

Quarantine

If a plant disease is located in a particular area causing great destruction to the crops, and if the diseased plant products such as fruits, seeds etc. are being transported from this region to some other region where there is no incidence of the disease, then there are good chances that the disease may spread in the new disease free area.

In order to avoid this, Quarantine regulations are enacted. These Quarantine regulations in the case of plant diseases are known as plant Quarantine. **Through plant Quarantine, diseased plant materials are checked from being transported from an infected to a disease-free area.**

Plant Quarantine has several rules and regulations. Through these rules and regulations, efforts are made to check the movement of plant produce containing disease from a diseased area to a new disease free area.

The concept of Quarantine first came into being in USA. It was because in this country, several plant disease epidemics were caused as a result of transportation of diseased plant material from some other country.

In India, the Quarantine regulations first came into being in 1914, entitled the “**Destructive Insect and Pest act**” (**DIP act**). These regulations were made in order to check the import of diseased material from some other country into India. So, it was a **foreign Quarantine**. For example potato tubers were are not allowed to be imported to India as they may contain the wart disease (*Synchytrium endobioticum*). Many research Laboratories require cultures of fungi and bacteria. But there are fears that if these cultures are imported from some other country then some highly notorious or virulent fungal or bacterial pathogens may enter into the country and result in an epidemic or epiphytotic in India. So, the head of the division of mycology and plant pathology of ICAR has devised certain regulations through which such materials cannot be imported into India.

Besides the foreign Quarantine which regulate the movement of disease material from some foreign country into India there exist a **domestic Quarantine** also. Domestic Quarantine regulates the movement of diseased material between the states of India. For example there is a complete ban on the transportation of potato tubers from Darjeeling area to other parts of the country. This is because, Darjeeling district has a vast area infested with wart disease of potato crop.

The officers of the plant Quarantine are stationed at various sea ports such as Mumbai, Chennai, Kolkata, Kochin, Visakhapatnam, Bhavnagar etc. and also at various airports such as Kolkata, Mumbai, Chennai, New Delhi, Amritsar and besides this certain land frontiers such as that of Atari Bagha border, Kalimpong Bongaon etc. also have plant Quarantine offices.

For the enforcement of plant Quarantine regulations, there is a vast team which includes technical officers of the **Directorate of plant protection and Quarantine, Ministry of Agriculture, Government of India** under the overall supervision of **plant protection adviser**. It is the duty of the plant protection advisor to issue certificate and import permits. The entire process is called **inspection and certification**.

The certificate issued by the plant protection advisor gives information that the living plants or their parts which are being imported have been thoroughly examined, on a date which must not be more than 14 days prior to shipment and have been found to be disease free.

Methods of operation of Quarantine

For plant materials, the main procedure for the operation of Quarantine is the **inspection and certification** both at the source of export and also at the receiving end i.e. the importing country. Plant materials are detained at the export source in order to test for latent infections and similarly at the receiving end also.