INFORMATION PAPER

TITLE: ADVANCING GLOBAL SEED HEALTH AND PHYTOSANITARY MEASURES: ISF'S 2024 INITIATIVES

Introduction

The International Seed Federation (ISF) remains committed to ensuring the safe and efficient movement of seed worldwide. As the global voice of the seed sector, ISF represents members responsible for 96% of the world's international seed trade, working closely with policymakers, regulatory bodies, and the seed industry to strengthen phytosanitary measures and support sustainable agricultural systems.

In 2024, ISF took significant steps to enhance phytosanitary standards, improve disease management practices, and advance risk-based regulatory approaches. These initiatives align with global efforts to modernize and harmonize plant health systems, contributing to international commitments under the IPPC and CPM frameworks.

This paper highlights ISF's key activities in phytosanitary risk management, regulatory harmonization, and innovation in seed health, demonstrating how industry-driven solutions can support national and international phytosanitary objectives.

Strengthening Risk-Based Phytosanitary Measures

ISF actively promotes science-driven approaches to phytosanitary risk management, particularly through its Systems Approach Expert Group (SA EG). In 2024, the group worked closely with National Plant Protection Organizations (NPPOs) to develop a global pest list for cucumber seeds, establishing science-based, harmonized risk mitigation measures. The initiative strengthens seed health management frameworks while ensuring regulatory measures remain proportionate and aligned with trade realities.

In parallel, ISF provided technical input on IPPC's Draft Annex to ISPM 38, advocating for practical, flexible, and outcome-focused phytosanitary measures that support both regulatory goals and trade efficiency. ISF emphasized the need for greater trust and collaboration between NPPOs and industry, ensuring practical, risk-based implementation of systems approaches in seed movement.

A key initiative in 2024 was the ISF Pilot Project on Systems Approach, designed to demonstrate the feasibility of implementing systems approaches in international seed trade. The project included the development of a Seed Health Management Plan, structured bilateral meetings between NPPOs and the seed sector, and planned field visits to assess integrated risk management strategies.

Advancing Seed Health through Science and Technology

In 2024, ISF's Coordination Group for Seed Health (CG SH) focused on advancing technical methodologies for seed health diagnostics and risk assessment. Recognizing the growing importance of High-Throughput Sequencing (HTS) in plant health, ISF developed a

comprehensive position statement outlining its potential, limitations, and regulatory implications.

HTS presents new opportunities for identifying pathogens in seed lots, but its use must be scientifically validated and harmonized globally to prevent misinterpretation of results and trade disruptions. ISF will initiate stakeholder dialogues and awareness-raising workshops to ensure that regulatory frameworks reflect the evolving technological landscape while maintaining trade predictability.

Enhancing Collaboration on Phytosanitary Innovation

ISF recognizes that phytosanitary solutions require strong partnerships between industry, regulators, and research institutions. In 2024, the Coordination Group Phyto (CG Phyto) worked to improve regulatory alignment and early pest detection frameworks, particularly through structured industry-regulator engagement.

A key area of focus was addressing risks related to illegal seed trade through e-commerce platforms, in collaboration with the Coordination Group on Illegal Seed Practices (CG ISP). ISF designed a workshop together with the World Trade Organization (WTO) to discuss traceability mechanisms, certification tools, and compliance measures that could be used to mitigate the phytosanitary and intellectual property risks associated with unregulated online seed sales.

Additionally, ISF is in the process of developing a technical guide on Hot Water Treatment (HWT) to address NPPO requirements and promote internationally accepted disinfection protocols. Exploring alternative seed treatment technologies remains a priority area for future research and regulatory engagement.

Promoting Transparency and Science-Based Policies

ISF continues to advocate for science-based, risk-proportionate phytosanitary policies that enable the safe movement of seed without imposing unnecessary trade restrictions. Through the Coordination Group for Seed Related Innovation (CG SRI), ISF developed communication strategies on seed treatments, microplastics, and biological innovations, ensuring that regulatory decisions are informed by scientific evidence and industry best practices.

In 2024, ISF's microplastics strategy focused on regulatory preparedness rather than public campaigning, aligning with FAO discussions on plastics in agriculture. Similarly, ISF conducted a workshop on biologicals, emphasizing their role in sustainable seed treatment technologies and agricultural innovation.

Conclusion and Call to Action

ISF remains committed to supporting the CPM's mission to enhance global plant health and trade efficiency through innovation, regulatory collaboration, and science-based risk management. The 2024 initiatives outlined in this paper demonstrate how the seed sector actively contributes to phytosanitary advancements, ensuring that regulatory frameworks remain effective, practical, and aligned with international trade realities.

As CPM-19 explores new priorities for phytosanitary governance, ISF encourages continued engagement with industry stakeholders to foster partnerships that enhance plant health while enabling global food security.

ISF invites the CPM to take note of this report and looks forward to continued collaboration in shaping the future of phytosanitary systems for the seed sector.