COMMISSION ON PHYTOSANITARY MEASURES

TWENTIETH SESSION

REPORT FROM THE

INTERNATIONAL PEST RISK RESEARCH GROUP (IPRRG)

AGENDA ITEM 22.3

(*prepared by the IPRRG*)

1. The International Pest Risk Research Group (IPRRG) consists of scientists mostly working for, or with, National Plant Protection Organizations in government agencies or institutions. Members have expertise in plant pest risk analysis (PRA) and related matters. Some of the members of IPRRG were previously in the International Advisory Group for Pest Risk Analysis (IAGPRA). IAGPRA provided expert advice and support to the CPM, its subsidiary bodies, contracting parties and the IPPC Secretariat on PRA related issues, in particular with respect to building capacity for PRA. IPRRG has now taken on this role (Agenda item 14.3 from CPM 14 refers).

2. Text describing IPRRG and its role as an external cooperating organization is available on its IPPC webpage[1].

3. The IPRRG webinar series on pest risks continued during 2025. There were four presentations over the year; (i) Understanding observable historical pest dynamics through a data rescue approach, (ii) Risk-based sampling at US ports of entry, (iii) DNA barcoding for pest detection in subtropical crops, and (iv) Modelling climate suitability for a pest with incomplete data – case study: *Pochazia shantungensis* and the risk to the United Kingdom. Up to 30th January, 2026, the four webinars shown during 2025 have seen over 160 times by viewers from across the globe. All IPRRG webinars are available via https://pestrisk.org/iprrg-webinar-series/.

4. The 17th annual IPRRG conference took place in association with Cervantes Agritech in Kuala Lumpur, Malaysia, 27th – 30th October 2025. The conference brought together PRA workers from North and Central America, Europe, East Asia and Oceania. The presentations ranged from PhD students summarising their recent research findings to papers by well-established researchers that drew on their experience to report on the development of pest risk analysis (PRA) tools and methods.

5. The conference sessions highlighted how PRA, surveillance, modelling and policy are evolving in response to globalised trade, climate change, and growing biological complexity. A recurring theme was the shift away from purely qualitative, single-species, reactive approaches towards more quantitative, anticipatory and system-based frameworks. One specific presentation provided an overview of the international development of plant health regulations with a focus on changes within the EU plant health regime. Several talks focused on strengthening PRA through quantitative modelling. However, there are substantial knowledge gaps for widespread use of quantitative modelling. Nevertheless, by using models that can be updated as data becomes available, PRAs can be used to inform cost-effective biosecurity actions. The consideration of time as an aspect of PRA was highlighted with one speaker noting how temporal factors affect all PRA stages, including trade patterns, climate change, pest spread and impact. Market concentration may influence the predictability of import pathways, affecting estimates of entry risk. Survey design and detection confidence were explored through a case study on emerald ash borer (*Agrilus planipennis*) in Poland. The approach used improves transparency for risk managers.

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6. Economic impact modelling featured prominently at the IPRRG conference. For example, estimates of potential losses in EU forestry from *Phytophthora ramorum* were presented as was the bioeconomic impacts of *Oryctes rhinoceros* (coconut rhinoceros beetle) in the Pacific. Losses to coconut and oil palm production were estimated in the tens of billions of dollars, highlighting the importance of investment in management strategies for socially and economically critical crops. Early warning and horizon scanning were discussed together with the increasing use of artificial intelligence (AI) in surveillance systems. Several presentations demonstrated advances in species distribution modelling e.g. for *Zeugodacus cucurbitae*, (melon fruit fly) in Taiwan. Other presentations explored how climate change, dispersal corridors, genetics and basic ecological research can refine pest risk assessments.

7. The workshops concluded by revisiting longstanding criticisms of PRA: its reactive nature, single-species focus, reliance on known hosts, and qualitative uncertainty. Discussions recognised these limitations but emphasised that PRA operates within international regulatory, trade and political constraints. The advances presented throughout the meeting demonstrate that PRA is evolving towards more quantitative, transparent and forward-looking approaches capable of addressing many of these criticisms while remaining fit for regulatory purpose.

8. PDF versions of presentations and the detailed meeting agenda can be found on the IPRRG website.

9. Plans are in development for the next meeting of IPRRG. You can find out more about IPRRG on its own dedicated web page: https://pestrisk.org/

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