- o Exporters and importers should be made to share much of the responsibility for export/import problems.
- o PQ officials must deal with exporters/importers firmly but fairly in the resolution of problems of certification and treatment when they are at fault.
- o There are technical problems and there are human factors beyond our control which need studies. There is always something which falls through the cracks.
- o Vigilance is the best course of action to follow in these matters. Exporting countries who know that a country has an active and viable quarantine programs and policies will exercise caution.

### **11.3.5 Areas of special concern to help solve these problems**

- o Conditions of entry imposed by importing countries should be those which are attainable.
- o Avoid laying down conditions of entry that do not fall within the area of phytosanitary certification.
- o Evaluate whether the pests of concern are obscure, hidden or latent and recommend conditions of entry accordingly.
- o Know the availability of effective treatment and the ability to use them.
- o The importing country needs to establish a degree of confidence in accepting certification and treatment from exporting countries.
- o Exporting countries are subjected to pressure groups. Importing countries need to be aware of this and take follow-up action through diplomatic channels to prevent certification and treatment policies becoming too liberal.
- o Inform exporting countries whenever the following occurs:
  - a. Incorrect certification of area or time rule,
  - b. Attesting to treatments that have been incorrectly applied,
  - c. Entering Additional Declarations incorrectly,
  - d. Evidence of forgeries allegedly by exporter/importer,
  - e. Using PC in lieu of re-export PC when there is evidence to that fact the plant material came from a third country,
  - f. Make available to exporting countries information on pests of importance to the importing country, and her requirements.
- o Violations and infractions which may have an effect on the industry as a whole may be referred to industry groups, associations, or membership for review and recommendations for appropriate action.
- o When the exporter is known to have caused the problem, certification can be suspended or denied by the exporting country.
- o Permits may be withdrawn, but it is not always effective because of the legal implications.

### **11.3.6 Update of PQ practices**

- o Fumigation and other treatment schedules carried out by the private sector should be supervised by the PQ service. They should also advise and guide them to carry out their tasks effectively.

- o For PQ services to be effective, services and procedures should be updated and published with posters (Airport lounge), pamphlets and publicity through the media. This will help considerably in creating an interest in PQ, and warning the public against contravening PQ laws.
- o The type of equipment needed in PQ usually depends on specific needs. The necessary basic equipment required to perform the task of PQ should be supplied.
- o PQ officials at the ports of entry should receive adequate warning of expected arrivals as undue delays could result in loss of materials.
- o With customs assistance the parcels of plant propagating materials/fruits should be referred to PQ unopened and with minimum delay. The parcel should be opened in a special room designed to permit fumigation if needed.
- o If no effective treatment is available for any infestation or infection the contents must be destroyed or returned to origin at importer's expense. All prohibited packing materials including wrappings should be burnt.
- o Quarantine treatments should only be done by trained and licensed personnel. Personnel required for fumigation must receive instructions and practical training in the approved methods and procedures.
- o It must be recognized the PQ should be a filter and not a barrier for trade and emphasis should be placed on effective operation.
- o Methyl Bromide (MB) fumigation adopted very frequently appears to be satisfactory, but it has been reported that high doses and extended time of fumigation by MB required to be effective for some pests may be phytotoxic especially for fruits. Only the approved and recommended treatment schedules that are known to be tolerated should be used.
- o Nevertheless it is worthwhile looking into alternative treatments like vapour heat treatment, irradiation techniques, low temperature storage and plant resistance and detection.
- o The PQ office in the KIA which is near duty free shops should be shifted to the Customs Department area so that their officers could work closely together.
- o An officer in the ports of entry should be trained to identify pests and diseases, at least in the recognition of common plant pests.
- o Fumigation facilities should be provided near the airport to treat infested cargo.

## **11.6 ORGANIZATIONAL STRUCTURE** (See Section II, Chapter 6)

### **11.6.1 Organizational Structure of PQ within the Government**

- o One of the following options should be implemented in order to strengthen PQ.
  - a) If PQ is to remain under the DA and DD SC & PP as it is now, the position of the DA must be strengthened. This can be achieved by making the DA or his nominee an ex-officio member of the boards of the TRI, RRI, CRI, SRI, SAPDA, MEA, the Cashew Corporation and the Palmyrah Board.
  - or b) One entity at cabinet level should be responsible for all matters related to agriculture and PQ.
  - or c) The PQ Service should be removed from DOA and MADR and placed under the Prime Minister.
- o PQ must retain strong links with the decentralised provincial extension services to keep the provinces informed of PQ requirements.

### **11.6.2 Action by PQ Service**

- o The PQ service must at least have half yearly meetings with the research staff of DOA, particularly with Botanists, Entomologists, Plant Pathologists, Virologists, Bacteriologists/ Microbiologists, Nematologists and Weed Scientists to discuss problems of mutual interest. Relevant subject matter specialists in the universities could serve as observers by invitation.
- o PQ must maintain links with specialist agricultural and biological scientists throughout the country so that every area of expertise will be available to PQ.
- o The following institutions should nominate a senior, suitably qualified officer to be in charge of the subjects of PP (including PQ), and the importation and export of planting material of the crops for which each institute is responsible:
  - a) DEA Research Station, Matale
  - b) Central Rice Breeding Station, Batalagoda
  - c) TRI, Talawakelle
  - d) RRI, Agalawatta
  - e) CRI, Lunuwila
  - f) SRI, Uda Walawe
  - g) Forest Department, Sri Jayawardenapura
  - h) MEA, Colombo
  - i) Palmyrah Development Board, Colombo

These officers will be responsible to their Institutional Heads for all matters relating to PQ for their respective crops.

- o At the meetings of the nominees of the institutions listed above, matters relating to PQ and pest and disease status of the country should be reviewed and lists of pests of quarantine significance intercepted in ports of Sri Lanka should be compiled, to be published in APPPC newsletters.
- o Outbreaks of new pests and diseases in Sri Lanka should be reported to APPPC and FAO by DOA and PQ.
- o PQ should also compile all major pests and diseases of crops in Sri Lanka and publish this information in appropriate journals.
- o The PQ should test the imported cargo at different intervals to detect/diagnose the pests/pathogens. A series of standardised internationally-accepted tests are available (e.g. Virus indexing - ELISA) and should be applied where appropriate.

### **11.6.3 Finances of the PQ Service**

- o A national PQ fund should be established to support the activities of the PQ service, instead of the service being completely dependent on the consolidated fund.
- o The National PQ Fund should be administered by a committee consisting the S/MADR, the DA, and the DD in charge of SC & PP or his nominee who will function as convener. The fund should be subject to audit by the Auditor General.
- o Funds from this source should not be used for purposes other than directly for the PQ service.
- o Funds from this source should not be used for any other activities of the DOA.
- o 50% of the funds generated by the PQ service for issuing PCs should be credited to the National PQ Fund and the balance credited to the consolidated fund. The fees must be realistic.
- o 65% of the funds generated by the PQ Service for inspections of consignments, and of importers / exporters facilities should be credited to the national PQ Fund. The fees must be realistic.
- o A 15-20 % slice of the funds should be reserved annually for depreciation and should be utilized for replacing unserviceable equipment.
- o The fund will not be credited with money received as fines for offenses. Such funds should be credited in total to the consolidated fund.

- o A 5-10 % mark up of fumigation or incineration costs may be credited to the fund as determined by the administrative committee of the fund.
- o The general principles of crediting money to the fund should be approved from time to time by the S/MADR with the concurrence of the Minister of Agriculture.

#### **11.6.4 Staffing and Training**

Adequate personnel and proper training are necessary in plant quarantine to carry out and implement the procedures in the enforcement of PQ policies and regulations.

- 1) The consultants endorse the personnel recommendations made in the report for the new PQ station and PEQ at KIA.
- 2) The recruitment and training of the staff for the new PQ/PEQ station should commence as soon as possible.
- 3) Serious consideration should be given to in-house training, especially as it concerns the proper application of equipment. It will save money and time. PQ should first explore the instructions and guidance offered by the contractors in the proper use of equipment (e.g. for fumigation).
- 4) Training in technologies and plant quarantine principles should consist of on-the-job training and study tours abroad.
- 5) It is recommended that a botanist be added, who has the capabilities needed at the PQ facility for weed identification, because noxious weeds are of world-wide concern. A botanist is therefore needed to identify them accurately. The increasing volume of export and import of plant materials including all kinds of seeds and plants will require expertise in the field of botany. The plant pathologist and botanist can work co-operatively within the same available space.
- 6) The station should develop capabilities in the identification of Mollusca (Snails).
- 7) Since Nematology is a specialized field, training in techniques and identification, surveys, etc. may be required both in Sri Lanka and abroad.
- 8) A permit unit should be established as a part of the administrative section. This unit should receive support from the entomology and plant pathology sections and other specialists within Sri Lanka. It can also assume the task for developing the "legislative draft" process for revising the regulations.
- 9) There should be an increase in personnel at KIA to two inspectors and six sub-inspectors to handle round-the-clock baggage inspection.

- 10) There is a need to increase the personnel at the POC to two inspectors and five sub-inspectors to handle the increase in volume of import and export products, including the inspection and monitoring of miscellaneous cargo containing prohibited articles and packing materials.
- 11) The diagnostic section at the PQ station at KIA should have the responsibility, together with support from competent scientists, for making final identification of quarantine pests intercepted at the POC and the KIA terminal.
- 12) The diagnostic section (Inspection Station) should have the responsibility for recommending the quarantine action that must be taken on intercepted pests found in cargo.
- 13) A list of "actionable" and "non-actionable" pests should be developed in determining future policy in the release of imported cargo.
- 14) It is recommended that the research officer for PEQ and the RO for the PQ station have separate responsibilities, if at all possible. In other words they should wear "separate hats".

#### **11.7 INTER-RELATIONSHIPS BETWEEN INSTITUTIONS, REGULATORY AGENCIES AND PQ**

(See Section II, Chapter 7)

- o It is recommended that responsibility for all members of the Palmaceae especially oil palm, kitul palm, areca palm, palmyrah palm and all ornamental palms importers wish to import be made the responsibility of the CRI for all matters pertaining to research, experimentation, and advice to DA on whether imports should be allowed and if so under what conditions.
- o It is desirable for DOA to separate PQ from the function of controlling pests within the country as the two have really no connection. Pest control is part of internal Plant Protection and these two subjects could be grouped together within the CS & PP Division of DOA. PQ should however, be well informed of control and eradication programs as they impinge on PQ's decision making policies on export/import.
- o The PQ service should have regular meetings with the Customs Department and have programmes supported by documentation to keep Customs Department officers informed and up-to-date on matters relating to PQ. They should inform Customs Department about the assistance PQ requires from the Customs Department.
- o Officers in the PQ service should have a similar status in the public service to that of Customs Department officers to enable them to function effectively as counterparts.

- o The PQ service should keep the EIDB informed of the importance of PQ and brief them of the necessity for conforming to PQ regulations.
- o Links should be developed between the PQ service and the management of the 22 private sector companies managing the plantations owned by GOSL to ensure that they are kept aware of PQ procedures.
- o PQ Service should take steps to publicise PQ requirements to all new exporters and importers. Appropriate literature should be prepared for this purpose.
- o Every avenue should be exploited to educate the public on PQ. These include statements in "Serendib" (the Airlanka magazine), addenda to visa application forms and other literature. Consideration should also be given for using the media.
- o It is recommended that the following statement be printed in Sri Lanka Passports.  

"Your entry into Sri Lanka will be speeded up if you do not bring with you meat or other animal products, birds, animals, fruits, vegetables, plants, parts of plants, soil or other agricultural items. It is unlawful to import foreign agricultural items without prior permission and permits as they may carry destructive plants or animal pests and diseases. For specific information write to  
The Deputy Director of Agriculture,  
(Seed Certification and Plant Protection),  
P.O.Box 49, Peradeniya, Sri Lanka."
- o PQ must establish strong links with Sri Lanka's Trade Commissioners in the overseas missions, so that they will be in a position to guide commercial organizations abroad on Sri Lanka's and other countries' PQ requirements.

## 11.8 INTERNATIONAL CO-OPERATION

(See Section II, Chapter 8)

It is strongly recommended that Sri Lanka uphold her commitments under the agreements of IPPC, APPPC and GATT. This commitment is multilateral in scope and will therefore help in strengthening her quarantine services.

- a) The DA or someone designated by him should participate at all regular meetings.
- b) To maintain continuity on the issues of importance to Sri Lanka, the same person(s) acquainted with the agreements should attend the meetings.
- c) PQ should be consulted and/or briefed on quarantine subjects being considered or reviewed by these groups.
- d) Sri Lankan plant protection should play an active role on matters of PQ and present its views appropriately and forcefully.

PQ should communicate bilaterally on plant protection subjects with counterparts in countries engaged in trade with Sri Lanka.

- a) Every effort should be made to re-affirm by personnel contact periodically with counterparts to foster better relationships on matters of plant quarantine significance.
- b) PQ should clearly and objectively demonstrate its PQ policies to the PQ community.
- c) Sri Lanka should consider bilateral agreements on the movement of plants and plant products between countries.
- d) Engage in co-operative agreements for inspection of agricultural products.
- e) Make on site visits to countries of its trading partners.
- f) Communicate with exporting and importing countries and discuss problems of mutual concern.
- g) PQ should develop a policy which allows for frequent contacts with its closest neighbour(s) on matters of plant protection and quarantine. Many problems common to them can be resolved in this way.
- h) When Sri Lankan PQ has a reason to believe that the requirements of the importing country regarding certification is not in accordance with relevant international guidelines PQ should request an explanation of the reasons for additional declarations of the importing country.
- i) Sri Lankan PQ should ensure that certificates and treatment accepted from exporting countries are based on adequate risk assessment procedures.

The recommendations made here refer to the co-operation between governmental agencies. Sri Lanka and/or PQ should, however, communicate its policies and decisions to the private sector, whose interests are ultimately affected by the decisions taken by them.

In order to be effective all relevant organizations under the Ministries of Trade/Commerce and Foreign Affairs should have strong and regular links with PQ.

## **11.9 PROPOSED AMENDMENTS/REVISIONS TO THE REGULATIONS** (See Section III, Chapter 9)

The recommendations listed below cover broad policies for the gazetted Ordinance/Regulations of 11/2/81 and the Revised policy published 17/12/91. Both chapters three and four should be reviewed to evaluate the recommendations

given below. Also specific recommendations are made on PC, PEQ, Permits, etc., under these headings. It will also be noted that both of the above documents were extensively reviewed, but to make a recommendation for each item analyzed would be too lengthy.

The gazetted Ordinance/Regulations of 11/02/81 should be completely revised (see Chapter 3).

A format that highlights the prohibitions first and lists other restrictions in descending order of significance and according to established guidelines and standards should be developed.

The format should conform to FAO guidelines, and the botanical names listed to the generic level. If family names must be listed, separate listings should be developed for reference by PQ inspectors.

The prohibitions giving Sri Lankan Agriculture maximum legislature protection against the introduction of plant pests not known or not widely distributed in Sri Lanka, should be retained. The legislation must be supported by strengthening of the enforcement procedures. (Appendix 2)

The prohibitions by conducting a pest risk analysis and assessment must be reviewed, so that the prohibitions conform to internationally acceptable principles. The prohibitions should be from those countries and areas where the pest risk occurs and must be listed in the regulations. The pests should be listed in the regulations. The prohibitions should be supported by scientific evidence. (Appendix 3)

A definite policy on the importation of prohibited articles, including seed, for scientific and experimental purposes, under proper safeguards, to prevent the accidental introduction of dangerous pests should be developed.

A clear policy permitting the entry of plant and plant products having less risk, for growing in PEQ by growers should be evolved. This may include any category of plant and plant material not prohibited.

It should be clearly distinguished whether seeds are included in the prohibitions of plants. This should be based on a biological analysis and assessment.

Policies should be clearly defined regarding prohibitions at the family level and other broad categories such as aquatic plants and forest trees, etc.

