PEST RISK ANALYSIS (PRA)

When and Why is it Done?

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Information that is required from importers for Plant Health to conduct PRA

A handout for Importers of Plants and Plant Products

Compiled by Plant Health Department, BAHA
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What is Pest Risk Analysis (PRA)

Pest Risk analysis is a process of investigation, evaluation of information and decision making with respect to a certain pest, that starts once it is known or determined that this pest is a quarantine pest\(^1\).

Subsequently an evaluation of the potential of introduction of the pest into the country is done.

With identification, determination and evaluation done, the process culminates with decision making to avoid or reduce the probability of entrance or establishment of the pest into the country.

Why and When is a PRA done?

- Pest Risk Analysis (PRA) is done to protect the country’s agriculture from damages that can be caused by harmful (quarantine) pests which can be brought in along with imported commodities.

- PRA evaluates the likelihood of the entry, establishment, or spread of a pest ... and the associated potential biological and economic consequences ... (SPS Annex A)

- There are generally two initiation points for a PRA:
  
  1. the identification of a pathway, usually an imported commodity, that may allow the introduction and/or spread of quarantine pests
  
  2. The identification of a pest that may qualify as a quarantine pest

PRA Initiated by a Pathway

A requirement for a new or revised PRA originating from a specific pathway will most frequently arise in the following situations:

\(^1\)Quarantine pest- A pest of potential economic importance to the area endangered thereby and not yet present there, or present but not widely distributed and being officially controlled.
- International trade is initiated in a new commodity (Plant or Plant Product) or commodity from a new origin. The PRA may be triggered by a request for import, or by the appearance in trade of consignments of a commodity. The pathway may concern a single area of origin or several.

- New plant species are Imported for selection and scientific research purposes.

- A pathway other than commodity import is identified (natural spread, mail, garbage, passenger’s baggage etc).

- A policy decision is taken to establish or revise phytosanitary regulations or requirements concerning specific commodities

- A new treatment, system or process, or new information impacts on an earlier decision.

The pests which are likely to follow the pathway (e.g. carried by the commodity) are then listed, and each is then subjected to a next stage in the PRA process. If no potential quarantine pests are identified as likely to follow the pathway, the PRA stops at this point.

**PRA Initiated by a Pest**

A requirement for a new or revised PRA originating from a specific pest will most frequently arise in the following situations:

- An emergency arises on discovery of an established infestation or an outbreak of a new pest within a PRA area

- An emergency arises on interception of a new pest on an imported commodity

- A new pest risk is identified by scientific research

- A pest is introduced into a new area other than the PRA area

- A pest is reported to be more damaging in a new area other than the PRA area itself, than in its area of origin

- Audits reveal that a particular pest is repeatedly intercepted

- A request is made to import, as such, an organism, for example by researchers, educators, biological practitioners, businesses (pet store owners), the food industry (e.g. snails for consumption) or hobbyists (aquatic plants for aquaria)

2 *PRA area* - Area in relation to which a pest risk analysis is conducted.
The specific pest identified is then subjected to the rest of the PRA process.
Necessary Information on a Product which is to be Subjected to the PRA Process

1. Scientific name, genus, species and family of the plant, product or by-product of interest

2. Localization, altitude, and latitude of the areas of production designated to exportation in the country of origin

3. Map of the country showing the areas of production designated to exportation and other areas

4. Climatical conditions in the areas of production
   - Maximum and minimum temperatures
   - Level of precipitation
   - Predominant winds
   - Relative humidity

5. Fenology of the crop, emphasizing the most important phases of growth according to the use and destiny of the product: leaf development, flowering and fructification

6. Phytosanitary management of the crop, showing dates and stages of major pest Incidences.

7. List of quarantine pests by stages of development of the crop, emphasizing the important pests related to the part of the plant which is being imported

8. List of pests of quarantine importance according to the A1 and A2 pest lists, both of the importing and exporting country

9. Biology, and actual situation, distribution, economic damage of the important quarantine pests in the production zone designated for export

\textsuperscript{3}A1 Pest list- list of quarantine pests associated with the plant product which are not present in the importing country

\textsuperscript{3}A2 Pest List- list of pest of quarantine importance associated with the product found only in parts of the importing country and are subjected to official control
10. Pre and post harvest phytosanitary treatments for important quarantine pests

11. Interior phytosanitary regulations of the exporting country related to the crop of interest, or pests identified as quarantine pests if such regulations are present in the country

12. Vigilance and monitoring systems to prevent the outbreak of pests of quarantine importance if such systems are present in the country

13. Infrastructure for the application of recognized quarantine treatments for the pests of quarantine importance.

14. Volumes of production and exportation

15. List of natural enemies of the pests of quarantine importance, if they exist in the exporting country related to the plant, product or byproduct of interest.
References
