

AMERICAN SEED TRADE ASSOCIATION

SAA 2024 SEED CONGRESS OF THE AMERICAS

Phytosanitary Update

Martha Malapi, Ph.D.
Director Seed Health & Trade



October 2, 2024



Outline



Tomato & pepper seeds:
Current issues with ToBRFV



Corn seeds:
Export to Chile



Seed health testing

Status of ToBRFV in the US

- ❑ *Tomato brown rugose fruit virus* (ToBRFV)
- ❑ ToBRFV first reported in 2014 in tomatoes in Israel and Jordan
- ❑ 2024: Reported in 35+ countries
- ❑ Regulatory status in the US: Quarantine pathogen
- ❑ APHIS requirements for importation: From an area free of the virus or negative lab test results
- ❑ Third party laboratory testing: Not accepted

FOR INFORMATION AND ACTION
DA-2024-21
June 17, 2024

Subject: APHIS amends Federal Order for U.S. Imports of tomato (*Solanum lycopersicum*) and pepper (*Capsicum* spp.) hosts of Tomato brown rugose fruit virus (ToBRFV)

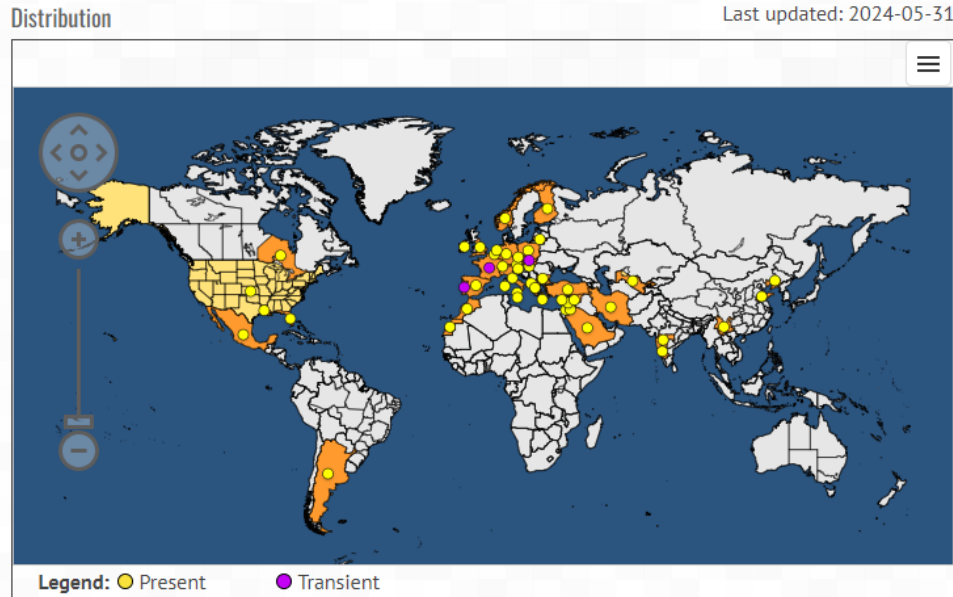
To: State, Tribal, and Territory Agricultural Regulatory Officials

Effective June 17, 2024, the USDA Animal and Plant Health Inspection Service (APHIS) is amending the restrictions for the importation of tomato (*Solanum lycopersicum*) and pepper (*Capsicum* spp.) hosts of Tomato brown rugose fruit virus (ToBRFV) by rescinding the import requirements for tomato and pepper fruit for consumption from all countries. APHIS provided stakeholders two ToBRFV pathway analyses that assessed the likelihood of introducing ToBRFV into the United States via fresh fruit for consumption and via propagative plant material, including seed. APHIS concluded fresh fruit for consumption is an unlikely pathway for the introduction of ToBRFV into tomato and pepper production areas, whereas propagative plant material remains a risk.

- In 2024, APHIS removed restrictions on fruit imports for consumption
- Unlikely pathway for the introduction of ToBRFV
- Maintained restrictions on seeds
- ASTA continues to advocate to re-classify ToBRFV as Regulated Non-Quarantine Pest (RNQP)

Re-exports of Tomato Seeds to the EU

Where are we?