The DOA or his delegated authority should determine who, where and under what safeguards prohibited material may be introduced and grown in Sri Lanka. Soil must be prohibited from all sources, and the policy strictly adhered to. A suitable policy to consider is that plants should come from land known or found to be free from specific pests such as *Globodera spp.*

A clear policy on noxious weeds must be developed identifying the most important weeds of concern to Sri Lanka. The main pathways of introducing them i.e. with cargo, seeds, plants, etc. must be investigated and examined.

The policy on the importation of plants not specifically prohibited and subject to special requirements should be categorized. They may be enterable to meet the needs of the private sector and agricultural agencies. The basic policy must be to authorize entry of these plants under permit, and subject to inspection and/or treatment only at an inspection station, and/or with additional safeguards like PEQ by growers. The kinds or types of restricted plant material that may be placed in this category may be expanded.

PQ should require that all planting material must pass through an inspection station until it has become acquainted with and evaluated the pest risks associated with each kind of plant or plant product. When it is known that a plant product has a very low risk, and is imported in large volume inspection may be done in cargo areas.

The policy on plants (not prohibited) from South American Leaf Blight of Rubber areas should be re-considered to allow their entry into Sri Lanka subject strictly to the requirements of the regulations (permits, inspection, PC, etc.), and/or treatment in an intermediate country.

The entry of woody forest species should be limited to seed only. These should be restricted as to size and age specifications.

The policy on seeds not specifically prohibited may be as follows:

- a. Authorize the entry of seeds of woody plants including nut species subject to permit and PC requirements, and subject to inspection and/or treatment only at an approved inspection station. Fumigation or treatment may be a condition of entry for seeds known to harbour internal insects of quarantine importance, i.e. avocado and mango seeds.
- b. Authorize entry of seeds subject to special requirements as in 'a' above for inspection at an approved inspection station.
- c. Authorize entry of vegetable, flower, herbs and some grass seeds known as having low risk subject to inspection for pathogens, insect pests, and weeds at a location designated by PQ.

The policy on entry of seeds either prohibited or subject to special requirement by the 1981 or 1991 (proposed revision) should be re-evaluated to authorize the entry of seeds of Palmaceae, except Cocos, and seeds such as Asparagus, beet, Glycine, lettuce, onion, sunflower, tomato, Zea, etc. subject to the usual entry requirements (permit, PC, inspection, and/or treatment, unless it can be shown that the seeds are carriers of seed borne diseases not reported in Sri Lanka.)

The policy on the entry status of seed Solanum tuberosum (potato) must be strictly regulated. Seed potatoes must be prohibited, but may be authorized entry only under strict safeguards to prevent the introduction of serious plant pests.

The policy on cutflowers should include a categorization of the different kinds. Entry may be permitted as outlined in Chapter 3 of the report.

The policy on the importation of in vitro culture should be to allow the entry of only plants and plant material not prohibited subject to permit PC and visual inspection at ports of entry.

PQ policy must be to prohibit fruits and vegetable from all countries, and authorize entry only under permit, and/ or approved treatment, and inspection as determined by a recent pest risk assessment. The policy should be to carefully consider the pest risk associated with fruitflies and other pests not known to occur or widely distributed in Sri Lanka. A list of enterable fruits and vegetables from each country should be developed.

The policy on the importation of insects, pathogens, snails, and weeds for scientific and experimental purposes, including bio-control agents must be strictly regulated and safeguarded.

Recommend that PQ review the entry status of carnations, chrysanthemums, and strawberry plant materials, and possibly others. These are moving in large volume internationally, and many countries are concerned about the spread of pests associated with them. Already many of the diseases and pests of these articles have a world wide distribution and Sri Lanka should try to prevent their introduction.

A policy on endangered species needs to be determined, and the role of PQ defined.

A regulatory policy must be developed which is not only based on biological assessment but also on good rational decisions. The rationale to place Begonia seed as enterable under special requirement is not relevant. Begonia seed would be enterable any way, and there are over 25,000 seed to the ounce (Revised Policy (1991)).

The recommendations and policies should be contingent upon strengthening of staff, facilities, training, and inspection procedures, etc.

For effective application of the regulations, they must be readily available to the private sector, either in the original form or in a less technical way.

The regulations and amendments should be communicated to FAO and APHIS, who maintain import summaries of all countries. Exporting countries will then be aware of Sri Lanka's import requirements. They can then apply them correctly in preventing the introduction of unwanted pests.

With regard to the revised policy published on 17/12/91 it would be desirable to suspend further processing of this document, and administratively implement those parts which facilitate the advance of the private sector without adding any significant pest risk to Sri Lanka's agriculture.

The requirement to allow entry of plant genera in media should be set aside separately in the regulations, stipulating the kinds of approved media and conditions for growing. The concept is recommended, but plants should be allowed only from approved growers specializing in the propagation in this manner and meeting specific growing standards to prevent pest introduction.

The policy to allow unrooted cuttings when viruses are of concern needs to be reviewed. Conversely to allow plants with roots when root nematodes like *Hoplolaimus* and *Hemicyliophora* (Dracaena) are of concern is contradictory to the foregoing policy as mentioned in the Revised Policy (1991).

The policy requiring unrooted cuttings is recommended in preventing the introduction of soil, root, soil-borne pathogens, and pests. If they are to be free from the pathogens, they must also come from healthy mother stocks. The requirement that *Begonia* cuttings rooted and grown on a soil-less medium should stipulate the approved medium and other growing conditions (Revised Policy (1991)).

The same is true for *Saintpaulia*. Also "recently rooted" *Begonia* or *Saintpaulia* needs to be defined or omitted for it may take from three months up to a year to produce a saleable plant. The requirement restricts these articles to seed and rooted cuttings, but then seedlings should be enterable, if they have been grown in an approved media, which are of a lesser pest risk.

If the rationale is to permit the entry of *Begonia* and *Saintpaulia* in approved media, then other enterable materials could also be permitted entry, such as crotons, ferns, etc. which are not presently prohibited.

It should be borne in mind that plants in media are more difficult to inspect than when free of soil.

## 11.10 FUTURE POLICY

Sri Lanka must form a clear and positive future PQ policy to meet the rapidly developing agricultural trade. Short and long term goals should be set for preventing the introduction and spread of plant pests. Some of things that PQ can do with regard to future policy are outlined below.

- o Review and update the current distribution of insect and disease pests of Sri Lanka.
- o Attend conferences, particularly regional meetings on plant quarantine.

- o PQ must be aware of pest outbreaks, both established and new to Sri Lanka.
- o Review scientific literature for new pests of quarantine pests, and their distribution.
- o Be alert to changing trade practices, including factors such as volume change, varietal changes, mode of transportation, origin of commodities, and people, etc.
- o Review the newest technologies in plant treatments for export and import articles.
- o Keep accurate records of pest interceptions and commodity seizures.
- o Review and update files on import requirements of other countries.
- o The plant quarantine service should be regularly reviewed, and may include changes in staffing and personnel, and legislative or regulatory changes; and it must develop good awareness tactics in the community, especially in the private sector.
- o PQ needs to set attainable goals and objectives, both short and long range, if it is going to perform the major task of preventing the introduction of plant pests, and at the same time working to prevent the distribution of pests with export materials.
- o As an important part of its goals should be international co-operation, especially with its trading partners and counterparts. This co-operation should be extended to other co-operating agencies and the private sector within the country.
- o The most important aspect of future policies is their implementation, in a biologically sound, equal, uniform and credible manner.
- o The policies should be communicated to all parties concerned as soon as possible.
- o Notify other countries and relevant international agencies of Sri Lanka's Phytosanitary requirements.
- o Make available reasons for specific phytosanitary measures required by Sri Lanka.
- o PQ should establish a line of communication with Provincial Agricultural Ministries.
- o The PP and SC should use risk assessment methods that are based on biological and economic evidence in the formulation of PQ policies.

- o Accepting the fact that risk of pest introduction always exists PP and SC should take into account of managed risk policy in formulating PQ policies and guidelines.
- o If Sri Lanka faces new/or unexpected pest risk PP and SC may take immediate phytosanitary measures on the basis of preliminary PRA.
- o There is an urgent need to define pest categories in Sri Lanka e.g. Quarantine pests, injurious pests.
- o PQ should also compile all major pests and diseases of crops in Sri Lanka and publish these information in appropriate journals.
- o The PQ should test the imported cargo at different intervals to detect/diagnose the pests/pathogens. A series of standardised internationally accepted tests are available (e.g. Virus indexing - ELISA) and should be applied where appropriate.
- o Develop and maintain a legislative and procedural "no risk" policy for articles of great economic importance and having a high risk factor to Sri Lankan agriculture. Everything should be done to block all possible pathways. This refers to prohibited articles.
- o Develop a "managed risk" policy from the "no risk", conservative policy for articles of known low pest risk, which can be managed by inspection, PC, and/or treatment at time of entry into the country, and/or controlled. Many seeds and plants not prohibited fall within this category.

**SECTION V**  
**APPENDICES**

**APPENDIX 1**

**TERMS OF REFERENCE FOR REVIEW OF PLANT  
QUARANTINE POLICIES AND REGULATIONS**

- 1. PRESENT PLANT QUARANTINE POLICY**
  - 1.1 To assess the appropriateness, adequacy and efficiency of present Plant Protection Ordinance and Regulations made there-under, in relation to the pest risk to Sri Lanka.
  - 1.2 To assess the efficacy of current practices, treatments schedules, decision making processes etc.
  - 1.3 To ascertain whether the present phytosanitary regulations are acting as technical trade barriers, and make suitable amendments to minimize the difficulties, if any.
  - 1.4 To critically review the policy on import of plant and plant products dated 17/12/91 and published by Director of Agriculture in the Ceylon Daily News dated 24/12/91.
- 2. FUTURE PLANT QUARANTINE POLICY**
  - 2.1 To make a clear statement of future plant quarantine policy to match the challenges of the rapidly developing agricultural trade.
  - 2.2 To identify and assess major plant quarantine threats to Sri Lanka and to categorize the risk.
  - 2.3 To propose suitable amendments to the plant protection Ordinance and/or to propose a new set of regulations replacing the present set signed by the Minister of Agriculture on 28/10/81 and gazetted on 22/02/1981.
- 3. FUTURE PLANT QUARANTINE STRATEGIES**
  - 3.1 To evaluate 'no risk policy' against 'managed risk policy' .
  - 3.2 To examine how the quarantine services can co-operate with other agencies to achieve the envisaged goals of plant protection.
  - 3.3 To assess the possibilities of using non DOA facilities for post-entry quarantine activities.

- 3.4 To evaluate the necessity of retention or removal of the permit system for import of plant and plant products.
- 3.5 To make recommendations on how to overcome the problems experienced when accepting certification and treatment from exporting countries.

#### **4. FUTURE ADMINISTRATIVE ARRANGEMENTS FOR PLANT QUARANTINE SERVICES**

- 4.1 To assess the present organization structure of the Plant Quarantine Service and to advise on systems which will ensure consistent policy, within the background of devolution and decentralization.

To examine how the plant quarantine services can co-operate with other agencies to achieve the envisaged goals of plant protection.

#### **5. INTERNATIONAL CO-OPERATION**

- 5.1 To suggest guidelines on the Sri Lankan role among the international plant quarantine community during the import and export of plants and plant products.
- 5.2 To assess the proposed policies and operations against international policies and procedures.
- 5.3 To assess the necessity of upholding our commitments under the agreements of APPPC, IPPC and GATT.

## APPENDIX 2

### MAJOR THREATS TO SRI LANKA

Sri Lanka has experienced several introductions of exotic pests and diseases in the past. Therefore plants and plant products imported should be subjected to quarantine on following categories.

- (1) Category A - Plant hosts of pathogens/pests that are not found in Sri Lanka having high epidemic potential if introduced.
- (2) Category B - Plant hosts of pathogens/pests which are known to occur in Sri Lanka but of limited distribution.
- (3) Category C - Plant hosts of pathogens/pests widely distributed in Sri Lanka.

The increase in air travel and cargo from other countries may pose a chance of accidental introduction of exotic pests/diseases into Sri Lanka. Therefore it is an accepted fact that the first line of defence against exotic introduction is plant quarantine.

Travellers returning from abroad often bring fruits, plants and plant products for consumption without undergoing (giving) proper quarantine inspection and/or treatment; and this could possibly be an illegal route for exotic fruit flies and other pests.

Some major potential threats to Sri Lankan agriculture are listed below.

List of some potentially destructive pests and diseases to crops  
in Sri Lanka

Host Pest/disease	Common name	Known distribution
<b>Rice (<i>Oryza sativa</i>)</b>		
Hoja blanca virus	White leaf	South America and U S A
<i>Heterodera oryzae</i>	Cyst nematode	Indonesia, Thailand, Ivory coast
<i>Lissorhoptrus</i>	Water weevil	India, Korea, U S A, Japan, Cuba
<i>Oryzophilus</i> Kuschel		Philippines, Japan, Taiwan
<i>Pomacea canaliculata</i> Lamarch	Golden snail	
<b>Tea (<i>Camellia sinensis</i>)</b>		
<i>Exobasidium reticulatum</i> Ito and Sawada	-	Japan, Taiwan, Malaysia
<b>Rubber (<i>Hevea brasiliensis</i>)</b>		
<i>Microcyclus ulei</i> P.Henn	South American leaf blight	Mexico, Central and South America, and adjacent areas
<i>Pellicularia filamentosa</i> (Put)	Target leaf spot	Asia, Africa, South America

<u>Leptopharsa heveae</u>	Lace bug	Tropical America
<u>Erinnyis ello</u>	Sphinx moth	South Central and North America
Mosaic virus	Mosaic virus	Brazil
<u>Thanatephorus cucumeris</u>	Target leaf spot	Tropical America, Asia and Africa
<u>Phytophthora capsici</u>	Leaf wither	Brazil
<u>Fusicoccum</u> sp.	Fusicoccum leaf disease	Malaysia
<b>Coconut (<u>Cocos nucifera</u>)</b>		
Viroid	Cadang cadang	Philippines, Guam, Solomon islands
MLO	Lethal yellowing	Central America, Jamaica, West and East Africa
Unknown etiology	Coconut wilt	West Africa, India
<b>Cocoa (<u>Theobroma cacao</u>)</b>		
<u>Crinipellis perniciosus</u> (Stahel)	Witches broom	South America, West Indies
<u>Sahlbergella singularis</u>	Capsid bug	Africa
<u>Conopomorpha cramerella</u>	Pod borer	Indonesia
Snelleu		
<b>Coffee (<u>Coffea</u> spp.)</b>		
<u>Colletotrichum coffeanum</u>	Coffee berry disease	Africa
<u>Pseudomonas syringae</u> pr Garcae	Bacterial leaf spot	Brazil, East Africa
<b>Oil palm (<u>Elaeis guineensis</u>)</b>		
<u>Fusarium oxysporum</u>	Fusarium wilt	Africa, Colombia
Schl.f.sp.elaedis Toovey		
Viroid	Cadang cadang	Philippines
<b>Potato (<u>Solanum tuberosum</u>)</b>		
<u>Leptinotarsa decemlineata</u> (Say)	Colorado beetle	North America, Europe
<u>Globodera pallida</u>	Cyst nematode	Europe, New Zealand, South America
<u>Globodera rostochiensis</u> (Wollenweber)	Potato cyst nematode	U S A, Europe, Algeria, Israel, New Zealand, Canada, Japan, India, South Africa, Tunisia, Philippines, South and Central America and Pakistan
<u>Synchytrium endobioticum</u> (Schilb) Perc.	Black Wart	South Africa, Europe, North and South Africa, India, (West Bengal) and Nepal
<u>Phoma exigua</u> fourata	Gangrene	Australia, Europe, var. Canada, U S A, U S S R
<b>Sugar cane (<u>Saccharum</u> spp.)</b>		
<u>Diatrea</u> spp.	Stalk borer	Central and South America, Mexico, U S A

<u>Xanthomonas campestris</u>	Gumming disease	South America, Africa, Australia, Mauritius
<b>Fruits and Vegetables</b>		
<u>Anastrepha ludens</u> (Lowe)	Mexican fruit fly	Mexico, Central and South America
<u>Ceratitidis capitata</u> Wied	Mediterranean fruit fly	Hawai, Europe, U S A, Central and South America, Australia
Other <u>Anastrepa</u> spp.	Fruit flies	America (Tropical and warm regions) Australia

The real threat of introducing some of these serious pests can occur with policies which are directly contradictory to the legislation and regulatory requirements. The alleged importation of large commercial shipments into Sri Lanka of fresh fruits and vegetables without treatment and/or safeguards pose a serious threat to Sri Lankan agriculture.

