Overview of NAPPO RSPM 40
Principles of Pest Risk Management for the Import of Commodities

Purpose: Globalization of trade has increased the risk that plant pests will spread via the worldwide agricultural supply chain. Pest risk management (PRM) measures may reduce and manage this risk. However, the selection and application of PRM measures may result in trade irritants between trading partners. PRM measures that are too strict may unnecessarily obstruct trade, while PRM measures that are too lax will not effectively reduce risk. RSPM 40 guides NAPPO member country national plant protection organizations (NPPOs) in identifying, evaluating, and selecting fair and justified PRM measures for managing the pest risk associated with imported plants, plant products and other regulated articles.

Contents: RSPM 40 has two parts: **the body of the standard**, which describes situations when risk management is warranted, explains the concept of "managed risk," presents the basic principles guiding the selection of PRM measures, and the specific issues to be considered when making risk management decisions, and **Appendix 1**, which explains how to evaluate uncertainty (e.g., lack of knowledge or conflicting information) in the data used to make PRM decisions.

Summary of RSPM 40: A pest risk assessment indicates if PRM measures are needed. The PRM process involves several stages: 1) identification of PRM measures that can reduce risk to an acceptable level; 2) evaluation of PRM measures to determine if they are both effective and feasible; 3) selection of best available PRM measure or combination of measures. Measures identified in stage 1 will typically include inspection, certification, treatment, surveillance and monitoring, sanitation, pest-free areas, and post-entry measures, used either singly or combined in a systems approach. Evaluation of the efficacy of PRM measures uses appropriate metrics to determine if the desired endpoint (mortality, sterility, inactivation, or altered behavior) is achieved by the selected measure(s). When evaluating the feasibility of a measure, costs, availability of facilities and equipment, legally permissible uses, and negative effects on the commodity (e.g., physical damage, reduced shelf life) should be considered. Economic, social, and environmental impacts of potential measures should also be assessed. Finally, a PRM measure or combination of measures is selected based on a comparison of efficacy, feasibility, costs, and impacts.

Summary of Appendix 1 – *Information Sources and Uncertainty*: PRM decisions are based on available data. A high degree of uncertainty in available data may justify adding more PRM measures or adding extra strength to PRM measures. Uncertainty in PRM data is a function of reliability (quality of the source, year of publication, methodology used, degree of consensus), and applicability (how closely data conforms to pest behavior in the geographic area under consideration). Table 1 categorizes the reliability of different information sources from low to high. Table 2 categorizes the applicability of species and environment data from low to high. The matrix in Figure 1 uses the reliability and applicability ratings from Tables 1 and 2 to estimate the degree of uncertainty in data used in the PRM decision making process.

Please read RSPM 40 for a more complete description of the process and considerations involved in identifying, evaluating, and selecting PRM measures for managing the pest risk associated with imported plant commodities.

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