December 15th, 2023

To: Chilean Ministry of Agriculture - Agricultural and Livestock Service (SAG)

Subject: Response to the Chilean Government - SAG proposed amendment to Resolution N° 1,187 of 2022 for the importation of *Zea mays*

Founded in 1883, the American Seed Trade Association (ASTA) is one of the oldest trade organizations in the United States. Its membership consists of close to 700 companies involved in seed production and distribution, plant breeding, and related industries in North America. As an authority on plant germplasm, ASTA advocates science and policy issues of industry-wide importance. ASTA's mission is to be an effective voice of action in all matters concerning the development, marketing and movement of seed, associated products and services throughout the world. ASTA promotes the development of better seed to produce better crops for a better quality of life. Below are the comments prepared by ASTA in response to the above-mentioned.

We are concerned that the currently proposed phytosanitary import criteria outlined in Amendment Resolution N° 1,187 of 2022 for *Z. mays* in Chile would introduce several significant complexities and obstacles to the importation of corn seeds. These challenges will likely result in import delays and even the complete suspension of certain shipments, potentially causing substantial disruptions to seed production. Chile, as a winter nursery and seed production location, holds significant importance to the U.S. seed industry and supports global food security since its unique geographical position allows for timely counter-season production.

General requests for SAG's consideration:

- The addition of the word "OR" between the proposed Additional Declarations (ADs) for *Pantoea stewartii* subsp. *stewartii, Clavibacter nebraskensis, Stenocarpella macrospora, Stenocarpella maydis* and weed seed pests. This is to avoid misinterpretation of the ADs in the Resolution. In this way, the ADs would be understood as the equivalent measures for the proposed regulated pest(s).
- To include as an alternative phytosanitary measure for all ADs the establishment of pest free areas, according to ISMP 04.
- To include as an alternative phytosanitary measure for all ADs the establishment of pest free places of production or pest free production sites, according to ISPM 10.
- Regarding this amendment entering into force on May 24, 2024, we respectfully request to delay the date until December 2026. This extension is critical to allow for a comprehensive discussion of established practices that can be successfully and effectively implemented to limit the potential for establishment in Chile of the various plant pests mentioned in the amendment. This extension will facilitate the adoption of seed management and certification modifications by both the industry and National Plant Protection Organizations (NPPOs), including the

implementation of new diagnostic tests, application of new seed treatments, and other relevant adaptations. Hence, shipments of corn seeds that have a certification dated prior to December 2026, to be exempt from all ADs.

- To perform an additional assessment of the current Pest Risk Analysis (PRA) for *Zea mays* seeds to determine the risk of the plant pests on grain versus seed.
- To consider the purpose of importing seeds per ISPM 38 to determine the phytosanitary measures for corn seed used in research. Specifically, removing the requirements for weed seeds and insect pests for Research and Development seed, following the approach applied by COSAVE corn breeding seed system approach. The production of breeding seed or seed in early product development is distinguished by its small scale/cultivation areas, and a greater degree of manual attention to the crop. This seed is typically not stored for extended periods but is sown shortly after harvest to expedite the product development process. This approach minimizes concerns related to storage insect infestations and weed seed contamination, primarily because the corn ears are hand-harvested.
- To consider adding a provision in its rule to allow as an option the use of a Systems Approach, such as ReFReSH, once it is appropriately developed. This initiative aims to transition the phytosanitary system from a consignment-by-consignment approach to a system focused on "risk mitigation via best seed production practices." Chile is currently in support of ReFReSH and is actively moving forward with a pilot project on corn seed.

Additional Declaration for *Caulophilus oryzae, Corcyra cephalonica, Prostephanus truncates, Trogoderma granarium* and *Trogoderma inclusum.*

- Regarding *C. cephalonica* and *P. truncates*, there are no references showing that corn seed is a pathway for the transmission of these two pests. Since the available information indicates there is no basis for regulating these insects in corn seed, we respectfully request these pests to be removed from the regulation.