The other major pathway for introduction of major pests and diseases into Sri Lanka is through unexamined passenger baggage cleared through customs.

## APPENDIX 3

### RISK ANALYSIS

The principle of plant quarantine is to protect agriculture from exotic plant pathogens and plant pests and those not widely distributed in the country. Pest risk assessment should be used to determine the "entry status" of plant material shipped into Sri Lanka. The term entry status covers the entire range of decisions or policies that serve as guidelines for rules and regulations that govern the entry of imported articles. The risks to agriculture and the environment must be accurately and carefully estimated so that the material that is to enter Sri Lanka and the conditions of entry could be formulated to prevent the introduction of pests. Pest risk analysis is therefore a thorough process to determine the entry status on the basis of risk. Risk must be understood as having two factors:

- 1) Those of probability and
- 2) Magnitude of consequences.

### PEST RISK POTENTIAL

The probability is assessed by considering the possibility of colonization and spread potential of the pests involved.

The following three steps must be completed in order to calculate the pest risk potential.

#### Step 1. Determine the probability of establishment

Probability of = [Pest with host][Entry Potential][Colonization Potential][Spread Establishment Potential]

#### Probability of Establishment

An exotic (foreign) pest could be introduced into Sri Lanka in various forms.

- a) Pest with host (origin)  
The pest could enter Sri Lanka on or with or in the imported commodity.
- b) Entry Potential
  - b1) Here we estimate the probability of the pest surviving in transit by various means e.g. Diapause, without food, adversity etc.
  - b2) It is also important to estimate the ability of the pest to escape detection through practical inspection methods.

- c) Colonization Potential  
Here we could estimate the probability of pest colonizing in Sri Lanka with an adequate host plant/food resource, and establishment despite the environmental resistance.
- d) Spread Potential  
Here we estimate the probability of a pest to spread beyond the colonized area e.g. natural dispersal, human activity and ability to develop strains/races.

Step 2. Determine the consequences of Establishment

The magnitude of the consequences is determined by estimating the economic losses caused by the pest.

(Consequences of Establishment = [Economic][Environmental] [Perceived])

- a) Economic damage potential  
Here we could estimate the economic impact if the pest is established. e.g. Crop loss assessment
- b) Environmental damage potential  
Estimates of environmental impact if the pest is established. e.g. Ecosystem destabilization
- c) Perceived damage  
Here we estimate the impact from social and/or political influences.
- d) Economic impact study, e.g. volume, type of material.

Step 3. Determine the Pest Risk Potential

Pest risk = [Probability of establishment][Consequences of establishment]

Pest risk	= High	High
	Medium	Medium
	Low	Low

Low = Acceptable risk - organism of little concern to Plant quarantine.

Medium = Unacceptable risk - organism of moderate concern to Plant Quarantine.

High = Unacceptable risk - organism of major concern to Plant Quarantine.

Therefore the above factors should be taken into consideration in analysing pest risks. The decision whether a certain pest/pathogen should be totally prohibited is a matter of concern entirely to quarantine authorities. The factors listed e.g. probability of establishment and the consequences of establishment may depend for a large extent on ecological factors and on the crops grown.

### **ENTRY STATUS IN RELATION TO PEST RISK**

The plant quarantine regulations in Sri Lanka categorize the entry of plants and plant products in several ways.

1. Prohibited
2. Prohibited but entry permitted for experimental and scientific studies.
3. Restricted
4. Restricted entry with adequate safeguards and post entry quarantine at non-DOA facilities
5. Entry subject to inspection

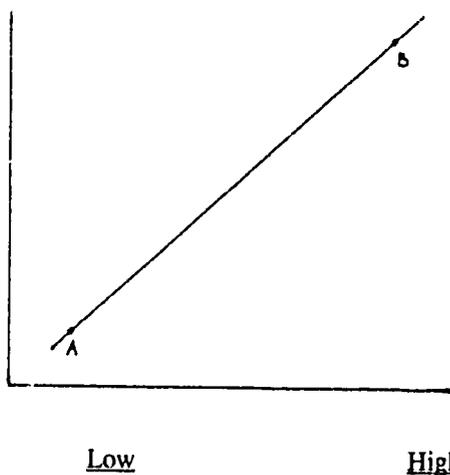
Note - These are also subject to inspection if they are plant products.

Biological factors should be the only criteria used in the establishment of quarantine policy and regulations. However the following exceptions to this policy is sometimes a factor:

- a) Economic factors: Individuals/groups within/outside the country bring pressure on governments to permit imports of prohibited plants and products for economic reasons.
- b) Political factors: Political factors resulting from Sri Lankas' foreign policy could override biological factors in promulgating regulations.

Airports/Seaports are high risk entry points. Vegetatively propagated material either as plants, corms, cuttings bulbs or buds and fruits is assessed as high risk category, involving the potential for spread of all stages of life cycles of pests/pathogens. The plant material grown under some kind of supervised cultivation is of lesser risk than that which is collected in the wild. Similarly seed as a means of exchanging germplasm is considered generally as less risk than the vegetative material. The points A and B in Figure 1 is the area where quarantine safeguards should be implemented.

Considerative  
 Wild  
 Market place  
 Farms  
 Plant nurseries  
 Field plots  
 Green house  
 Certified  
 Quarantine sta.  
Liberal



Pest risk  
Analysis  
 (From Khan  
 1979)

Pest risk

A - Low pest risk and free entry

B - High pest risk and Prohibited/restricted entry

### MANAGED RISK

Managed risk is the acceptance of risk associated with imports. The level of managed/accepted risk can be defined as tolerance. There are two problems that are inherent with this concept.

- (1) There is a technical problem of what is an acceptable risk for a pest. This is what the assessment is all about and there are no guidelines for this in Sri Lanka.
- (2) The second problem is the perception by industry and the public of the danger of tolerating the entry of a number of pests into Sri Lanka. This could pose a real problem and be a handicap for the application of managed risk policy.

Plant Quarantine in Sri Lanka need to liaise and consult with the private sector to achieve this understanding. Educational programs and campaigns must be organized and targeted at the public particularly when environmental pests are concerned.

## APPENDIX 4

### PROBLEMS CONNECTED WITH CERTIFICATION AND TREATMENT FROM EXPORTING COUNTRIES

One of the best recommendations that can be made to overcome the problems when accepting certification and treatment from exporting countries, is to work co-operatively in the exporting country in performing certification and/or treatment. The concept is known as "pre-shipment clearance", and is already practised by many countries. This is, however, often costly to the exporters/importers who pay the bill, but it eliminates the problem, and also reduces the pest risk, and fosters better understanding and co-operation between plant quarantine services. Co-operative agreements between the countries can be made to perform such activities when it involves a large volume of plant or plant products.

A second option that can be taken is to make an onsite visit to the exporting country and review the procedures and practices of that country. On the basis of this assessment a determination can be made on how the certification and treatment procedures can be changed to satisfy the importing country's requirements. This usually helps considerably in clarifying any misunderstanding that may exist. Bilateral meetings in most cases resolve the problems amicably, because both exporting and importing countries co-operatively identify and solve problems.

Another option, and often a very good one is to inform the exporting country through proper channels of the real problems that exist, and elicit their co-operation in getting the best in certification and treatment. The problems must be clearly identified, and solutions provided, if possible. Until problems are resolved the importing country continues to perform inspection, and/or monitoring depending on developments.

It seems that, there are countries who tend not to accept certification and treatment of exporting countries. There is always the matter of trust, reliability, and credibility. There are also some technical problems, even when the certification and treatments are fully complied with. Some insects and pests not visible at the time of certification develop in transit and become visible later. PQ could group imports of this nature into two categories.

- a) Those for which action is required
- b) Those for which no action is necessary

Treatments, although performed according to proper scheduling to eliminate a particular pest or disease, may not eliminate others, or there may be survival of some of the target pests.

Many importing countries are reluctant to accept the treatments done in exporting countries, and accept certification only as a means of reducing the pest risk to at least a non-detectable level.

A problem may exist as a result of unreasonable demands by the importing country, which cannot be satisfactorily met by the exporting country. AD requirements for example must be practical and justifiable, otherwise they are just ignored if they cannot be met.

Much of the responsibility for certification and treatment should be with the exporter. It may happen and does occur that some exporters circumvent the procedures for some reason or other, and usually for economic reasons. These exporters should be identified and their names and the pest findings and/or violations reported to the plant protection service of the exporting country, so that appropriate measures can be taken to prevent it from occurring again. This can result in more intensive inspection, better monitoring of export shipments, or outright suspension of the certification, if the violation is serious and frequent.

Last but not least if there are major problems with certification and/or treatments from an exporting country(ies), they can be referred to FAO or to the region for review and/or advice.

APPENDIX 5

QUESTIONNAIRE TO EXPORTERS/IMPORTERS  
OF SEEDS, FLOWERS, FRUITS, VEGETABLES, PLANTS, PLANTING MATERIAL, PLANT  
PRODUCTS, CELL/TISSUE CULTURE MATERIAL

- 
01. NAME OF INSTITUTION/COMPANY :
02. NAME & DESIGNATION OF CONTACT PERSON :
03. ADDRESS, TELEPHONE & FAX NO. :
04. EXPORTS :

4.1 Species/Varieties Exported :				
4.2 Countries :				

4.3 Problems encountered by exporters :  
(Use a separate sheet, if necessary)

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05. IMPORTS :

5.1 Species/Varieties being imported			
5.2 Countries of Origin :			

5.3 Problems encountered by importers :  
(Use a separate sheet, if necessary)

5.4 Names of prohibited/restricted plants/seed you wish to seek  
import approval for :

NAME	Reasons for seeking import approval
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5.5 Any other observations :

Signature :

Designation :

Date :



APPENDIX 6

LIST OF RECEIPIENTS OF QUESTIONNAIRE

CONTACT PERSON	DESIGNATION	ENTERPRISE	
		Name	Address
Abbink, Mr W R		Lanka Dutch Agro Development Co. (Pvt.) Ltd.	138/5 Kynsey Road, Colombo 8.
Abeywardene, Mr D C	PROP	Golden Eagle Trading Co.	502/1 Galle Road, Colombo 3.
Amarasuriya, Mr M J C	G/ED	Quality Seed Co. Ltd.	P.O.Box 70, 400 Deans Road, Colombo 10.
Ambani, Mr E		Metropolitan Management Services (Pvt.) Ltd.	85 Braybrooke Place, Colombo 2.
Aponso, Mr G A		Agri-Seed Agencies	103 A Egoda Uyana, Moratuwa.
Attapattu, Mr J		DPL Plantations Ltd.	400 Deans Road, Colombo 10.
Austin, Ms Dawn		Nitro Supply (Pvt) Ltd.	129 Reid Avenue, Colombo 4.
Azad, Mr M H M		Akbar Brothers Group of Companies	334 T B Jaya Mawatha Colombo 10.
Balthazar, Mr W		Estate Management Services (Pvt.) Ltd.	
Balthazaar, Mr W		Pickle Packers (Pvt.) Ltd.	122/1 Dudley Senanayake Mw., Dehiwala.
Boparachchy, Mr R N		Chemical Industries (Colombo) Ltd.	21 Bristol Street, Colombo 1.
Boralessa, Mr K		Magpek Colombo Land Plantation Management (Pvt.) Ltd.	46/10 Navam Mawatha, Colombo 2.
Chandrasekaran, Mr S	MPT	Sivasakthi Corporation	258 Main Street, Matale.
Channer, Mr G W	D	Sri Lanka Soya Utilization Project PLENTY Canada	Primrose Road, Mulgampola, Kandy.

Cooray, Mr N K M	PT	Exotic Foliage Co.	52 Sarasavi Lane, Castle Street, Colombo 8.
De Silva, Mr Titus		Mackwoods Ltd.	10 Gnanaratha Pradeepa Mawatha, Colombo 8.
De Alwis, Mr C L		Chemanex Ltd.	P.O.Box 188, 52 Galle Face Court 2, Colombo 3.
De Alwis, Mr Lalith		IML (Pvt) Ltd.	140 Vauxall St., Colombo 2.
De Silva, Ms A C		Oasis Plants and Seed Exporters	112 Kumaratunge Munudasa Mawatha, Colombo 3.
De Zylva, Mr M D	MD	Janatha Fertilizer Enterprise Ltd.	19 Dawalasingharama Mawatha, Colombo 15.
Devanadan, Mr S		Devanadan	53/1 Ramakrishna Rd. Colombo 6.
Dias, Mr A	MPT	Dasun's House Plants	304 Galle Road, Panadura.
Eriyagama, Mr R L	PT	Lanka Exports Ltd.	24 Borella Cross Rd. Colombo 8.
Fernando, Mr M H J A	M	Adamjee Lukmanjee & Sons Ltd.	140 Grandpass Road, Colombo 14.
Fernando, Mr K J E	MD	Interlac Foliage	142 Athukala, Negombo.
Fernando, Mr M L P	AGRM	Agro-Culture Trends (Pvt.) Ltd.	103/11 Model Farm Road, Colombo 8.
Flick, Mr R C	Chief of Party	Agricultural Corporative Development International	03 Mclead Road, Colombo 4.
Gerrits, Mr Lucas	MD	Asian Cuttings Lanka Pvt. Ltd.	Kandawela, Katana.
Gnanaskandar, Mr S		Eastern & Allied Agencies Ltd.	175 Kirula Road, Colombo 5.
Gunasekara, Mr J M	D	Agricultural Corporative Development International	03 Mclead Road, Colombo 4.
Gunasekera, Ms S P	C	Purple Foliage (Pvt.) Ltd.	35 Staple Street, Colombo 2.

Gunasekera, Mr K D	MD	Supreme Orchid Export (Pvt.) Ltd.	51/C, C.W.W Kannangara Mawatha, Colombo 7.
Gunawardena, Mr S	D	Upali Nurseries (Pvt.) Ltd.	223 Bloemendal Road, Colombo 13.
Hettiarachchi, Mr D A S	D	Sunflower Lanka (Pvt.) Ltd.	Bandiruppuwa, Lunuwila.
Illangakoon, Mr Y S		Keels Agro Products Ltd.	18 Tempale Road, Ekala, Ja-Ela.
Jayakody, Ms S	D	Huejay International (Horticulture) Ltd.	"Huejay Court" 32B Sri Mohamed Macan Marker Mw., Colombo 3.
Jayaratne, Mr		Jafferjee Bros.	150 St Joseph's St., Colombo 14.
Jayasingam, Mr T		Creasy Plantation Management Ltd.	760-762 Baseline Rd, Colombo 9.
Jayasingam, Mr N		Lankem Plantation Services Ltd.	760-762 Baseline Rd, Colombo 9.
Jayasundera, Mr L		Hayleys Plantation Services Ltd.	400 Deans Road, Colombo 10.
Jayawardena, Mr D H S		Stassen Plantation Management Services (Pvt.) Ltd.	833 Sirimavo Bandaranayake Mawatha, Colombo 14.
Jayawardena, Mr L	C	Quality Seed Ltd.	400 Deans Road, Colombo 10.
Jayawardena, Mr P S M		Aitken Spence Agricultural Development Ltd.	13 Sir Baron Jayathilake Mawatha, P.O.Box 5, Colombo 1.
Jeyarajan, Mr P		Jeya Textiles	122 3rd Cross St., Colombo 11.
Kaibir, Mr M I A		Dilarshad Enterprise	49 Rosemead Place, Colombo 7.
Kariyawasam, Ms Chiranthi		C.D. Ariyawasam & Co.	421 Thimbirigasyaya Road, Colombo 5.
Karunaratne, Mr N G R	MD	CTC Services Ltd.	108 George R. de Silva Mawatha, P.O.Box 18, Colombo 13.
Keerthiratne, Ms P I	MD	Mike Flora Ltd.	56A Castle Street, Colombo 8.
Kiridena, Mr S S		Uniceyl Marketing Services (Pvt.) Ltd.	200 Darly Road, Colombo 10.