Distribution of ToBRFV May 2024
EPPO Global Database

- In the EU, ToBRFV is regulated as a quarantine pathogen
- In Dec. 2024, current regulation on ToBRFV will expire
- Production site requirements: "information ensuring the traceability of the production site of the mother plants"
- Lack of clarity on detailed traceability requirements, leading to trade blockages
- ~ 6 months: No Phytosanitary Certificates (PCs) for re-export issued
- ASTA worked with APHIS to resume issuing re-export PCs
- Countries : Italy, Spain, The Netherlands, Portugal, Greece (France)
- Unofficially: EU will change regulatory status of ToBRFV as RNQP in January 2025

ToBRFV - Regulated Non-Quarantine Pest

Defining criteria	Quarantine pest	RNQP
Pest status	Absent or of limited distribution	Present and may be widely distributed
Pathway	Phytosanitary measures for any pathway	Phytosanitary measures only on plants for planting
Economic impact	Impact is predicted	Impact is known
Official control	Under official control if present with the aim of eradication or containment	Under official control with respect to the specified plants for planting with the aim of suppression

- ❑ ISPM 16 suppression vs. eradication: minimize negative economic impacts
- ❑ Maintain seed and transplant ToBRFV-free-from requirement
 - ✓ Continue seed health testing requirement for imports
 - ✓ Provide on-shore testing as an option
- ❑ Option to utilize pest free places of production
- ❑ Research facilities/programs to a BL-1 level: Genetic resistance, Improved diagnostic assays
 - ✓ Biological relevance: ToBRFV false positive results (Skelton et al., 2023; Mehle et al., 2023)

Overview: Corn Export to Chile

- ❑ Chile is a winter nursery to the U.S. seed industry
- ❑ Chile's geographical position allows for year-round production
- ❑ Exports to Chile from the U.S: Corn is #7 - Ag and related products
- ❑ The U.S. is #1 supplier of corn to Chile :
 - ✓ ~60% import market share (USDA-FAS)
- ❑ Chile – SAG
 - ✓ Released a global Pest Risk Assessment (PRA) for corn in 2023
 - ✓ Establishing new phytosanitary entry requirements for importation of corn: 16 new pests
 - ✓ Potential outcome: Substantial import delays and suspension of certain shipments



Exports of Corn Seed to Chile: Where are we?

Collaborative effort:

- ❑ ASTA-members / APHIS / ANPROS/ SAG/ SAA/ many other sister societies

Highlighting:

- ✓ Hosts specificity
- ✓ Pests that are not seed transmitted
- ✓ Differentiate the risk for grain vs seed
- ✓ Seeds for R&D: a greater degree of manual attention
- ✓ Visit to corn fields