For *C. oryzae, T. granarium* and *T. inclusum*, we request:

I. To re-assess the risk of these pests based on the industry practices of seed storage and conditioning, which are different to grain processing activities.
II. To confirm that a standard shipment visual inspection remains sufficient to meet this AD.
III. In addition to visual inspection, to add other phytosanitary measures as options, such as:
    a. Laboratory testing to confirm that shipments are free of these pests, OR
    b. Seed treatment of the consignment with an appropriate broad-spectrum insecticide or fumigation to mitigate the risk.

Additional Declaration for *High plains wheat mosaic emaravirus (*Synonym*: High plains virus)*

- On November 3th, 2023, SAG repealed the resolution Nº 3,210, which established a program of immediate emergency and phytosanitary actions to control *High plains virus* (HPV). This is because HPV was identified in Chile as "present" as the result of the surveys carried out by the National Agricultural Surveillance System. Therefore, HPV was removed from Amendment Resolution N° 1,187 of 2022 for *Z. mays*, and an AD will not be needed as a phytosanitary requirement for this virus. Consequently, ASTA will not submit further comments for HPV.

Additional Declaration for *Pantoea stewartii* subsp. *stewartii* and *Clavibacter nebraskensis*

- We request to include as an alternative phytosanitary measure for these bacterial pathogens the establishment of pest free areas according to ISMP 04; or the establishment of pest free places of production or pest free production sites according to ISPM 10.
- Regarding the measure that "the shipment is free of *C. nebraskensis*, according to the result of the official laboratory analysis":
    - Requiring laboratory testing as a mandatory step could create a bottleneck in the testing process, leading to delays in the issuance of Phytosanitary Certificates. This delay could have the detrimental consequence of missing planting deadlines.
    - Currently, the validated test for the identification of *C. nebraskensis* by the National Seed Health System (NSHS) is a culture-based assay. Positive results are then confirmed by plant injections of bacterial suspension on susceptible corn varieties. Inoculated seedlings are examined for typical Goss' wilt symptoms on leaves.
    - The assay mentioned above is not designed to test large quantities of corn seed samples, and no laboratory in the U.S. has the capability to do so.
    - Researchers from Iowa State University Seed Science Center will begin working on validating a PCR-based diagnostic assay that can be used to screen large quantities of samples, but the validation process is a laborious and multi-year process.
    - Given these challenges, we respectfully request SAG to delay the enforcement of this amendment until December 2026 to avoid import delays and disruption of seed production.

Additional Declaration for *Stenocarpella macrospora* and *Stenocarpella maydis*

- We request to add as a phytosanitary measure option, the use of an appropriate broad-spectrum fungicidal seed treatment as an alternative control method towards these fungal pathogens.

Additional Declaration for *Achyranthes aspera, Amaranthus palmeri, Eragrostis plana, Persicaria nepalensis, Striga* spp.*, Urochloa panicoides*

- *Eragrostis plana* has been shown to be a contaminant of forage grasses and pastures (CABI 2015), which is unrelated to corn production. Hence, there seems to be no evidence for regulating this weed in corn and we respectfully request to be removed from this amendment.

For A. aspera, A. palmeri, P. nepalensis, Striga spp. and *U. panicoides,* we request the following:

- As corn is a species with large seeds, the removal of these weed seeds is simple with standard post-harvest production conditioning processes consistently adhered to by companies. These processes play a crucial role in ensuring that the exported seeds meet global planting standards.
- Regarding *Striga* spp., it is classified as a quarantine pest within the United States and is subject to stringent official control measures. It has a very limited distribution and remains under eradication/containment. The rest of the United States beyond these regulated areas is officially considered free from Striga (USDA -NISIC).
- Consequently, we request a standard visual inspection as a valid method for verifying the absence of seeds from these weed species as an alternative for meeting plant pest requirements.

We appreciate your consideration of our comments. The American Seed Trade Association stands ready and willing to provide any additional information on the global seed industry that may be useful. Please let us know if you have any additional questions regarding these comments and this request.

Sincerely,

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