Kumar, Mr Udaya		Sun Agencies	103 Mayfield Rd., Colombo 13.
Kurian, Mr Bhurip	MD	CTC Foliage Ltd.	108 George R. de Silva Mawtha, Colombo 13.
Malwana, Mr T	D	Topass Horticulture Ltd.	625 Baseline Road, Colombo 9.
Manickawasagam, Mr A	MPT	Design Textile Centre	153 Keymer Street, Colombo 11.
Manoharan, Mr V	MPT	Crossworld Trading	67 St. Lawrence Road, Colombo 6.
Mendis, Comdr P H	MD	Italanka Foliage (Pvt.) Ltd.	19th Floor, UDA Tower, 25 Station Road, Colombo 4.
Nagendra, Mr S T		Finlay Plantation Management (Pvt.) Ltd.	186 Vauxhall Street, Colombo 2.
Nandakumar, Mr A		Devi Trading Co.	125 Bankshall St., Colombo 11.
Nathani, Mr F	D	Tropical Foliage & Flower Co. Ltd.	50 1st Floor, Hyde Park Corner, Colombo 2.
Nawaratne, Mr D K		DUS Agriculture	Mahatenne, Belihuloya.
Nonis, Ms S		Mackwoods Plantations (Pvt.) Ltd.	10 Gnanaratha Pradeepa Mawatha, Colombo 8.
Nugawela, Mr Amitha	MD	Allied Horticultural Enterprises (Pvt.) Ltd.	272 D.S.Senanayake Vidiya, Kandy.
Peiris, Mr Darshan	MD	Prithvi Seed Co. (Pvt.)Ltd.	79/3 Woodland Avenue Off Anderson Road, Kalubovile, Dehiwela.
Peiris, Mr Ian		RPK Management Services (Pvt.) Ltd.	320/1 Union Place, Colombo 2.
Perera, Mr Leslie K		Supreme Marketing Company	204 Galle Road, Ratmalana.
Perera, Mr E J		Crop Management Services (Pvt.) Ltd.	52 Galle Face Court 2, Colombo 3.

Perera, Mr J M J P		Agri Lanka	70 Colombo Road, Malpitiya, Boyagama.
Perera, Mr D J V		Princess Enterprise Ltd.	55 Stace Road, Colombo 15.
Ranasinghe, Mr C		Crossworld Trading (Pvt.) Ltd.	67A Parsons Rd, Colombo 2.
Perera, Mr Chrishantha		Uva Western Plantations (Pvt.) Ltd.	46/38 Navam Mawatha, Colombo 2.
Rajapakse, Mr Jayantha		Unipower Ltd.	29/5 Nanda Investment Building, 25 C W W Kannangara Mawatha, Colombo 7.
Ramanayake, Mr R S		Lanka Canneries Ltd.	MD Canning Factory Narahenpita, Colombo 5.
Rodrigo, Mr W R F	M	Hoechst (Ceylon) Co. Ltd.	114 Ward Place, Colombo 8.
Roosemale Cocq, Mr T R		George Steuart Management Services (Pvt.) Ltd.	
Samarakoon, Mr S M S	PROP	Samarakoon Agricultural Services	829 Peradeniya Rd, Kandy.
Samarasinha, Mr D		Free Lanka Management Co. (Pvt.) Ltd.	401 1/1 Galle Road, Galle Road, Colombo 4.
Seneviratne, Ms I R		Kelani Valley Canneries Ltd.	30 Janaki Lane, Colombo 4.
Shanmugasunceram, Mr D	PT	Eswaran Brothers	267 Sea Street, Colombo 11.
Shums, Mr A A		Shumps & Company Ltd.	33 A Queens Rd., Colombo 3.
Silva, Mr S Berty		Wayamba Plantations Ltd.	165 Puttalam Road, Chilaw.
Silva, Ms C	M	Little Flower	180 Negombo Road, Liyanagemulla, Seeduwa.
	MD	Anosha Associates	127 W.A.D. Ramanayake Mawatha, Colombo 2.
Subasinghe, Mr Alfred S	MPT	Tropical Seed Co. Pvt. Ltd.	127 W.A.D Ramanayake Mawatha, Colombo 2.

Subramaniam Pillai, Mr M N	PROP	Sri Subramaniam Stores	153 Keyser Street, Colombo 11.
Suriyaseena, Mr E	D	Orchid Indoor Plants (Ceylon) Ltd.	P.O.Box 1, Marawila.
Svinnigen, Mr A	D	Green Farms Ltd.	25 Galle Face Centre Road, Colombo 3. (Hotel Taj Samudra)
Unambowe, Mr Stanley		Carsons Agro Services Ltd.	67 Dharmapala Mw. Colombo 7.
Uvais, Mr M L M		Sabsala Associates	11 13 <sup>th</sup> Lane, Colombo 3.
Viswakula, Mr V A N	MD	Viswakula Sons (Kandy) Ltd.	441/1A Razeendale Gardens, Colombo 4.
Wadugodapitiya, Mr S N B		Jwa-Sabaragamuwa Plantations (Pvt.) Ltd.	46/38 Navam Mawatha, Colombo 2.
Wamsler, Mr Bruno P	MD	Mahawelli Farm Development (Pvt.) Ltd.	176/5C Thimbirigasyaya Rd., Colombo 5.
Weerakoon, Mr E B	M	Ligncell Ltd.	400 Deans Road, Colombo 10.
Weerasinghe, Mr B	D	Eldorado Plants (Pvt.) Ltd. COBAMILLS Ltd.	54 3/3 Australia Building, York Street, Colombo 1.
Wickramanayake, Mr Anil		Dutch Foliage Farm (Pvt.) Ltd.	105 Katana Road, Thimbirigaskotuwa, Negombo.
Wickramasinghe, Mr R L	MPT	Wichy Plantation Co.	22 Arthur's place, P.O.Box 4, Dehiwala.
Wickramasinghe, Mr G C		Aitken Spence Plantation Managements (Pvt.) Ltd.	13 Sir Baron Jayatilake Mawatha, Colombo 1.
Wijeratne, Mr H		Ceyexxe Plantations Ltd.	55/20 Vauxhall Lane, Colombo 2.
Wijesinghe, Mr E		BC Plantations Ltd.	65 Braybrooke Place, Colombo 2,
Wijewardena, Mr R S		L H Plantations (Pvt.) Ltd.	41 W A D Ramanayake Mawatha, Colombo 2.

D

Marketing Services, AME	204 Dutugamunu St. Kohuwala.
Orchid Exports	2/13 Charles Drive Colombo 3.
Pan-Am Foods Ltd.	79A/1 Alexandra Place, Colombo 7.
Orient Commercial Enterprises Ltd.	7 Rajagiriya Udyanaya, Rajagiriya.
Robeena Traders	79 Messenger St., Colombo 12.
Real Pharmacy & Groceries	15 Rajamalwatte Rd., Colombo 15.
Samco Products	605 Sangabo Mawatha, Makola North, Makola.
Santushi Basel	85 Fife Road, Colombo 5.
A K R & Co.	79 Sea Street, Colombo 11.
Adamexpo	57 Chatham St., P.O.Box 1481, Colombo 1.
Agricultural Exports (Private) Ltd.	267 Sea Street, Colombo 11.
Kosean (Pvt) Ltd.	69 Janadhipathi Mawatha, Colombo 1.
Aitken spence Agricultural Developments Ltd.	18 Sir Baron Jayatilake Mw., Colombo 1.
Amalgamated Trades	14 1/1 Shady Grove Avenue, Off Castle St. Colombo 3.
Azure Organisation	165 San Sebastian St, Colombo 12.
Fresh N Green (Pvt) Ltd.	21 Kirula Road, Colombo 12.
Green Field Exports.	32 Milagiriya Avenue, Colombo 5.
Freightair (Pvt) Ltd.	60 1/1 Reclamation Avenue, Colombo 11.

Aquarmarines International (Pvt.) Ltd.	44/3 Alwis Gardens Sri Gnanendra Rd., Ratmalana.
Armz Exports & Imports	49/2 Regent Bldg., Sir Chittampalam A Gardiner Mawatha, Colombo 2.
Ashraff Limited	408 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Division, Maradana Road, colombo 10.
Asian Impex Enterprise	51 First Cross St. Colombo 11.
Aslams	P.O.Box 17, 33 Telangapatha Road, Wattala.
Chathu Enterprises	158/3 4 <sup>th</sup> Cross Street, Colombo 11.
Orient General Agencies	35/2 A G Hinniappuhamy Mw., Colombo 13.
Sri Krish Corporation Ltd.	85 George R De Silva Mawatha, P.O.Box 1286, Colombo 13.
Abdul Sattar	123 Prince Street, Colombo 11.
Green Finger Associates	30 Janaki Lane, Colombo 4.
Sri Lanka State (Consolidated Exports) Corporation	68/70 York St., Colombo 1.
Greenth Horticultur	123 Medawelikada Rd., Rajagiriya.
Greenet Plants & Flowers Ltd.	870/3 Negombo Rd., Mabole, Wattala.
Tropical Bloom	P.O.Box 802, Colombo.
Mag Consultant and Agent Ltd.	81/41 Negombo Rd., Peliyagoda.
Nidro Supply Pvt. Ltd.	129 Reid Avenue, Colombo 4.

Keels Agro Products Ltd.	18 Temple Road, Ekala, Ja-Ela.
Eastern and Allied Agencies Ltd.	175 Kirula Road, Colombo 5.
Para Expo Products Ltd.	30 Sea Street, Colombo 2.
Spiceway International	Sriyani, Hettiyawatta, Angoda.
Orchid Exports	10 Sri Maha Bodi Rd., Dehiwela.
Manium Stores	75 77 Prince St., Colombo 11.
Sunil Fresh Foods (Pvt.) Ltd.	122 People park Shopping Complex, Pettah.
Sunil Traders	57 5 <sup>th</sup> Cross St., Colombo 11.
A S Chatoor & Co. Ltd.	372 Cyril C Perera Mw., Colombo 13.
Adan Expo	57 Chatham Street, Colombo 1.
Adamjee Luckmanjee and Sons Ltd.	140 Grandpass Rd., Colombo 14.
Aitken Spence Agricultural Development Ltd.	P.O.Box 5, Colombo.
Akbar brothers Exporters Ltd.	P.O.Box 1726, T B Jayah Mw., Colombo 10.
Anuraj Agencies	22 new Chetty St., Colombo 13.
C W Mackie (C.P) Ltd.	P.O.Box 89, Colombo.
Ceylon Floral Creations (Pvt.) Ltd.	268 Canal Rd., Hendala.
Ceylon Trading Co.	P.O.Box 161, Colombo.
Consolidated Business Systems Ltd.	17 S De S Jayasinghe Mw., Kohuwala, Nugegoda.

D S C Fibres	198 St. Joseph's St., Colombo 14.
Eastern Merchants Ltd.	341 Union Place, Colombo 2.
Eswaran Brothers	P.O.Box 206,267, Sea Street, Colombo 11.
Expo Lanka Ltd.	P.O.Box 1162, Colombo.
Fern Tea Ltd.	188 Vauxhall St., Colombo 2.
George Payne & Co. (Ceylon) Ltd.	P.O.Box 122, Colombo.
George Steuart (Pvt) Ltd.	45 Janadhipathi Mw., P.O.Box 151, Colombo 1.
H D De Silva & Sons (Pvt) Ltd.	309 Javantha Weerasakera Mw., Colombo 10.
Hayleys Exporters Ltd.	400 Deans Road, P.O.Box 70, Colombo 10.
Hemas (Drugs) Ltd.	Hemas Building, 36 Bristol St., P.O.Box 911, Colombo 1.
Itlanka Foliage (Pvt) Ltd.	19 A Uda Tower Building, 25 Station Rd., Colombo 4.
Mackwoods Ltd.	P.O.Box 91, Colombo 8.
Natasa Exports	22 Peiris Avenue, Moratuwa.
Princess Enterprise	P.O.Box 652, Colombo.
Saboor Chatoor & Co. Ltd.	20 Sri Wickrama Mw., Colombo 15.
Spiceco Ltd.	23 Sri Sangarama Mw., Colombo 10.
Stassens Exports Ltd.	P.O.Box 1,770, 833 Srimavo Bajjaramayake Mw., Colombo 14.

Sunfrost Ltd.	74 De Waas Lane, Colombo 14.
Tanadsha & Co.	29 Siripura, Thalawathugoda.
Union Commodities (Pvt) Ltd.	55 73 Vauxhall Lane, Colombo 2.
United Millers &	19 & 21 Grandpass Rd., Colombo 14.
Expolanka Ltd.	10 Mile Post Avenue, Colombo 3.
Consolidated Business Systems	27 Church Road, Nugegoda.

## APPENDIX 7

### RESPONSES TO THE QUESTIONNAIRE ON IMPORTS AND EXPORTS OF PLANTS AND PLANT MATERIALS BY THE PRIVATE SECTOR

A questionnaire (See Appendix 5) was sent to 173 enterprises engaged in the import and export of plant products. This questionnaire sought information on problems confronting the private sector and matters relating to plant quarantine which affect the trade.

Responses were received from 66 enterprises. Wherever possible these responses are summarised below. The following four groups were identified.

- Group A - Some enterprises have not yet engaged in either import or export of plants and plant materials as yet, but some of them wished to do so. There are 21 enterprises in this category.
- Group B - 22 Enterprises engaged in exports only.
- Group C - 12 Enterprises engaged in imports only.
- Group D - 11 Enterprises engaged in both exports and imports.
  - o Problems were reported by 41 enterprises, i.e. 62% of the total who responded.
  - o Twenty three of them wished to import prohibited items.
  - o Five enterprises reported delays in the issuance of import permits.
  - o Nine reported delays in the issuance of phytosanitary certificates by PQ.
  - o Delays in obtaining treatment (e.g. fumigation) at the correct time were reported by two enterprises.
  - o Only one enterprise considered PQ service as having unnecessary red tape.
  - o Eighteen Enterprises suggested that the conditions for the issue of import permits be relaxed.
  - o Eleven enterprises who engaged in seed imports reported that seed testing procedures such as is done by ISTA are required to be duplicated locally resulting in additional costs which affect their competitiveness and which increases costs to growers.

- o Three of the enterprises have not highlighted their problems but they wished to attend the conference/workshop.
- o Six enterprises did not state their problems clearly.
- o Thirteen enterprises engaged in plantation management have not yet commenced imports and exports of plant material but wish to do so in the future.
- o Twelve enterprises engaged in both exports and imports have stated they have no problems or constraints.

The consultants have made far-reaching recommendations to alleviate some of these problems.

## APPENDIX 8

### A - PERSONS AND GROUPS INTERVIEWED IN THE STATE SECTOR

Abeytunge, Mr K A W	ROIC, ARS, Sita Eliya, NE.
Abeytunge, Ms K A W	Research officer, (Plant Breeding), Sita Eliya, NE.
Ahangama, Dr Ms D	Senior Lecturer in Pest Management, FOA, UP.
Amarasiri, Dr S L	Deputy Director Research, DOA, Peradeniya.
Amalappa, Dr Ms T I	Plant Breeder, TRI, TLK.
Ariyaratne, Mr K A D	OIC, PQ, KIA.
Arulpragasam, Dr P V	Plant Pathologist, TRI, TLK.
Balasooriya, Prof I	Chairman, Rubber Research Board, Ratmalana
Bandara, Mr H M J	Assistant Chief QC, DOA, Peradeniya.
Dassanayake, Prof M D	PGRC, Gannoruwa, Peradeniya.
De Alwis, Dr Ms Nalini	Registrar of Pesticides, DOA, Peradeniya.
De Silva, Mr M D H	OIC, PQ, POC
De Silva, Ms P	Assistant Plant Pathologist, RRI, Agalawatta.
De Silva, Mr R S Y	Chief QC, PQ Division, Gannoruwa, Peradeniya.
De Silva, Mr Y P	Extension Agronomist, MARD, Aralaganwila.
De Zoysa, Mr M A U	Deputy Director, Product Management, EDB, Colombo.
Dias, Mr P H A N	Chairman, Kahawatte Plantations Ltd., Kandy.
Dias, Mr J N S	Deputy Director, Marketing, EDB, Colombo.
Dias, Mr N	Chairman, CRB, Lunuwila. Chairman, SAPDA, Colombo.