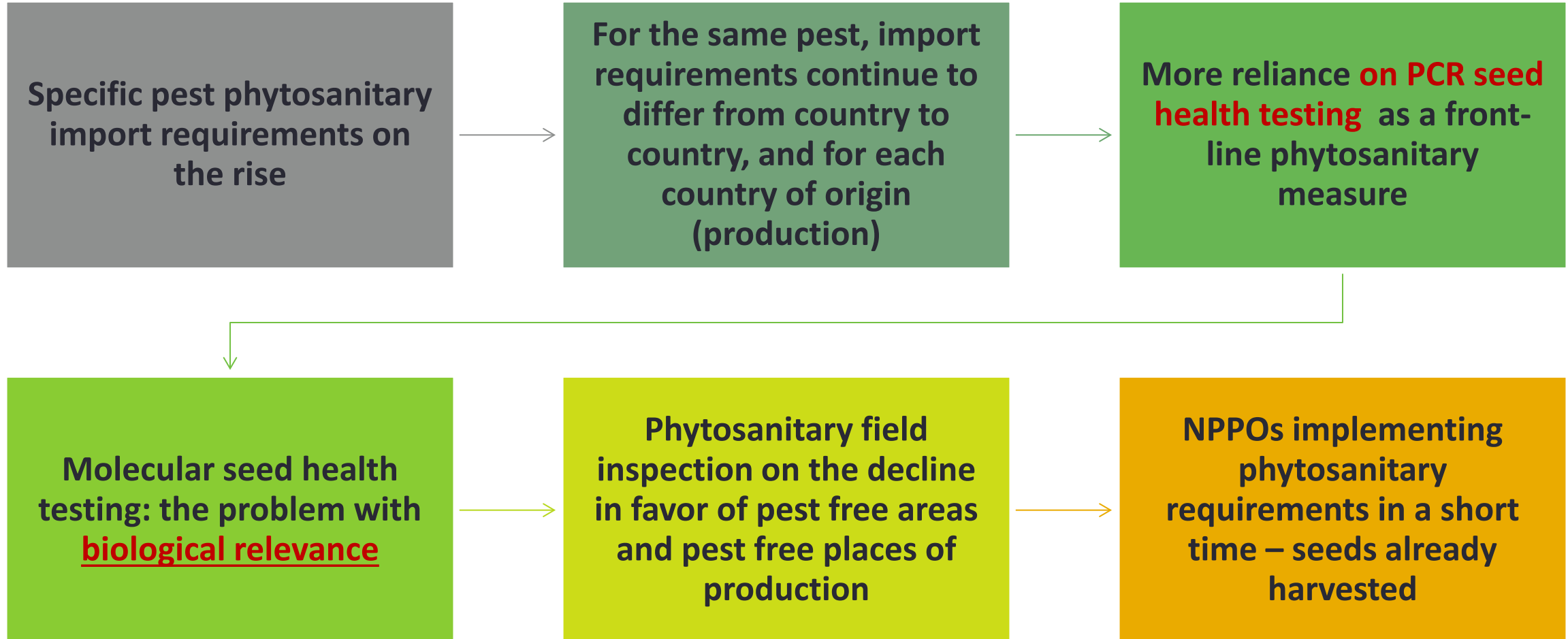
SAG Updates to APHIS

- ✓ New WTO notification with modified amendments will be published soon
- ✓ Pathogens and pests list – updated
- ✓ R&D exemptions granted
- ✓ Implementation delayed until 2026

Pathogens remaining

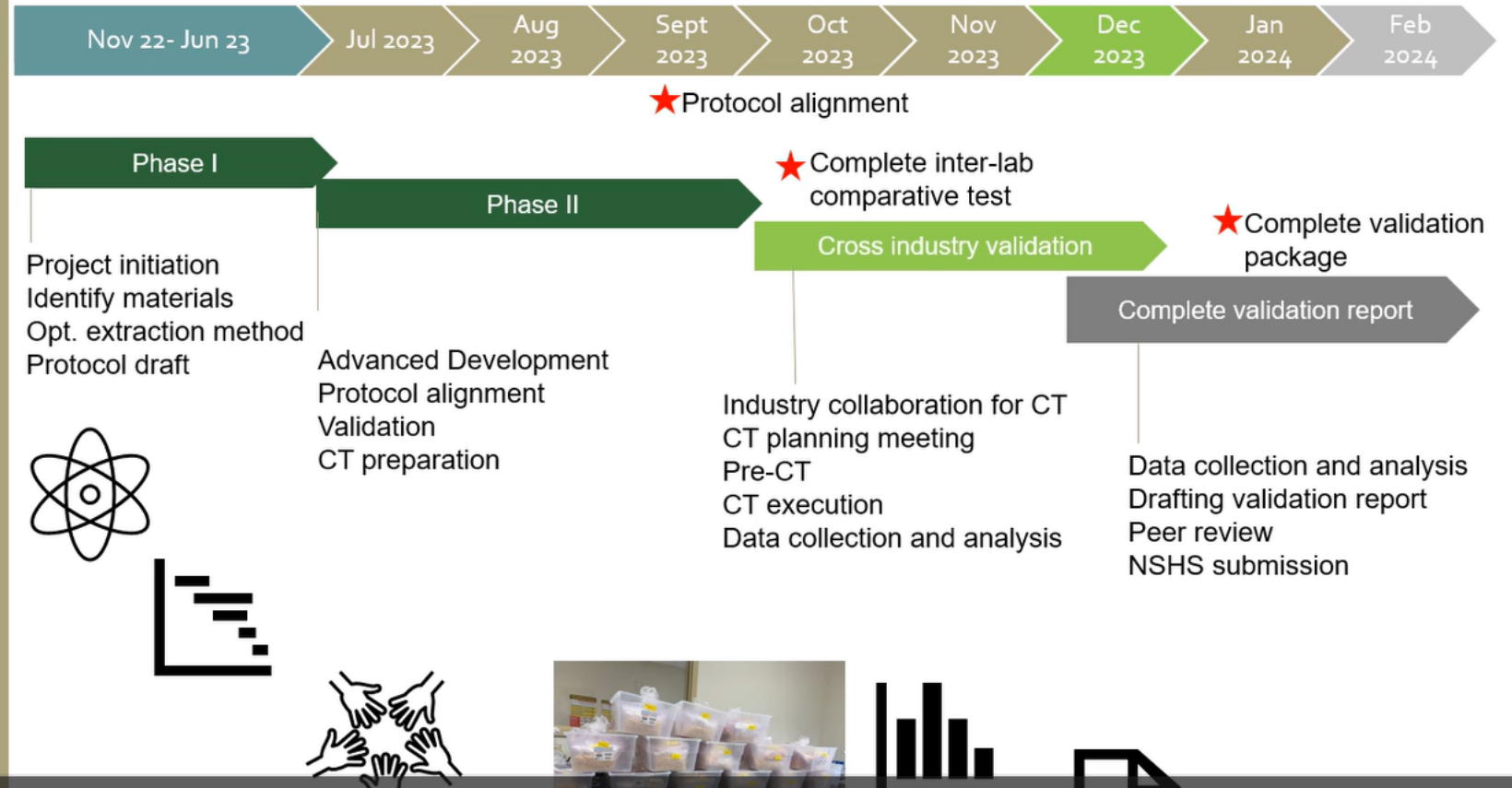
- ✓ *Stenocarpella macrospora*
- ✓ *Stenocarpella maydis*
- ✓ *Clavibacter nebraskensis* ←
- ✓ *Pantoea stewartii*

