

## Plant Import Legislation in Ceylon

BY

M. P. D. PINTO

**T**HE subject of insect pests has assumed such great importance that there is hardly any civilized country which has failed to take very serious notice of the "insect menace" or the "dominance of insects" in the world today. Insects inflict colossal losses annually. As pests of cultivated plants they are a perpetual menace and are a very important contributory factor for the shortage of food which is one of the gravest problems now facing Ceylon and the rest of the world.

Similarly, tremendous damage to cultivated crops is caused by plant diseases such as the notorious coffee leaf disease which ruined a flourishing coffee industry in the Island causing a loss of £17,000,000. Loss is also caused by weeds which not only reduce crop yields but also seriously interfere with agricultural or irrigational operations. They also harbour pests and diseases.

In the fight against pests and diseases of cultivated plants and of weeds it has long been recognized that the assistance of the law must be invoked and there are probably very few countries, if any, today that have not adopted some form of legislation to that end. In Ceylon legislation against pests and diseases of cultivated plants was first introduced in 1901. Since then various amendments to that legislative enactment have taken place.

At present the regulations regarding the control of pests have been issued almost entirely under the Plant Protection Ordinance, No. 10 of 1924 which was enacted "to make better provision against the introduction into Ceylon and against the spread therein of weeds, and pests, and diseases injurious to, or destructive of, plants and for the sanitation of plants in Ceylon."

This Ordinance thus makes provision not only for the control of serious pests already occurring in the Island but also for the prevention of introduction into the country of insect pests, diseases, and weeds from outside. To prevent the importation of foreign pests under this Ordinance regulations have been framed from time to time prohibiting or restricting the import of plant matter and insects into the Island.

The need for such import prohibitions and restrictions is obvious. It may, perhaps, be of interest to mention that some, if not most, of the most destructive pests, diseases and weeds in the country are those that have been inadvertently imported from outside. Blister blight of tea, which has raised grave problems in the tea industry, is a recent example.

Each of these foreign pests is responsible annually for enormous losses ; and will continue to be so indefinitely. Once established they, like the poor, will always remain with us. It is simple enough to imagine what the country would save each year, and how much more food and raw material would be available for our use, if, for example, the bunchy-top disease of plantains, or the coffee berry-borer, or the Kalutara snail, or the blister blight of tea or the weed water hyacinth, or other noxious pests could have been prevented from gaining entry into the Island.

Beside those occurring here, there are numerous other important insect pests and fungus, bacterial or virus diseases in other countries which gaze hungrily at our plantations, fields and orchards. If they happen to be introduced and become established agriculture would be gravely affected ; each would cause similar or more serious loss as those which have unfortunately gained admittance into the country. One such example of a pest is the Mediterranean fruit-fly whose introduction into the Island it has been possible to avert by the narrowest margin.

The Mediterranean fruit-fly is, perhaps, the most destructive known pest of fruits and some vegetables, and is a serious menace in almost all the countries where it occurs. If by some misfortune it gains admittance and establishes itself in the Island its eradication would be economically impracticable as is the case with the other unwelcome introductions in the past. It would represent a major problem in insect control, parallel to the blister blight of tea, and remain to inflict enormous losses annually not only to growers of fruits but also to peasant cultivators since such vegetables as gourds, cucumber and brinjal are also liable to serious attacks.

This pest created a sensation in the United States when it was discovered for the first time in 1929 in Florida. Realizing that the best protection the State could have when invaded by the pest was its extermination a vigorous campaign was instituted immediately on the discovery of the fly and before it could spread when eradication would become almost impossible. Although some were sceptical of its successful eradication even at that initial stage, the campaign proved most effective.

Apart from the inconvenience due to the quarantine and the loss fruit-growers and others were subjected to, the Federal Government alone expended in less than two years £1,256,000 in this venture. This money was well invested and had been the means of saving a great deal annually not only for the fruit-growers but also for the nation.

The growing importance of insect pest and plant disease problems has constantly increased the need for efficient plant pest inspection and quarantine service. The realization that hundreds of noxious foreign pests and diseases have not been introduced and established provides convincing evidence that all feasible efforts should be made to maintain an effective foreign plant quarantine system. It is hardly necessary to point out that the amount saved in preventing the establishment of one pest or disease having the potentialities of those imported pests mentioned above would be far in excess of that spent for an all-time efficient foreign plant quarantine organization. .