Ekanayake, Dr A	Director Planning, MPI, Colombo.
Ekanayake, Dr Ms R	Nematologist, CARI, Gannoruwa, Peradeniya.
Fernando, Dr M H J P	Deputy Director, CS & PP, DOA, Peradeniya.
Jayasekera, Dr N E M	Head, Genetics and Plant Breeding, RRI, Agalawatta.
Jayasinghe, Mr C K	Head, Plant Pathology, RRI, Agalawatta.
Jayatissa, Dr P M	Director, CISIR, Colombo.
Jayawardena, Mr J	MLMD, Colombo.
Jayawardena, Dr S D G	Additional Deputy Director Research, DOA, Peradeniya.
Kathirgamathiyah, Dr S	Director, Export Agriculture, Peradeniya.
Kirtisinghe, Dr D	Manager, Agricultural Research Project, MADR.
Kudagamage, Dr C	Entomologist, CARI, Gannoruwa, Peradeniya.
Kulasuriya, Prof S A	Head, Department of Botany, UP.
Liyanage, Mr D	Secretary, Ministry of Coconut Industries.
Mahindapala, Dr R	Director, Coconut Research Institute, Lunuwila.
Medawewa, Mr S	Acting Director, Department of Wild life.
Mubarak, Ms C	Deputy Director, Product Management, EDB, Colombo.
Nugawela, Dr A	Head, Plant Science Department RRI, Agalawatta.
Paranmana, Mr J	Director Customs (Export) representing CD.
Perera, Dr A L T	Senior Lecturer in Plant Breeding, FOA, UP.
Peries, Dr K R R A	Head Genetics & Plant Breeding, CRI, Lunuwila.
Peries, Dr O S	Chairman, Sri Lanka Standards Institution, Colombo.
Pethiyagoda, Dr U	Mahaweli Employment Investment and Enterprise Development Division, MLMD, Colombo.

Pinto, Mr M E R	Consultant, DARP, Peradeniya.
Rajakpase, Ms C	Research Assistant, Crop Protection Division CRI, Lunuwila.
Ramasamy, Dr R	Additional Director General, NARESA, Colombo.
Seneviratne, Mr G D	Director, ARTI, Colombo.
Seneviratne, Dr S N de S	ARTI, Colombo.
Sivapalan, Dr P	Director TRI, TLK.
Somaratne, Mr A	Advisor, TSHDA, Peradeniya.
Soyza, Dr Ms J	Plant Pathologist, CARI, Gannoruwa, Peradeniya.
Sumanasekera, Mr A H	Senior Conservator, Wild Life Department, Kotte.
Thiruganasunderan, Mr S	Entomologist, TRI, TLK.
Udalagama, Mr P	Chairman, Sri Lanka Cashew Corporation, Colombo.
Vignarajah, Dr N	Additional Deputy Director Research, DOA, Peradeniya.
Watson, Mr M	Assistant Director, NARESA, Colombo.
Weerasena, Dr S	Additional DD, SCS & PP, DOA, Peradeniya.
Weerasinghe, Dr S P R	Director of Agriculture, Peradeniya.
Wickramasinghe, Dr R L	Chairman, SRI, Colombo.
Wijegunasekera, Mr H N P	Head, Agricultural Biology, UP.
Wijeratnam, Dr Ms S W	Team Leader, Senior Research Officer, CISIR, Colombo.
Wijayawardene, Mr D	Director, Agricultural Development, MADR.
Yatawatte, Mr S T	Advisory officer, TRI, Hantane, Kandy.

## APPENDIX 8

### B - PERSONS AND GROUPS INTERVIEWED IN THE PRIVATE SECTOR

Atton, Mr M S C	Information officer/Assistant Secretary Chamber of Commerce
Cooray, Mr M	Managing Partner, Exotic Foliage Co.
Daluwatta, Mr G	Production Manager, Tropical Foliage & Flower Co. Ltd.
Fernando, Mr L	Agricultural Manager, Agroculture Trends (Pvt.) Ltd.
Hettiarachchi, Mr S	Director, Sunflower Lanka (Pvt) Ltd., Lunuwila.
Jayakody, Ms H	Managing Director, Huejay Group
Kurian, Mr B	General Manager, CTC Foliage Ltd.
Manoharan, Mr V	President, Seedmens' Association of Sri Lanka
Muthubanda, Mr	Production Manager, Anosha Associates Pvt. Ltd.
Peiris, Mr O E	ED/Onesh Horticulture Services Pvt. Ltd.
Subasinghe, Mr A S	Chairman, Tropical Seed Co. Anosha Associates Onesh Horticulture Services (Pvt.) Ltd.
Subramaniam, Mr M	Proprietor, Sri Subramaniam Stores.
Vincent, Mr B V	Former PQ Inspector, PQ Service
Wakwella, Mr S	Asian Cuttings Lanka (Pvt.) Ltd.

## **APPENDIX 8**

### **C - FOREIGN PERSONS AND GROUPS INTERVIEWED**

Chapman, Mr K R	DARP, Peradeniya.
Gerrits, Mr L	Production Manager, Asian Cuttings Lanka (Pvt.) Ltd.
Osvaldo Sig. G	Italanka Foliage Ltd, Colombo 4.
Selleck, Dr G W	Farming Systems Agronomist, MARD, Aralaganwila.
Sivinngen, Mr A	President Floriculture Produce Exporters' Association Chairman/MD, Green Farms Ltd., Sri Lanka
Spake, Mr B	Chief of Party, MARD, Aralaganwila.
West, Mr M	Horticulturist, MARD, Aralaganwila.

## APPENDIX 9

### LIST OF INSTITUTIONS/AGENCIES VISITED

DATE	PLACES VISITED
June 22	SC & PP Division DOA
23	SC & PP Division DOA
24	PGIA (P)
25	Entomology and Plant Pathology, CARI, DOA
26	Plant Breeder, Faculty of Agriculture, UP
27	SATURDAY
28	SUNDAY
29	DARP, PQS, DOA Head office
30	Entomology, CARI, DOA
July 1	TRI, Talawakelle, ARS, DOA, Sita Eliya (NE)
2	Project office
3	Project office
4	SATURDAY
5	SUNDAY
6	DARP, Peradeniya
7	Project office
8	Project office
9	CTC Foliage Ltd, Nursery, Kalagedihena

- July 10 RRI, Agalawatta,  
Chamber of Commerce, Colombo
- 11 Onesh Horticulture Services, Colombo.  
Anosha Associates (Pvt.) Ltd. Nursery  
Bopitiya, Giriulla
- 12 SUNDAY
- 13 NARESA - Colombo.  
Sri Lanka Cashew Corporation, Colombo.  
ARTI Library, Colombo.
- 14 Tropical Foliage and Flower Co. Ltd.  
Nursery - Hunumulla.  
Asian Cuttings Lanka (Pvt.) Ltd. Nursery - Katana.
- 15 PQ - Seaport of Colombo  
Floricultural Produce Exporters' Association,  
Seedmens' Association of Sri Lanka, Colombo.
- 16 EDB, Colombo  
ARTI, Colombo  
Department of Wild Life, Sri Jayewardhanapura  
CISIR, Colombo
- 17 PQ - Colombo Airport, Katunayake  
CRI Lunuwila  
Green Farms Ltd. Nursery, Marawila
- 18 Huejay International (Horticulture) Ltd.  
Colombo
- 19 SUNDAY
- 20 RARC, Aralaganwila. MARD/MEA Pimburettawa
- 21 Project office
- 22 DOA, Head office
- 23 DAI, DARP, Peradeniya
- 24 DEA, Peradeniya

July	25	CARI, Gannoruwa, Peradeniya
	26	PEQ Station, SRI, Hantane, Kandy
	27	CS & PP office, Peradeniya
	28	Project office
	29	Customs Department, Colombo
	30	Project office
	31	Project office
Aug.	1	SATURDAY
	2	SUNDAY
	3	Project office
	4	Project office
	5	DOA Head office, Peradeniya
	6	PQ office, Peradeniya
	7	CARI, Gannoruwa, Peradeniya
	8	SATURDAY
	9	SUNDAY
	10	RRI, Ratmalana
	11	PQ, Gannoruwa, Peradeniya
	12	Sunflower Nurseries, Lunuwila
	13	Project office, Colombo
	14	Project office, Colombo

Aug. 15 SATURDAY  
16 SUNDAY  
17 PQ, Gannoruwa, Peradeniya  
18 Rresearch Division, DOA Head office, Peradeniya  
19  
20  
21  
22 SATURDAY  
23 SUNDAY

## **APPENDIX 10**

### **LIST OF FACILITIES INSPECTED**

1. Seaport of Colombo - Office and Fumigatorium
2. Colombo Airport Katunayake Cargo and Passenger Terminals
3. DOA PQ office and PEQ Station Gannoruwa, Peradeniya
4. CARI, Gannoruwa, Peradeniya
5. TRI, Talawakelle
6. RRI, Agalawatta and Ratmalana
7. CRI, Lunuwila
8. SRI PEQ Station, Hantane, Kandy
9. RARC, DOA, Aralaganwila
10. MARD, Aralaganwila
11. ARTI, (Library), Colombo
12. NARESA (Library), Colombo
13. PGIA, FOA, UP
14. CISIR, Colombo
15. Several private sector facilities

# Sri Lanka

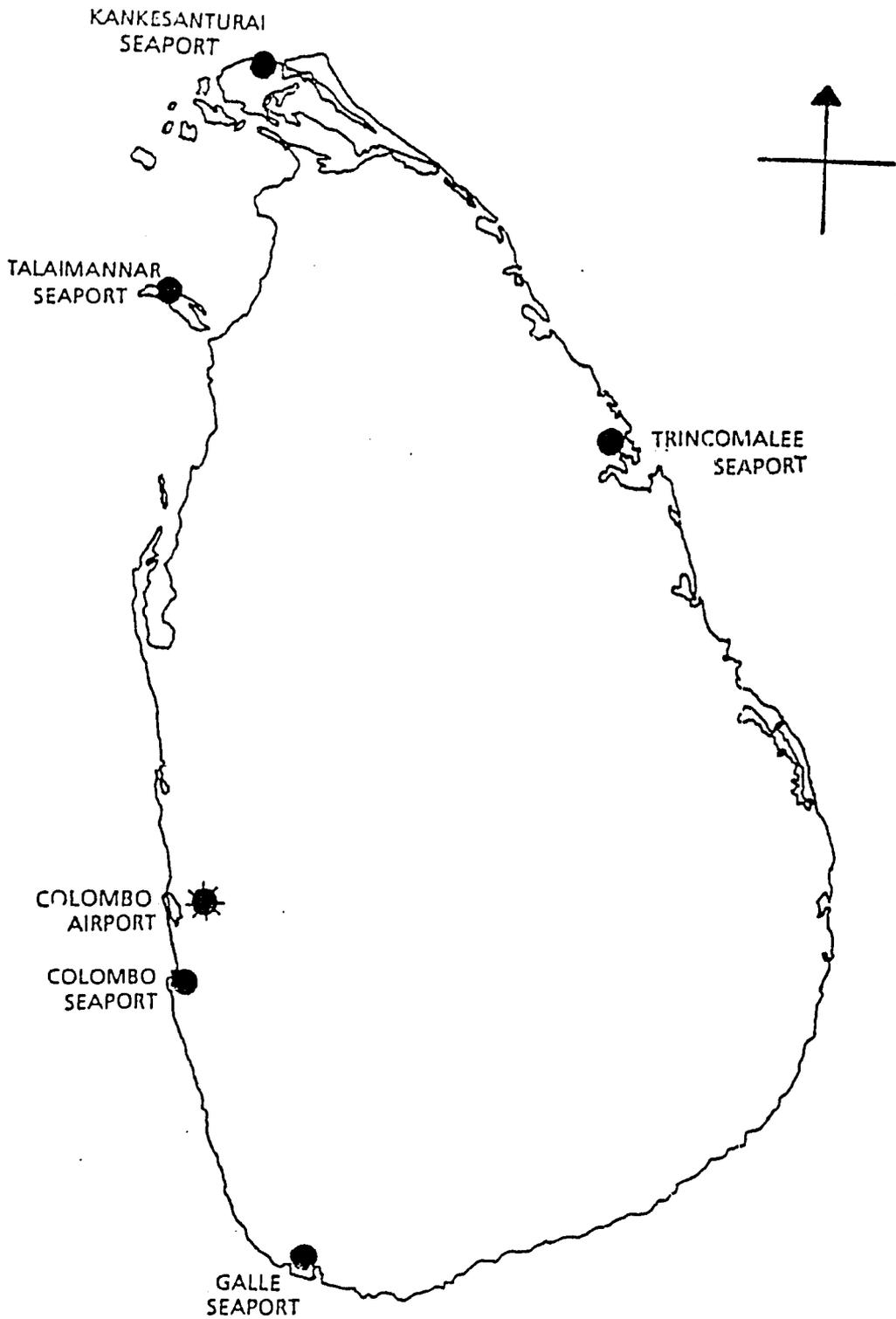


Fig. 1 Locations of Seaports and Airports

CHAPTER 447

PLANT PROTECTION

Ordinance No. 10 of 1924.  
Acts Nos. 8 of 1950,  
21 of 1955.

AN ORDINANCE TO MAKE BETTER PROVISION AGAINST THE INTRODUCTION INTO CEYLON AND AGAINST THE SPREAD THEREIN OF WEEDS, AND OF PESTS, AND DISEASES INJURIOUS TO, OR DESTRUCTIVE OF, PLANTS, AND FOR THE SANITATION OF PLANTS IN CEYLON.

[27th June, 1924.]

Short title. 1. This Ordinance may be cited as the Plant Protection Ordinance.

Interpretation. 2. In this Ordinance and any regulations made thereunder, unless the context otherwise requires—

11 2. 8 of 1950 "disease" shall include any fungus or other agent which shall injure, destroy, or be parasitic upon any plant;

"owner" or "occupier" shall include the proprietor, lessee, superintendent, or other person in actual charge of any cultivated or uncultivated land;

"pest" shall include any insect or animal which shall in any stage of its development eat, destroy, or otherwise injure any plant;

11 2. 8 of 1950 "plant" shall include all members of the vegetable kingdom, whether living or dead, or any part or parts of such, but shall not include canned or preserved fruits or canned or preserved vegetables;

"weed" shall include any plant which is declared by the Minister to be a weed for the purposes of this Ordinance.

3. There may be appointed for the purposes of this Ordinance one or more inspectors and sub-inspectors and such other officers as may be necessary.

Appointment of inspectors and officers.

4. It shall be lawful for the Director of Agriculture, or for any person authorized by him in writing or for any inspector or sub-inspector, with or without assistants, to enter, at all reasonable times, upon any land for the purpose of inspecting and examining whether plant pests, diseases, or weeds exist thereon, and the owner or occupier of such land shall afford all reasonable facilities for such inspection and examination.

Entry on land for purposes of inspection.  
11 2. 8 of 1950.

5. Neither the Director of Agriculture, nor any inspector or sub-inspector, nor any person assisting the Director or any such inspector or sub-inspector, shall be deemed a trespasser by reason of any entry or destruction or action taken or thing done under this Ordinance or any regulation made thereunder, or be liable for any damage occasioned by carrying out any of the provisions of this Ordinance or of any regulation made thereunder, unless the same was occasioned maliciously and without reasonable and probable cause.

Director of Agriculture, inspector, or sub-inspector not to be deemed trespasser by reason of entry, &c.