Current Phytosanitary Regulatory Environment

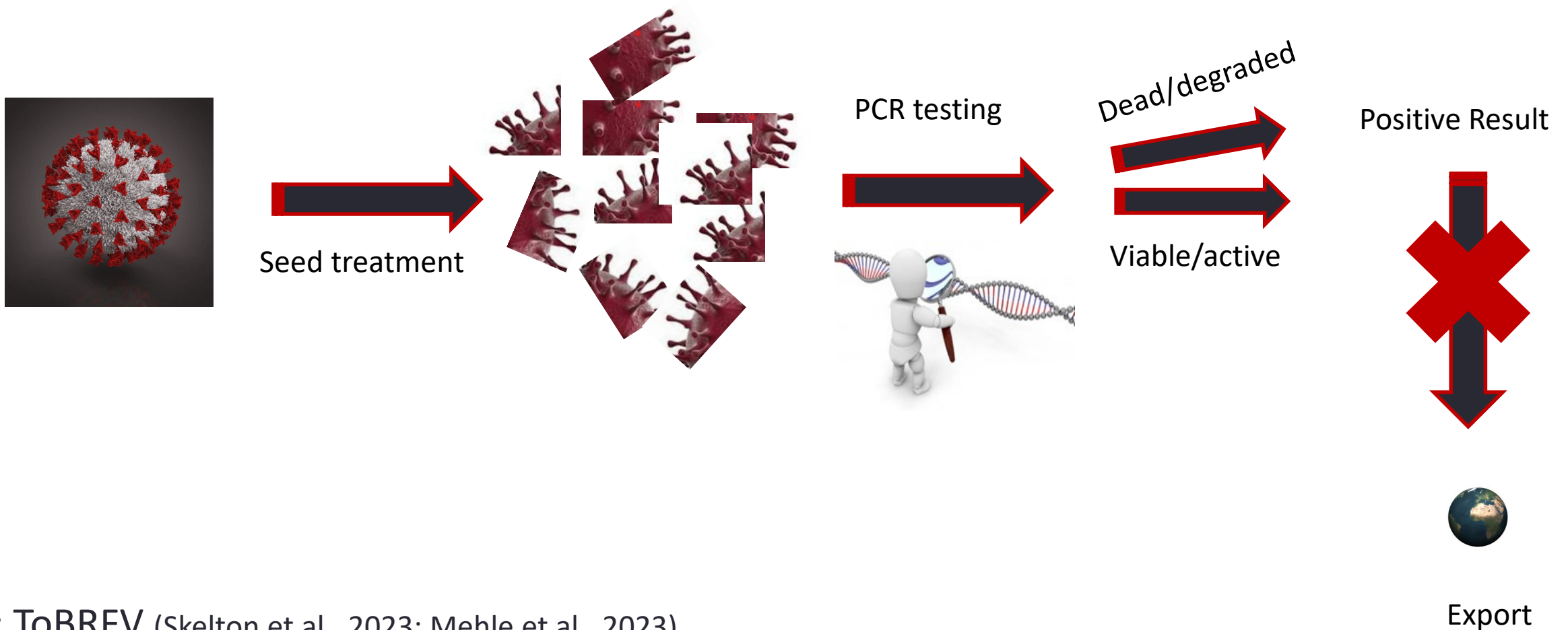


Validation Timeline in the U.S.: ~15 months

Project Timeline Overview



Molecular Seed Health Testing: The Problem With Biological Relevance



Ex: ToBRFV (Skelton et al., 2023; Mehle et al., 2023)

*Thank
you*



asta

**BETTER SEED,
BETTER LIFE**