



# Germplasm exchange must be improved

October 3, 2021

Seeds at the National Center for Genetic Resources Preservation in Ft. Collins, CO are safeguarded

*Seeds at the National Center for Genetic Resources Preservation in Ft. Collins, CO are safeguarded in a 0°F storage vault. Photo by Steve Ausmus, USDA-ARS.*

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Advances in plant breeding have led to remarkable gains in food, feed, and fiber productivity. The Green Revolution of the 1960s, credited with saving millions from starvation in developing countries, was enabled by the facilitated exchange of germplasm around the world. Exchange has been significantly hampered over the past 50 years by international legal efforts to conserve and sustainably use biodiversity.

A team from Iowa State University, Nickson Research and Consulting, and Corteva Agriscience studied and analyzed the technical and policy implications of these negotiations that have largely failed to achieve their objectives while creating a global environment where the exchange of germplasm has been increasingly impeded. Their review in the July–August 2021 issue of *Agronomy Journal* documents how facilitated exchange of germplasm contributed to critical improvements in major food crops. The

authors also provide insights into a workable way forward founded in the perspective that germplasm is a common heritage of mankind that must be collected and shared. The need for more funding of germplasm collection, curation, and conservation is highlighted in the review.

The authors conclude that collection and distribution of germplasm could be improved if governments become less parochial, make more money available for conservation, and recognize their mutual dependence on germplasm exchange for food security.

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Smith, S., Nickson, T.E., & Challender, M. (2021). Germplasm exchange is critical to conservation of biodiversity and global food security. *Agronomy Journal*, 113, 2969–2979. <https://doi.org/10.1002/agj2.20761>

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