6. If any person, without lawful authority or excuse (proof whereof shall lie on him), contravenes any regulation made under this Ordinance, or does or omits to do anything which under the provisions of this Ordinance or of any regulations made thereunder he ought not to do or omit, or if he molests, obstructs, or impedes, or assists in molesting, obstructing, or impeding, the Director of Agriculture, or any inspector or sub-inspector appointed under this Ordinance, or any customs officer, in the execution of any provisions of this Ordinance or any regulation made thereunder, he shall be guilty of an offence against this Ordinance.

Penalty for contravention of Ordinance or regulation thereunder.

7. If any person is guilty of an offence against this Ordinance or any regulation made thereunder, he shall be liable on conviction before a Magistrate to

Punishment for offences.

imprisonment of either description to a term not exceeding three months, or to a fine not exceeding five hundred rupees, or to both.

Penalty on person guilty of unnecessary violence or annoyance.

8. Every person who shall, under pretence of performing any act under the authority of this Ordinance or of any regulation made thereunder, be guilty of any unnecessary violence or cause any unnecessary annoyance to any person, shall be guilty of an offence against this Ordinance.

Regulations.

9. (1) The regulations set forth in the Schedule shall have effect as if the same were contained in this Ordinance, but may be added to, amended, or revoked in the manner, and subject to the conditions, provided for the making of regulations in this section.

[14. 6. of 1959]

(2) The Minister may make regulations for the purpose of preventing the introduction into Ceylon, and for the purpose of eradicating, or preventing the spreading therein of weeds, or of pests and diseases injurious to, or destructive of, plants

(3) Such regulations may provide, but without detracting from the generality of the powers herein before conferred—

[14. 6. of 1950]

(a) for prohibiting the importation into Ceylon from places beyond sea of any plants, invertebrate animals and insects, and for restricting the sea and air ports at which plants may be landed;

[14. 6. of 1950.]

(b) for prohibiting the landing of plants from vessels or boats or aircraft either absolutely or conditionally;

[14. 6. of 1950]

(c) for providing for the importation of plants under special licence and conditions;

[14. 6. of 1950.]

(d) for inspecting plants at, before or after the time of landing;

(e) for cleansing, fumigating, or disinfecting, at the expense of the consignee, and, if expedient, destroying at, before or after landing and

without compensation, all plants, or the packages, cases, pots, or covering in which they may be packed, which shall be found or suspected to be infected with any pest or disease, and for the recovery of prescribed fees from the consignee;

[14. 6. of 1950]

(f) for requiring the quarantine of imported plants in special areas, and for fixing the conditions of such quarantine and the fees to be charged therefor;

(g) for preventing the outbreak or dissemination of any pest, disease, or weed within Ceylon;

(h) for declaring any area to be an infested area, and for the proper quarantine of any area declared as being infested with any pest, disease, or weed;

(i) for the spraying or other treatment of any weed or of any plants within Ceylon affected with any pest or disease;

(j) for the destruction and proper disposal of any weed or of any plants within Ceylon affected or likely to be affected with any pest or disease;

(k) for regulating the transfer of plants from one locality to another;

(l) for prescribing the officers who are to carry out regulations under this Ordinance, and the powers conferred, and duties imposed, upon them for the purpose aforesaid;

(m) for the constitution of committees to advise the Director of Agriculture and the inspectors appointed under this Ordinance, and to take such other action as may be necessary to ensure its effective administration.

(4) All regulations made under this Ordinance shall be published in the Gazette, and shall, subject to the provisions of the next following subsection, from the date of such publication have the same force as if they had been enacted in this Ordinance.

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(5) All regulations published as aforesaid shall be laid as soon as conveniently may be before the Senate and the House of Representatives, and may at any time within forty days after the date of their being so laid before the Senate or the House of Representatives, or at any of the three meetings of the Senate or the House of Representatives, succeeding such date, by resolution of the Senate or the House of Representatives be disallowed, amended, or otherwise dealt with as may be directed by the said resolution, but without prejudice to anything that may have been done thereunder.

## SCHEDULE

## REGULATIONS

## PART I

## 1. Limitation of Importation of Plants.—

No person shall import any plant into Ceylon except through the port of Colombo or the port of Talaimannar or the airport of Colombo (Ratmalana) or the Royal Air Force Station, Negombo, or the airport of Ankesanturai.

2. Prohibitions and Restrictions.—(1) No person shall import into or land in Ceylon—

- (a) any living specimen of any insect or invertebrate animal not already known to exist in Ceylon except under a permit in writing previously obtained from the Director of Agriculture;
- (b) any plant whatsoever or any insect or any invertebrate animal by aircraft except under a permit in writing from the Director of Agriculture;
- (c) any seed or plant of any species from the American Tropics or any country in which the South American leaf disease of Hevea (*Dothidella ulei*) occurs;
- (d) any seed or plant of any species of *Hevea* from any country whatsoever except under, and in accordance with the terms and conditions of, a permit in writing from the Director of Agriculture;
- (e) any aquatic plant;
- (f) any of the plants known as—
  - (i) Rice grass (*Spartina townsendii*);
  - (ii) Blackberry (*Rubus fruticosus*); or
  - (iii) Cape tulips (*Homeria collina* and *H. Miniata*);
- (g) any coconut plant;

- (h) any plant, pod or seed (other than cured seed) of cacao (*Theobroma cacao*) from any country whatsoever except under and in accordance with a permit in writing from the Director of Agriculture;
- (i) any seed or unginned cotton or raw ginned cotton of any species of *Gossypium* grown in the Western Hemisphere except through the port of Colombo, and except under, and in accordance with the terms and conditions of, a permit in writing from the Director of Agriculture;
- (j) any sweet potato tuber or portion thereof from Africa;
- (k) any living part of the cassava plant (*Manihot Utilissima*) except under a permit in writing from the Director of Agriculture;
- (l) any tomato seed except under the authority of a written permit from the Director of Agriculture;
- (m) any citrus plant of any species except under a permit in writing from the Director of Agriculture who shall grant such permit only if he is satisfied that the country from which such plant is to be imported is free from any virus disease of the citrus plant; or
- (n) any seed or plant of any species of *Helianthus* grown in the Western Hemisphere.

(2) No person other than the Director of Agriculture shall import into or land in Ceylon any plant packed with soil or compost other than mulch which can be completely removed from the plant and subjected to sterilization.

(3) No person shall land in Ceylon any refuse or sweepings containing vegetable matter from any ship or aircraft which has arrived at any port or airport in Ceylon from any place outside Ceylon.

(4) No person other than the Director of Agriculture shall import into or land in Ceylon any sugar cane sett.

3. (1) No person shall import any fresh fruit into Ceylon without a licence issued by the Director of Agriculture, or by an officer of the Department of Agriculture authorized in that behalf by the Director, or otherwise than in accordance with the terms and conditions of such licence.

(2) No licence shall be issued for the import of fresh fruit from any country in which the Mediterranean Fruit Fly (*Ceratitis capitata*) or any other pest of fruits which has not become established in Ceylon is known or suspected to exist unless the Director of Agriculture is satisfied that either before export from such country or during transit to Ceylon the fruit is so treated as to ensure that such pest, in all its stages, is effectively destroyed.

(3) Every licence issued under this regulation shall—

- (a) specify the country from which the fresh fruit may be imported;
- (b) be valid for the period specified in the licence;
- (c) be subject to the condition that it may be withdrawn by the Director of Agriculture at any time prior to the expiry of that period by written notice addressed to the holder of the licence;

(d) be subject to such other special conditions as may be set out in such licence by or by the authority of the Director of Agriculture; and

(e) be in the form set out hereunder:—

"THE PLANT PROTECTION ORDINANCE

*Licence to Import Fresh Fruit*

Under regulation 3 of the regulations set forth in Part I of the Schedule to the Plant Protection Ordinance, as amended by regulation published in Gazette No. \_\_\_\_\_ of \_\_\_\_\_ (name) \_\_\_\_\_ of \_\_\_\_\_ (place) \_\_\_\_\_ is hereby licensed to import the under-mentioned varieties of fresh fruit from \_\_\_\_\_:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

This licence expires on \_\_\_\_\_.  
This licence is subject to the condition that it may be withdrawn by the Director of Agriculture at any time prior to the date set out above by written notice addressed to the holder of this licence.

This licence is further subject to the special conditions set out overleaf.

(for) Director of Agriculture.

(date) \_\_\_\_\_."

(4) No person shall land any fresh fruit at the port of Colombo or at the port of Talaimannar or at the airport of Colombo (Ratmalana) or at the Royal Air Force Station, Negombo, or at the airport of Konkesanturai, unless he has satisfied the Collector of Customs at that port or airport, as the case may be, that such fruit was grown in and consigned from the country specified in the licence issued for the importation of such fruit under regulation 3 (1).

4. *Inspection, Fumigation, and Disinfection.*—(1) All living imported plants together with the packing cases, pots or coverings in which such plants may be packed shall be conveyed by the customs authorities to the inspector-in-charge of the Colombo fumigatorium for examination: Provided that this paragraph shall not apply to potatoes, onions, turmeric, culinary seed, edible vegetables, and the seed of such vegetables and the seed of any ornamental plant.

(2) Every imported plant, which on inspection is found or suspected to be infected with any pest or disease, shall be subjected to fumigation or disinfection, or both fumigation and disinfection, in such manner and to such extent as may be deemed necessary by the inspector.

(3) Where fumigation or disinfection is necessary, such fumigation or disinfection shall be carried out at the Colombo fumigatorium.

(4) The Director of Agriculture may order that any plant which has been inspected be grown at the risk of the consignee for a period of quarantine in special nurseries provided or approved by the Director of Agriculture for that purpose. Neither the Director of Agriculture nor any other officer acting under his authority shall be in any way responsible for the safety of plants in quarantine. No plant nor any part thereof shall be removed from quarantine without a written permit from the Director of Agriculture.

(5) Every plant which is to be fumigated or disinfected under this regulation shall, after it is landed at the customs premises, be conveyed to the fumigatorium under customs supervision at the expense of the consignee or his agent.

(6) As soon as possible after the receipt of any imported plant or package of imported plants at the fumigatorium such plant or package shall be examined by the inspector and fumigated or disinfected or both fumigated and disinfected, as the circumstances may require.

(7) After examination and any necessary treatment, the articles shall be delivered to the consignee together with a certificate showing that they have been dealt with as required by this regulation.

(8) No person shall remove any article from the fumigatorium until he has obtained the certificate referred to in paragraph (7).

(9) The certificate referred to in paragraph (7) shall not be granted, until all fees due in respect of supervision and fumigation have been paid in such manner as the Principal Collector of Customs may direct.

(10) Fumigation or disinfection shall be carried out at the risk of the consignee, and the consignee or his agent shall be in attendance during the process of unpacking the articles for inspection, fumigation, or disinfection and of repacking them thereafter, and shall provide the labour necessary for handling the articles during such processes.

(11) Where any plants are sent to Ceylon through the post office from a place beyond Ceylon the plants shall be conveyed to the fumigatorium under the supervision of the postal authorities at the expense of the consignee or his agent and shall be examined by the inspector and dealt with as prescribed in the foregoing paragraphs.

(12) The consignee shall pay in respect of each plant or package conveyed to the fumigatorium—

(a) where it is conveyed under the supervision of the customs authorities, a supervision fee of Re. 1 for any period from 9 a.m. to 4 p.m., together with a further fee calculated at the rate of 25 cents per hour for any period between 4 p.m. and 9 p.m.; and

(b) where it is conveyed under the supervision of the postal authorities, a supervision fee of 50 cents for any period from 9 a.m. to 4 p.m., together with a further fee calculated at the rate of 25 cents per hour for any period between 4 p.m. and 9 p.m.

(13) The consignee shall, in addition to the fee specified in paragraph (12) pay a fee of 25 cents per package to cover the cost of fumigation or disinfection.

(4) Any inspector or sub-inspector may inspect any nursery in which plants are grown for sale, and may, by notice in writing served on the owner or person in charge of such nursery, order such owner or person in charge to destroy any diseased or pest-infested plant found in such nursery. Every person on whom a notice is served under this paragraph shall, unless he appeals from the order, comply with such notice within the time prescribed therein.

(5) Any person who is dissatisfied with any order issued under paragraph (4) may, within three days of the receipt of the notice communicating such order, appeal against such order to the Director of Agriculture and such Director may confirm or reverse such order or give such directions in the matter as he may deem necessary.

APPENDIX

THE PLANT PROTECTION ORDINANCE  
NOTICE UNDER REGULATION 13

1. You are hereby requested to take notice that \_\_\_\_\_ has been found to occur on \_\_\_\_\_ owned/occupied by you in \_\_\_\_\_ District, in \_\_\_\_\_ Province, and that you are required to adopt the following prescribed treatment within \_\_\_\_\_ days.

*Treatment Prescribed.*

2. If you fail to comply with this notice, \_\_\_\_\_ is authorized by law to carry out the measures ordered, and the cost of carrying out such measures shall be recovered from you under regulation 14 of the regulations in the Schedule to the Plant Protection Ordinance. In addition, you will be liable to the penalties specified in section 7 of the said Ordinance.

\_\_\_\_\_  
*Signature and designation of officer.*



GOVERNMENT OF CEYLON

LEGISLATIVE ENACTMENTS

Plant Protection Ordinance

1956 Revision

1960

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(14) Any imported plant which in the opinion of the inspector cannot be cleaned by fumigation or other treatment and which is not necessary for further observation shall, together with the packings, cases, pots or covering in which it may be packed, be destroyed at the expense of the consignee.

## PART II

5. *Notification of Pests, Diseases, and Weeds.*—The Minister shall from time to time, by notification in the Gazette, declare the pests and diseases and weeds to which the regulations contained in this Part shall apply, hereinafter in these regulations referred to as a declared pest, disease, or weed, as the case may be.

6. The owner or occupier of any plantation, estate, garden, or land upon which any declared pests, diseases, and weeds are present shall forthwith report in writing the presence of such pest, disease, or weed to the Director of Agriculture either direct or through the nearest headman. A failure so to report shall be an offence under the Ordinance, unless such person shall prove that he had no reasonable ground for suspecting the presence of such pest, disease, or weed in his plantation, estate, garden, or land.

7. In the case of a declared infested area it shall be lawful for the Director of Agriculture or any person authorized by him in writing, or for any inspector or sub-inspector, to enter at all reasonable times any plantation, estate, garden, or land whatsoever to determine whether any declared pest, disease, or weed is present. It shall be lawful for such Director of Agriculture, or person authorized by him in writing, or inspector, or sub-inspector to remove plants or any portion thereof for the purpose of further examination and inspection.

8. It shall be the duty of every owner or occupier of any plantation, estate, garden, or land to conduct or cause to be conducted the Director of Agriculture, or any person authorized by the Director of Agriculture in writing, or inspector or sub-inspector over such plantation, estate, garden, or land upon being requested to do so.

9. *Declaration of Areas Infested.*—When the Director of Agriculture shall be satisfied that any declared pest, disease, or weed is present in any plantation, estate, garden, or land, he shall, by notification in the Gazette, declare the plantation, estate, garden, or land, or the divisional revenue officer's division of the administrative district or any part thereof in which the said plantation, estate, garden, or land is situated, and such adjoining divisional revenue officers' divisions of administrative districts as he may consider necessary as an infested area.

10. *Plants not to be removed from an Infested Area.*—No weed or plant or part of plant attacked by or liable to be attacked by the pest or disease specified in the notification of an infested area shall be removed by any person other than an inspector or a sub-inspector from land within such infested area, save and except as may be permitted by the Director of Agriculture under permit in writing, and any person removing or receiving such plants shall be guilty of an offence.

11. *Declaration of Areas Free.*—Upon being satisfied that any such infested area or part thereof is no longer infested, the Director of Agriculture may, by notification in the Gazette, declare such area or part thereof to be no longer infested, and thereafter it shall cease to be an infested area.

12. *Spraying or other Treatment.*—The Director of Agriculture may, by notice in the Gazette, prescribe the manner in which weeds or plants attacked by a declared pest or disease shall be treated, and it shall be the duty of the owner or occupier of land within this defined area to cause such weeds or plants attacked by the declared pest or disease to be treated in the manner prescribed.