The maintenance of the plant quarantine work of the Island entails the careful and thorough examination of imported plant material and the large-scale fumigation and other treatment, where necessary, and carrying out of other measures for the purpose of preventing introduction of dangerous pests. It also includes the issue of health certificates, after examination and fumigation, if necessary, of certain plant matter prior to export.

Practically all the civilized countries of the world are realizing more and more the utmost importance of preventing the addition of foreign pests to those already occurring in a country. The possibility of introducing inadvertently undesirable pests into a country has become much greater than ever before. With the recent expansion of commercial oceanic and air traffic and the very rapid transport which permits live insects to be readily carried to various countries from distant and hitherto considered remote places the problem of preventing the dissemination of plant pests and diseases has assumed international importance.

#### SUMMARY OF PLANT IMPORT REGULATIONS

For the purpose of preventing the introduction into Ceylon of weeds, and of pests and diseases of cultivated plants, various regulations have been framed from time to time under the Plant Protection Ordinance, No. 10 of 1924, regarding the import of plants and insects into the Island. These regulations may be added to, amended or revoked as and when necessary by notification in the *Ceylon Government Gazette*.

The legislation summarized below provides for the examination of all imported living plants or parts of plants, for their fumigation, or disinfection when necessary and if expedient their destruction. It also provides for the quarantine of imported plants should this be considered necessary. Provision is made for prohibition of importation of certain plant material while some plants are permitted entry only subject to special conditions. The following is a summary of the regulations at present in force.

*Prohibitions.*—The regulations completely prohibit the importation into the Island of any seed or plant from the American Tropics or any country where the South American leaf disease of *Hevea* rubber occurs. They also prohibit the importation of coconut plants; sweet potato tubers from Africa; any seed or plant of any species of *Helianthus* grown in the Western Hemisphere; any sugarcane sett other than by the Director of Agriculture; any aquatic plant; and any of the plants known as (i) Rice grass (*Spartina townsendii*), (ii) Black berry (*Rubus fruticosus*), or (iii) Cape tulips (*Homeria collina* and *H. miniata*). Importation of tomato seed is also prohibited except from India and except under a permit in writing from the Director of Agriculture.

Import of plants packed with soil is prohibited. It is unlawful for any person other than the Director of Agriculture to 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; and so it is to land at any port any refuse or sweepings containing vegetable matter from any ship or aircraft which has arrived from any place outside Ceylon.

The need for the prohibition of importation of coconut plants is mainly to prevent entry into Ceylon along with these plants of foreign insects such as beetles, caterpillars and scale insects from other countries where several of them are known to cause extensive damage to coconut palms. Similarly to safeguard the country from the introduction of virulent virus diseases not known to occur here the importation of sweet potato tubers from Africa and any seed or plant of *Helianthus*, including sunflower, from the Western Hemisphere is prohibited. Importation, other than by the Director of Agriculture, of sugarcane setts is not permitted to prevent the accidental importation of mosaic disease. Such setts can also be an excellent channel for the carriage of sugarcane-borers and leaf-hoppers unknown in this country.

A very serious bacterial disease of tomato, the Grand Rapids disease also known as Bacterial Canker of tomato, has been recorded in various countries and to prevent the introduction of this seed-borne disease importation of tomato seed into Ceylon has been prohibited. Since this disease has so far not been recorded in India obtaining of seed from this country is permitted subject, however, to such conditions as the Director of Agriculture may specify.

The two serious water weeds in Ceylon—the Water Hyacinth and the Water Fern—are both plants introduced from outside. To prevent the further introduction of such weeds which can be a menace to irrigation systems importation of aquatic plants is prohibited. Similarly the importation of Rice grass, Black berry and Cape tulips is prohibited to prevent introduction of these foreign plants which have become very serious weed pests in countries where they have been introduced for ornamental and other purposes.

*Restrictions.*—The following imports are conditionally prohibited. Importation into Ceylon is permitted only under a permit issued by the Director of Agriculture or by an authorized officer of the Department of Agriculture who shall specify the terms and conditions under which such licence is issued.