13. If on a visit of an inspector or sub-inspector any declared weed, pest, or disease is found to be present, he may order the weeds or affected plants to be treated in the manner prescribed. If upon a second visit after an order has been issued the inspector or sub-inspector shall find the declared weed, pest, or disease still to exist, and that no action has been taken, he shall report the matter to the Director of Agriculture or to any person authorized by the Director of Agriculture in writing or to the local agricultural committee, as the case may be, who may by notice which shall be in English, Sinhalese, and Tamil and in the form or to the effect set out in the Appendix to these regulations order the owner or occupier to treat the plants or weeds in the manner prescribed within a defined time.

14. If the owner or occupier fails or neglects to comply with such notice, the inspector or sub-inspector may enter upon the land and spray or otherwise treat the weeds or plants or destroy them at the expense of the owner or occupier, but nothing contained therein shall relieve the owner or occupier from any penalty he may have incurred by reason of his default, failure, or neglect.

15. *Service of Notice.*—A notice shall be deemed to be served on any person if it is delivered to him personally or sent through the post in a registered letter addressed to him at his last known place of abode or business, or if the notice cannot be so served, or if there be no known owner or occupier, it may be put up at some conspicuous part of such land, and it shall be not necessary in any such notice to name the owner or occupier, and a notice purporting to be signed by the Director of Agriculture or the chairman of the local agricultural committee shall be prima facie evidence that it was signed by him.

16. *Plant Nurseries.*—(1) The owner or person in charge of any nursery in which plants are grown for sale shall, within thirty days of the publication of this regulation in the Gazette, give notice to the Director of Agriculture of the existence of such nursery.

(2) Every person who intends to establish a nursery for growing plants for sale shall, at least fourteen days before the date on which he establishes such nursery, give notice to the Director of Agriculture of his intention to establish a nursery.

(3) Every person who gives notice under paragraph (1) or paragraph (2) of this regulation shall specify in such notice particulars of the plants grown or to be grown, as the case may be, in the nursery.

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## The Gazette of the Democratic Socialist Republic of Sri Lanka

EXTRA ORDINARY

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No. 165/2—MONDAY, NOVEMBER 02, 1981

(Published by Authority)

### PART I: SECTION (I)—GENERAL

#### Government Notifications

##### THE PLANT PROTECTION ORDINANCE

REGULATION made by the Minister of Agricultural Development and Research by virtue of the powers vested in him by section 9 of the Plant Protection Ordinance (Chapter 447)

Colombo 28th October, 1981.

E. L. SENANAYAKE,  
Minister of Agricultural Development and Research.

#### Regulation

The regulations set out in the Schedule to the Plant Protection Ordinance (Chapter 447) are hereby amended, by the substitution for Part I thereof, of the following new Part:—

#### PART I

1. Subject to the Provisions of the Plant Protection Ordinance, no plant shall be imported into Sri Lanka, except under the authority and in accordance with the conditions, of a Plant Importation Permit previously issued by the Director of Agriculture or by an officer of the Department of Agriculture authorised in writing by the Director for that purpose.

2. The import into Sri Lanka of the following Plants is prohibited or restricted except if imported under Regulation 14 or Regulation 15:—

- (i) any plant capable of further growth or propagation, and originating in the American tropics or in any country in which South American Leaf Blight (*Microcyclus ulei*) occurs;
- (ii) Vegetative planting material of the family *Mucaceae*, including banana, plantain and abaca;
- (iii) *Artocarpus* (Breadfruit) from areas where "Pingalap" disease is known to occur;
- (iv) *Theobroma* (Cocoa);
- (v) *Anacardium* (Cashew);
- (vi) *Citrus* (Citrus);
- (vii) *Eugenia* (Clove and related plants);
- (viii) *Coron* (Coconut and related plants);
- (ix) *Coffea* (Coffee);
- (x) *Gossypium* (cotton and related plants) with the exception of seed or baled cotton. If originating from the western hemisphere, such seed or baled cotton shall be fumigated by a method approved by the Director of Agriculture as being effective against the Mexican Boll Weevil (*Anthonomus grandis*);
- (xi) planting material of any species of forest trees, except the seed that is free of extraneous material, treated with a fungicide and fumigated;
- (xii) fruit and vegetables for consumption, from countries where fruit flies (family *Tephritidae*) not recorded in Sri Lanka are known to occur, unless the fruit and vegetables are certified by the exporting country to have been grown in an area where fruit flies are not known to exist, or that the fruit and vegetables have been treated in a manner approved by the Director of Agriculture to kill all fruitfly larvae;
- (xiii) planting material of *Arachis* (Groundnut);

- (xi) planting material of *Lactuca* (Lettuce), unless the seed has been certified by the exporting country to be free of lettuce mosaic virus ;
- (xv) planting material of *Zea mays* (Maize) except seed, from countries where *Erwinia stewartii* does not occur ;
- (xvi) *Elaeis* (Oil palm) ;
- (xvii) vegetative propagating material of *Piper nigrum* (Pepper) ;
- (xviii) vegetative propagating material of *Ananas* (Pineapple) ;
- (xix) seed tubers of *Solanum* (Potato) unless—
  - (a) from countries where black wart (*Synchytrium endobioticum*), ring rot (*Corynebacterium sepedonicum*), and potato nematode (*Heterodera rostochiensis* and *H. Pallida*) do not occur, or unless certified by the phytosanitary service of the exporting country to have been produced in areas within that country where black wart (*Synchytrium endobioticum*), ring rot (*Corynebacterium Sepedonicum*) and potato nematode (*Heterodera rostochiensis* and *H. Pallida*) have not been known to occur and which areas are separated from areas infested by these diseases by a radial distance of not less than two kilometers ; and
  - (b) the seed has been certified to have been obtained from crops free of viruses other than virus X.
- (xx) *Oryza* (Rice), except processed rice for consumption ;
- (xxi) *Hevea* (Rubber) ;
- (xxii) planting material of *Glycine max.* (Soyabean) ;
- (xxiii) vegetative propagating material of *Saccharum* (Sugar cane) ;
- (xxiv) vegetative propagating material of *Helianthus* (Sunflower and related plants) ;
- (xxv) planting material of *Ipomea* (Sweet Potato) ;
- (xxvi) planting material belonging to the family (tare and related plants) ;
- (xxvii) planting material of *Camellia* (Tea and related plants) ;
- (xxviii) plants material of *Nicotiana* (Tobacco), except where the seed is imported under a Plant Importation Permit and accompanied by a phytosanitary certificate and certificate of field inspection, and also treated by immersion for 15 minutes in a 0.1 solution of silver nitrate ;
- (xxix) planting material of *Lycopersicum* (Tomato), unless the seed has been acid extracted or otherwise treated to prevent transmission of seed-borne diseases ;
- (xxx) *Spartina* (Rice Grass) ;
- (xxxi) *Robus* (Blackberry) ;
- (xxxii) *Hemeria* (Cape Tulips) ;
- (xxxiii) planting material of *Manihot* (Cassava) ;
- (xxxiv) any aquatic plant ;
- (xxxv) Vegetative planting material of fruit trees belonging to the family Rosaceae (including Apples and Pears) ;
- (xxxvi) planting material of the family Vitaceae (including Grapes) ;
- (xxxvii) Vegetative planting material of *Fragaria* (Strawberry) ;
- (xxxviii) Vegetative planting material of *Mangifera* (Mango).

3. Any importation not conforming to the requirements of regulation 2 may be destroyed or returned to the sender.

4. Notwithstanding the provisions of regulation 1, small quantities of plants which are not specifically prohibited by regulation 2, may be imported without a Plant Importation Permit, and without restriction, except that such material is liable to inspection by the Director of Agriculture or by an Inspector or Sub-Inspector and to treatment or destruction in the event of it being found infected, contaminated or infested with any dangerous pest, weed or disease.

5. All packing materials as well as accompanying or adhering media shall be subject to the provisions of the Plant Protection Ordinance and regulations made thereunder as if they themselves were plants ;

Provided that no packing material or accompanying or adhering media shall contain any soil.

6. No plants shall be imported into Sri Lanka except through one of the following ports or places of entry :—

- (a) the port of Colombo ;
- (b) the port of Trincomalee ;
- (c) the port of Talaimannar ;
- (d) the port of Galle ;
- (e) the port of Kankesanthurai ;
- (f) the air-port of Katunayake ;
- (g) the air-port of Palaly.

7. An application for a Plant Importation Permit, shall state—

- (a) the full name and address of the applicant ;
- (b) the name and address of the person, firm or organization, from whom the plants are to be obtained ;
- (c) the scientific names and quantities of the plants to be imported ;
- (d) the means of importation (e. g., air-freight, sea-freight, air mail, surface mail) ;
- (e) the port of entry ; and
- (f) the approximate date or dates of entry into Sri Lanka.

8. All plants imported into Sri Lanka, shall be examined by an Inspector or Sub-Inspector ;

Provided that, where the Inspector is satisfied that such plants are being imported for consumption, processing, manufacture or for any purpose other than propagation and the material is not one that is prohibited or restricted under regulation 2 hereto he may dispense with such inspection.

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9. It shall be lawful for the Director of Agriculture or an Inspector or Sub-Inspector, to enter at all reasonable hours into any building or conveyance (including ships, boats, aeroplanes and motor vehicles) where any plant disease, pest or weed may reasonably be suspected to exist, to inspect and examine that building or conveyance, or any goods, stores, furnishings or cargo within that building or conveyance, for the purpose of determining if any such plant disease, pest or weed exists therein or thereon.

10. An Inspector or Sub-Inspector may, if he is satisfied that any plant or planting or vegetative material being imported may be infested or infected or in any way carrying a disease, pest or weed, and whether or not such plant, or planting or vegetative material, has been imported in conformity with the Plant Protection Ordinance and regulations made thereunder—

- (a) authorize or carry out its disinfection or treatment ;
- (b) authorize or carry out its immediate destruction ;
- (c) direct it to be taken out of the country within a specified period ; or
- (d) direct it to be detained in quarantine or in any other place approved by the Director of Agriculture, for a period not exceeding twenty-four months ;

11. (a) Any package or parcel containing any plant or planting or vegetative material, shall be delivered to an Inspector or sub-inspector by the Principal Collector of Customs or by the Postmaster-General, as the case may be.

(b) After an examination and treatment, as provided in regulation 10, the package or parcel containing the plant, or planting or vegetative material shall (except where such parcel and its contents has been refused entry under the instruction of an Inspector or sub-inspector) be returned to the Collector of Customs or the Postmaster-General, as the case may be.

12. (1) Plants, or planting or vegetative materials which are prohibited, or whose importation is restricted under the provisions of the Plant Protection Ordinance or regulations made thereunder, if temporarily brought into Sri Lanka or its territorial waters, shall be subject to such inspection, treatment or other disposition as may be deemed necessary by the Director of Agriculture or an Inspector or Sub-Inspector.

(2) The provisions of paragraph (1) shall also apply to carriers including ships and air-crafts, their stores, furnishings, dunnage etc., while such carriers are in Sri Lanka or in the territorial waters of Sri Lanka.

13. No person shall import into Sri Lanka any living insects, birds or other animals in any stage of their development, or any virus, bacteria or fungus cultures, except under the authority of an import permit issued by the Director of Agriculture and in accordance with the conditions laid down in that permit :

Provided that this regulation shall not apply to animals generally covered by animal quarantine rules.

14. Nothing in the Plant Protection Ordinance or in any regulation made thereunder shall prevent the Government, with notice in writing to the Director of Agriculture, from importing into Sri Lanka for scientific purposes and under adequate safeguards specified in writing by the Director of Agriculture, small quantities of plants the entry of which is prohibited or restricted under such Ordinance or Regulations.

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15. (a) Where any plants of the genus *Hevea* are imported into Sri Lanka under regulation 14, such plants shall, if so imported—

- (i) from outside the Region, have been disinfected and freed of any soil in the country of origin in a manner acceptable to the Director of Agriculture and also freed from pests and diseases, and each consignment of such plants shall be accompanied by a certificate to the effect that the afore mentioned requirements have been fulfilled and signed by an appropriate authority of the country of origin and each such consignment shall be addressed to and received by the Director of Agriculture ; or
  - (ii) from the American tropics or from any other country in which South American Leaf Blight is present and so as to be capable of further growth or propagation (excluding the seed), in addition to the requirements of paragraph (i), be grown for a period considered adequate by the Director of Agriculture at a plant quarantine station for *Hevea* at a place approved by such Director and situated outside the Region, the American tropics and any other country in which South American Leaf Blight is present. Each consignment of such plants shall be accompanied by a certificate signed by the officer-in-charge of such quarantine station to the effect that the above requirements have been fulfilled and that the plant or plants are free from pests and diseases ; or
  - (iii) in the form of seed and from the American tropics or from any other country in which South American Leaf Blight is present, in addition to the requirements of paragraph (i), have been examined and again disinfected at a place approved by the Director of Agriculture, and situated outside the Region, the American tropics, and any other country in which South American Leaf Blight is present, and the packing has been replaced with new packing materials placed in new containers.
- Each consignment of such seed shall be accompanied by a certificate signed by the officer-in-charge of such examination and disinfecting to the effect that the above requirements have been fulfilled ; or
- (iv) so as to be incapable of further growth or propagation, in addition to the requirements of paragraph (i), have been sterilized in the country of origin by a method approved by the Director of Agriculture.

(b) The Director of Agriculture shall ensure that any plants of the genus *Hevea*, imported into Sri Lanka for further growth or propagation, are grown under his supervision for a period considered by such Director to be adequate to enable him to determine whether such plants are free from all pests and diseases before they are released.

16. Any person importing plants under these regulations shall pay the costs of treatment (including disinfection) under regulation 10, regulation 11 or regulation 12, at the following rates :—

Services	Charges
1. Fumigation or other treatment of packages less than 0.5 cubic metre in volume	Rs. 10 package.
2. Fumigation or other treatment of packages more than 0.5 cubic metre in volume	Rs. 25 per cubic metre of total consignment.
3. Holding of plants in post-entry quarantine	Rs. 1 per plant per month held in post-entry quarantine.
4. Issue of phytosanitary certificate for goods for export	Rs. 10 per certificate.

17. No compensation shall be payable in respect of any package, parcel, plant or any planting or vegetative material destroyed or damaged in any inspection or treatment carried out under the Plant Protection Ordinance, or any regulation made thereunder.

18. (1) On a request made by an exporter, the Director of Agriculture shall issue a phytosanitary certificate in respect of a consignment of plants intended for export to a foreign country and offered for inspection:

Provided that the Director or any officer authorized in writing by him in that behalf is satisfied that the consignment is substantially free from pests and diseases and also that it conforms to the plant quarantine laws of the importing country;

Provided further, that where the Director is not so satisfied, he may refuse to issue a phytosanitary certificate or may require any treatment to be carried out as a pre-requisite for the issue of such certificate.

(2) The importer shall pay the costs of inspection, treatment and issue of a phytosanitary certificate at the rate set out in regulation 16.

19. In these regulations, unless the context otherwise requires—

"Inspector" or "Sub-Inspector" means an officer appointed as such under the Plant Protection Ordinance;

"Region" means the South-East Asia and Pacific Region as defined in the Plant Protection Agreement for South-East Asia and the Pacific Region; and

"South American Leaf Blight" means, the plant disease caused by the fungus *Mycrocylus ulmi*.

## DEPARTMENT OF AGRICULTURE

### REVISED POLICY ON IMPORT OF SEEDS AND PLANTING MATERIALS TO SRI LANKA

The Department of Agriculture (DOA) has revised its policy on the import of plants and planting materials, consistent with safety to agriculture and the environment. The schedule appended below classifies some of the important materials into three categories, unrestricted, restricted and prohibited.

A permit issued by the DOA is required for the import of all plant materials. Importers will have to strictly comply with the plant quarantine requirements that are being enforced.

The import of "restricted" plants and planting materials (including seeds) will be permitted subject to a pest risk analysis and plant quarantine requirements.

Such imported planting material should be placed under post-entry quarantine with the importer or in the facilities of the DOA. The facilities with the importer including net houses, screen houses, trained manpower etc., should conform to the requirements stipulated by the DOA. Such plants will be kept under surveillance for a period of time, as may be necessary, prior to release or destruction if any serious pest or disease that may be hazardous to the country is detected.

Permits to import prohibited plants will be given only to/through appropriate research institutes of Sri Lanka.

For further particulars contact: Deputy Director of Agriculture (Seed Certification and Plant Protection), P.O. Box 49, Colombo, Peradeniya.

Tel: 08-88076, 08-88077.

Director of Agriculture,

Peradeniya.

17.12.1991

#### SCHEDULE VEGETABLE SEEDS OF WHICH IMPORTATION IS PERMITTED WITHOUT RESTRICTION ON QUANTITY:

1. Beet (Special plant health requirement: Seeds have to be certified as decorticated and as originating from an area free of beet cyst nematode, *Heterodera schachtii* and downy mildew, *Peronospora farinosa*).
2. Brinjal
3. Broccoli
4. Brussels sprout
5. Cabbage
6. Capsicum
7. Carrot
8. Cauliflower
9. Celery
10. Cucumber
11. Knel Khol
12. Large Onions - (Special plant health requirement: Seeds have to be certified to be free from *Aceria tulipae*, *Ditylenchus dipsaci*, *Ditylenchus destructor*, *Mycosphaerella schoenoprasii*, *Peronospora destructor*, *Puccinia allii*, *Puccinia asparagi*, *Synchytrium endobioticum*, *Urocystis cepulae*, *Ustilago allii*, *Verticillium albo-atrum* and Onion yellow dwarf virus).
13. Leeks
14. Lettuce - (Special plant health requirement: Seeds have to be certified to be free of lettuce mosaic virus. This virus has been reported to occur in Argentina, Australia, Austria, Belgium, Bermuda, Brazil, Canada, Chile, China, Denmark, France, Germany, Ghana, Great Britain, Hungary, India, Israel, Italy, Japan, Malawi, Mauritius, Mexico, The Netherlands, New Zealand, Portugal, Romania, Sierra Leone, Switzerland, Syria, Tanzania, Uruguay, USA, Zambia, Zimbabwe).
15. Melons
16. Okra
17. Radish
18. Spinach
19. Squash
20. Turnip
21. Beans (Quantities subject to availability of local stuff)

#### PLANTS AND PLANT PRODUCTS OF WHICH THE IMPORTATION IS ONLY PERMITTED WHEN THE SPECIAL REQUIREMENTS ARE FULFILLED

Description of the Permitted Item	Special Requirements
01. Seeds of Annona L. (Custard apple, Bullock's heart, Cherimoya, Soursop and Sweetisop)	Permitted if certified to be free from <i>Cercospora</i> spp., <i>Elaeinoe annonae</i> , <i>Aecidium annonae</i> & <i>Phakopsora cherimollae</i> .
02. Plants of family Araceae Juss. other than edible aroids.	Permitted as in-vitro cultures. Culture medium should not contain charcoal or antibiotics. Cultures have to be certified to be free from Viruses of Alomae disease complex, Booboo virus, Dasheen mosaic virus and tall small bacilliform virus.
03. seeds of <i>Asparagus officinalis</i> L.	Permitted if certified to be free from Asparagus latent virus, <i>Cercospora asparagi</i> , <i>Ditylenchus dipsaci</i> , <i>Erwinia carotovora</i> , <i>Helicotylenchus nestus</i> , <i>Puccinia asparagi</i> , Tobacco etiyak flavivirus and <i>Trichodora chinensis</i> .
04. <i>Eugenia</i> L.	Permitted. I. either as seed II. or as recently rooted cuttings grown on a soil-less medium and if certified to be free from Aster yellow, Beet curly top virus, Tomato spotted wilt virus, <i>Verticillium albo-atrum</i> and <i>Verticillium dahliae</i> .
05. Plants of family Bromeliaceae Juss. other than <i>Ananas</i> Mill.	( <i>Ananas</i> is prohibited). Other bromeliads are allowed as in-vitro cultures. Culture medium should not contain charcoal or antibiotics.
06. <i>Croton</i> L. <i>Codiaeum</i> A. Juss.	Permitted. I. Only as unrooted cuttings and II. if certified free from <i>Phymatotrichum omnivorum</i>
07. Unrooted cuttings (stem) of plants of members of family Cupressaceae Bertl. imported for decoration purposes.	Permitted. I. only during November and December months. II. if certified to be free from <i>Seitidium cardinale</i> , <i>Cryptoctelia cupressell</i> , <i>Cercospora sequoiae</i> , <i>Gymnosporangium</i> spp., <i>Kabothina thujae</i> and <i>Kritbia thujina</i> .
08. <i>Dracaena</i> Vand. et L.	Permitted if certified to be free from <i>Coriolythium concentricum</i> , <i>Lophodermium</i> spp., <i>Heterocyclus parvum</i> and <i>Hoplostictum bradyi</i> .
09. <i>Ficus</i> L.	Permitted only as in-vitro cultures. Culture medium should not contain antibiotics or charcoal.
10. Fresh fruits, all seeds with adhering pulp and fresh vegetables.	I. Importation permitted only through seaport of Colombo II. Permitted only from the following countries: Tasmania (in Australia), New Zealand, U.S.A. (Refer special conditions applicable to import of fresh fruits into Sri Lanka)
11. <i>Hibiscus rosa-sinensis</i> L.	Permitted, as unrooted cuttings and, I certified to be free from Beet yellow virus, Cotton leaf...

#### PLANTS AND PLANT PRODUCTS OF WHICH THE IMPORTATION IS PROHIBITED:

DESCRIPTION Scientific Name	Common Name	From localities/ Countries

11. Any plant or plant material with soil All  
 12. Plants, Planting Materials, Plant Products and Seeds Tropical America  
 13. All aquatic plants All  
 14. Plants, Planting materials and Plant Products of forest trees All

(B)

All plants and planting materials (including seeds) of the following:

- |    |   |  |  |
|----|---|--|--|
| 05 | <i>Alocasia</i> (Schott.) G. Don                            | Taro   | All  |
| 06 | <i>Anacardium</i> L.  | Cashew                                       | All  |
| 07 | <i>Arachis</i> L.   | Ground nut                                   | All  |
| 08 | <i>Artocarpus</i> J.R. & G. Forst.                          | Breadfruit                                   | All  |
| 09 | <i>Camellia</i> L. (= <i>Thea</i> L.)                       | Tea  | All  |
| 10 | <i>Carica</i> L.  | Papaya                                       | Angola, Cameroon, Egypt, Ivory Coast, Hawaii, South Africa, Tanzania, Zaire, India, Sudan, West Indies and USA |
|    |   | Papaw  |  |
| 11 | Citrus L.   | Lime, Lemon, Orange, Citron, Grapefruit etc. | All  |
| 12 | <i>Coccoloba</i> L.   | Coconut                                      | All  |
| 13 | <i>Coffea</i> L.  | Coffee                                       | All  |
| 14 | <i>Colocasia</i> Schott.                                    | Taro, Dasheen, Eddoes.                       | All  |
|    | Cocoyam   |  |  |
| 15 | <i>Dioscorea</i> L.   | Yam  | All  |
| 16 | <i>Elaeis</i> Jacq.   | Oil Palm                                     | All  |
| 17 | <i>Eugenia</i> L. (= <i>Syzygium</i> Gaertn.)               | Clove & Others                               | All  |
| 18 | <i>Glycine max</i> (L.) Merr.                               | Soyabean                                     | All  |
| 19 | <i>Gossypium</i> L.   | Cotton                                       | Western Hemisphere   |
| 20 | Family Gramineae Juss                                       |  | All  |
| 21 | <i>Helianthus</i> L.  | Sunflower                                    | All  |
| 22 | <i>Hevea</i> Aubl.  | Rubber, Para rubber                          | All  |
| 23 | <i>Homeria</i> Vent.  | Cape tulips                                  | All  |
| 24 | <i>Ipomoea</i> L.   | Sweet potato & others                        | All  |
| 25 | <i>Manihot</i> Mill.  | Cassava, tapioca                             | All  |
| 26 | Family Myrtaceae Juss.                                      | Eucalyptus, Guava, Clove etc.                | All  |
| 27 | <i>Nicotiana</i> L.   | Tobacco and others                           | All  |
| 28 | <i>Oryza</i> L.   | Rice (Paddy)                                 | All  |
| 29 | Family Palmae Juss.   | All palms                                    | All  |
| 30 | <i>Parthenium hysterophorus</i> L.                          | Congress weed white top                      | All  |
| 31 | <i>Rubus</i> L.   | Blackberry                                   | All  |
| 32 | <i>Saccharum</i> L.   | Sugarcane                                    | All  |
| 33 | <i>Spartina</i> Schreb.                                     | Rye grass                                    | All  |
| 34 | <i>Striga</i> Lour.   | Witchweed and others                         | All  |
| 35 | <i>Syzygium</i> Gaertn. (= <i>Eugenia</i> L.)               | Clove & others                               | All  |
| 36 | <i>Theobroma</i> L.   | Cacao  | All  |
| 37 | <i>Vigna sinensis</i> Endl. (= <i>Vigna unguiculata</i> L.) | Cowpeas & others                             | All  |
| 38 | Family Vitaceae Juss. (= Family Vitaceae Juss.)             | Grapes & others                              | All  |
| 39 | <i>Xanthosoma</i> Schott.                                   | Dasheen                                      | All  |
| C) | Vegetative planting materials of the following:             |  |  |
| 40 | <i>Ananas</i> Mill.   | Pineapple                                    | All  |
| 41 | <i>Fragaria</i> L.  | Strawberry                                   | All  |
| 42 | <i>Mangifera</i> L.   | Mango  | All  |
| 43 | Family Musaceae Juss.                                       | Abaca, Banana, Plantain etc.                 | All  |
| 44 | <i>Piper nigrum</i> L.                                      | Pepper                                       | All  |
| 45 | Family Rosaceae Juss.                                       | Apple, Pears etc.                            | All  |

12. Seeds of Tomato (*Lycopersicon esculentum* Mill.)

13. Plants of family Marantaceae Petersen (eg. *Maranta* L. *Calathea* G.F.W. Mey, *Ctenanthe* Eichl. etc.)

14. Plant of family Orchidaceae Juss.

15. Rose plants (*Rosa* spp.)

16. *Saintpaulia* H. Wendl.

17. Seed tubers of potato *Solanum tuberosum* L.

18. Seeds of maize or corn (*Zea mays* L.)

geminivirus, Oryza mosaic tymovirus, *Pellicularia koleroa*, *Phymatotrichum omnivorum*, *Verticillium albo-atrum* and *Verticillium dahliae*.

Permitted if acid extracted or subjected to one of the following treatments

I. Hot water treatment at 55 C for 25 minutes, then soaked in 10% trisodium phosphate solution for 60 minutes and dried.

II. Soaked for 5 minutes in acidulated mercuric chloride (1% of mercuric chloride in 2.5 ml concentrated hydrochloric acid added to 20 l water), then dipped in skimmed milk solution to neutralize acid and dried.

Permitted only as in vitro cultures. Culture medium should not contain charcoal or antibiotics. Cultures have to be certified to be free from *Abaca* mosaic virus.

Seeds, seedlings, meristem cultures grown on sterile media or composts containing a medium without soil and plant debris are permitted.

Permitted.

I. only as unrooted cuttings and

II. If certified to be free from *Cytoporella umbrina*, *Verticillium albo-atrum*, *Verticillium dahliae*, *Rosettes virus*, *rose mosaic virus*, *Rose wilt virus*, *Apple mosaic virus* and *Peach ring spot virus*.

Permitted.

I. either as seed,

II. or as recently rooted cuttings grown on a soilless medium and certified to be free from *Phymatotrichum omnivorum*, *Verticillium albo-atrum* and *Verticillium dahliae*.

Permission will be granted under exceptional conditions as determined by the Secretary, Ministry of Agriculture, Development and Research. Special requirements for entry will be stated in the permit issued by the Director of Agriculture.

Permitted (Certified).

I. to be originated from countries where *Ervulia stewartii* does not occur. (This organism has been reported to occur in Brazil, Canada, China, Costa Rica, Guyana, Italy, Mexico, Peru, Poland, Puerto Rico, Romania, Switzerland, Thailand, USA, USSR, Vietnam, Yugoslavia)

II. to be free from *Claviceps gigantea*, *Maize streak virus*, *Diatraea* spp., *Sesamia cretica*, *Heliothis zea*, *Sesamia calamitella*, *Cryptophlebia leucotreta*, *Corynebacterium nebraskense*, *Corn stunt virus*, *Peronosclerotpora philippinensis*, *Scie ospora philippinensis*, *Maize dwarf mosaic virus*, *Maize stripe disease virus*, *Protephanus truncatus*.

## ANNEX A

### Definitions

For the purposes of this agreement, the following definitions shall apply:

1. Sanitary or phytosanitary measure - Any measure designed and applied to protect human, animal or plant life or health from risks arising from or created for agricultural, fishery or forestry products.

or

Sanitary or phytosanitary measure - Any measure intended to control or prevent the movement across national boundaries of pests, diseases, disease-causing organisms and disease-carrying organisms which can adversely affect human, animal or plant life or health or otherwise cause damage, together with measures intended to control or prevent the use of additives and the presence of contaminants in foods and beverages in order to protect human health.

Note 1 Sanitary and phytosanitary measures shall cover all laws, decrees, regulations, requirements and procedures related to human, animal or plant life or health including, inter alia, end product criteria; processing and production methods; testing, inspection, certification and approval procedures; quarantine treatments; provisions on relevant statistical methods, sampling procedures and methods of risk assessment; packaging and labelling requirements directly related to food safety; [measures for the protection of animal welfare and of the environment, as well as consumer interests and concerns]. Measures relating, inter alia, to quality assurance, composition and grading, [consumer preferences, consumer information, animal welfare] and ethical and moral considerations are not considered to be sanitary or phytosanitary measures for the purposes of this agreement.

Note 2 Sanitary and phytosanitary measures may be applied by an importing contracting party to protect human, animal or plant life or health within its territory, or by an exporting contracting party for similar purpose within its territory or during transport to another contracting party of a commodity in trade.

Note 3 Sanitary and phytosanitary measures may intentionally or incidentally protect the natural and the built environment by controlling or preventing the movement across national boundaries of pests, diseases and organisms which may cause or carry disease.

2. Sanitary and phytosanitary regulation - Sanitary and phytosanitary measure such as law, decree and ordinance applicable generally.

Note - The definition thus excludes individual permits and approvals based on regulations.

3. Control, inspection and approval procedure - Any procedure to check and ensure the fulfilment of sanitary or phytosanitary requirements or measures.

Note - Control and inspection procedures include inter alia procedures for sampling, testing, inspection, certification and approval.

4. Harmonization - The establishment, recognition and application of common sanitary and phytosanitary requirements or measures by different contracting parties.

5. International standards, guidelines and recommendations

- for food safety, the standards, recommendations and guidelines of the Codex Alimentarius Commission relating to food additives, veterinary drug and pesticide residues, environmental contaminants, methods of analysis and sampling, and codes and guidelines of hygienic practice;
- for animal health, the standards, recommendations and guidelines developed under the auspices of the International Office of Epizootics;
- for plant health, the standards, recommendations and guidelines developed in the framework of the International Plant Protection Convention by organizations engaged in these activities;

and, for matters not covered by the above organizations, appropriate standards, recommendations and guidelines promulgated by other relevant international organizations [open to full participation by all contracting parties] [and regional organizations].

6. Risk assessment - The evaluation of the likelihood of entry, establishment and spread of pests, diseases or organisms within the territory of a contracting party and the relevant potential biological and economic consequences, or the evaluation of the potential adverse effects on human health of additives or contaminants in food and beverages.

or

Risk assessment - The qualitative and quantitative evaluation of the importance to human, animal or plant life or health of disease-causing organisms, pests, and chemical substances.

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## APPENDIX 14

### REFERENCES

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