A permit in writing from the Director of Agriculture should previously be obtained to import any plant or part of a plant by aircraft; a living specimen of any insect or invertebrate animal; any seed or plant of any species of *Hevea* rubber; any seed (other than cured seed) of cacao; any seed or unginced cotton or raw ginned cotton of any species of *Gossypium* grown in the Western Hemisphere; any living part of the cassava or manioc plant; and any citrus plant of any species. A permit to import citrus plants will be issued only if the Director of Agriculture is satisfied that the country from which the plants are to be imported is free from any virus disease of citrus plants.

A licence from the Director of Agriculture is also required to import into or land in Ceylon fresh fruits. It is unlawful for a person to land any fruit unless he has satisfied the Principal Collector of Customs that such fruit was grown in and consigned from the country specified in the licence. The Director of Agriculture will not issue a licence to import fruits from any country in which the Mediterranean fruit-fly or any other pest of fruits which has not become established in Ceylon is known or suspected to exist. A

licence may, however, be issued if the Director of Agriculture is satisfied that either before export from such country or during transit to Ceylon that the fruit is so treated as to ensure that such pest, in all its stages, is effectively destroyed.

Although the importation of rubber seeds and plants from countries where the serious South American leaf disease of *Hevea* exists is completely prohibited importation from other countries is permitted under conditions imposed by the Director of Agriculture. The need for such restrictions is to prevent the introduction of other rubber diseases not occurring in Ceylon. Similarly it has been considered desirable to restrict the import of plants and seeds of cacao to prevent the introduction of diseases of cacao unknown here particularly of the Witches' Broom, and of the Swollen Shoot virus disease which has caused tremendous loss in West Africa.

The fact that citrus diseases, which in some cases are known to be of the nature of viruses, have been recorded in certain countries has been the reason to introduce legislation to prevent diseases of this complex being introduced with citrus plants into Ceylon. And the importation of cassava has been restricted because this plant is subject to a serious virus disease unknown in Ceylon. The object in prohibiting the importation of cotton seed or unginmed cotton grown in the Western Hemisphere except under a licence from the Director of Agriculture is to eliminate the risk of introduction of such destructive pests as the notorious Mexican cotton boll weevil now present in most of the cotton-growing countries of the West.

*Ports of Entry.*—It should be mentioned also that under the existing regulations importation of plants is permitted only through the ports of Colombo and Talaimannar or the airport of Colombo (Ratmalana) or the Royal Air Force Station, Negombo.

*Inspection, Fumigation, or Disinfection.*—All living imported plants or parts of plants (except potatoes, onions, turmeric, culinary seed, edible vegetables, and the seed of such vegetables other than of tomato, and the seed of any ornamental plant) are subjected to examination before passing out of the Customs. They together with the packing cases, pots or coverings in which such plants may be packed are conveyed by Customs or Postal authorities to the Inspector-in-charge of the Colombo Fumigatorium who shall examine them and, where necessary, ascertain that the terms and conditions specified in the licences issued by the Director of Agriculture have been complied with.

Every plant which on inspection is found or suspected to be infected with any pest or disease will be subjected to fumigation and/or disinfection at the risk and expense of the consignee or his agent. The consignee or his agent should be present during the process of unpacking the articles for inspection, fumigation or disinfection and of repacking thereafter. He also should provide the labour necessary for handling the articles.

*Quarantine and Destruction.*—If after inspection it is considered necessary, the Director of Agriculture is empowered to order that any plant so inspected be grown for a period of quarantine in special nurseries provided

or approved by him. These plants will be grown at the risk of the consignee and are not to be removed without a written permit from the Director of Agriculture.

Any imported plant or part of plant which in the judgment of the Inspector-in-charge of the Colombo Fumigatorium cannot be cleaned by fumigation or other treatment and which is not necessary for further observation will be destroyed together with the packings or covering in which it may be packed. Such destruction will be carried out at the expense of the consignee.

The above orders and regulations no doubt cause a certain amount of inconvenience, or even loss, to the general public. In view of what has been stated earlier they will, however, understand and appreciate the imperative need for the introduction of such legislation. The establishment of a number of dangerous pests, diseases and weeds of foreign origin already in the country, each causing very serious loss annually, should convince that increased emphasis must be placed not only on performing the plant quarantine function in a manner that will cause the least inconvenience or loss to the public but also in employing at the same time every safeguard reasonably necessary to prevent the introduction of undesirable foreign pests which menace our agriculture.

---