

NATIONAL PLANT GERMPLASM SYSTEM

# Temperate-adapted forage legume genetic resources

## PROJECT OVERVIEW

Temperate-adapted forage legumes are among some the most significant cultivated crops in the world. The USDA National Plant Germplasm System (NPGS) manages a large diverse germplasm collection (>13,000) of alfalfa, clover, trefoil and many of their crop wild relative accessions (plant lines). The goal of this, and other NPGS projects, is to acquire, conserve, characterize, evaluate, document, and make available agriculturally important plant germplasm to researchers and educators worldwide.



alfalfa

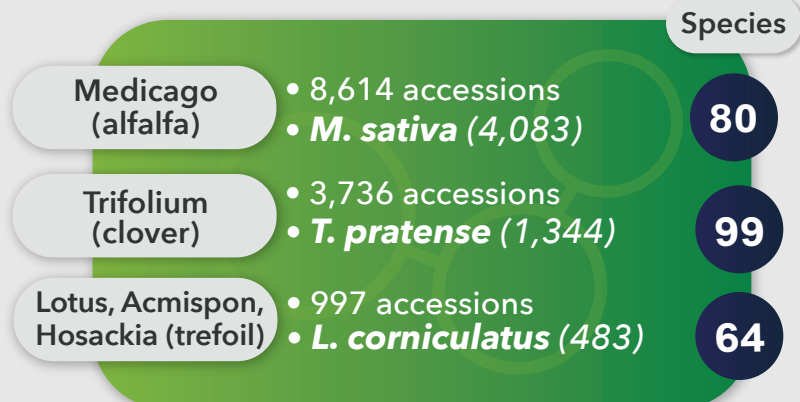


clover

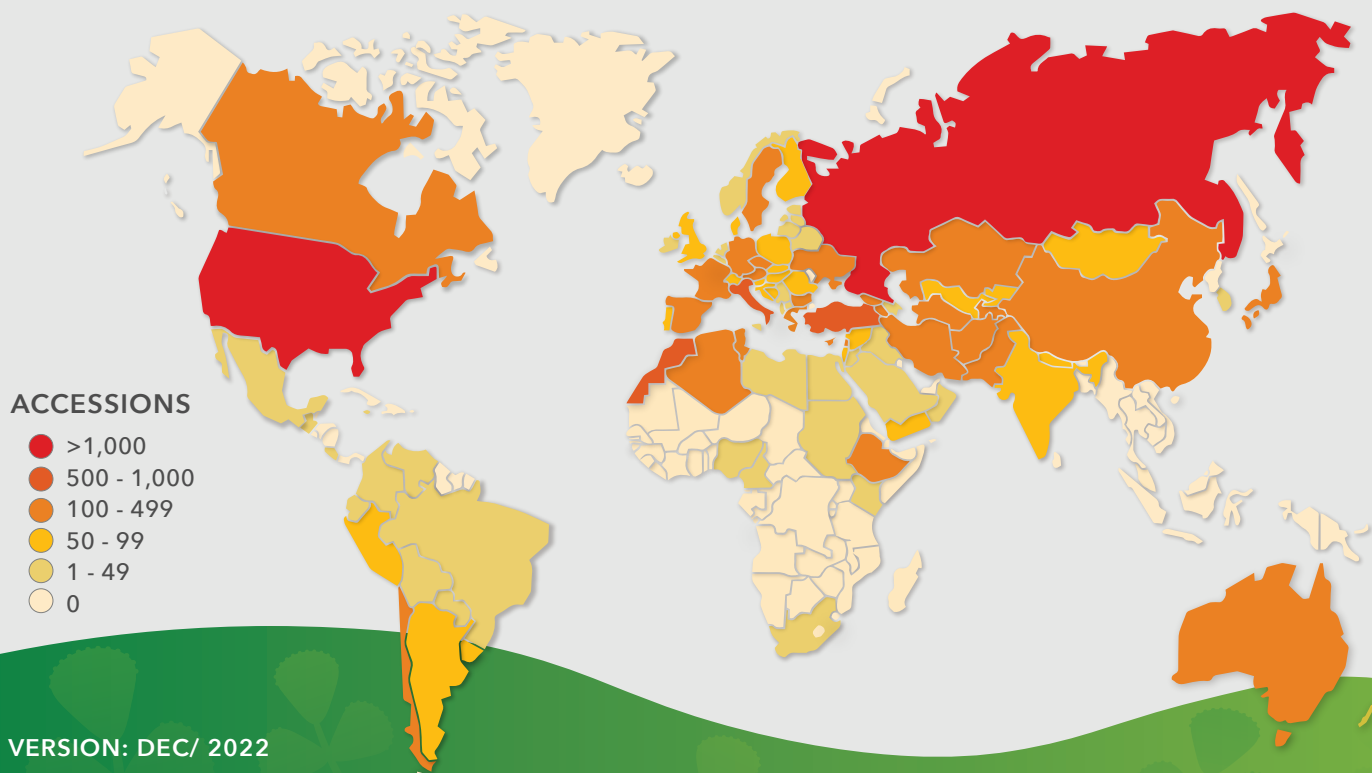


trefoil

## COLLECTION HOLDINGS



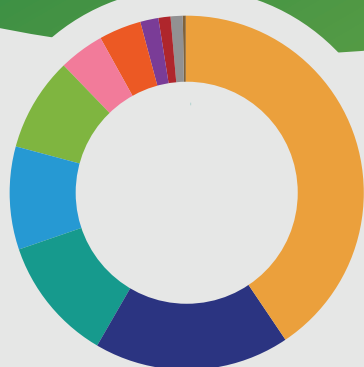
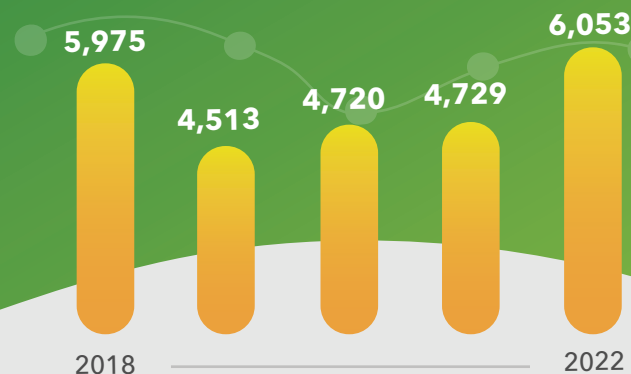
## SOURCE OF ACCESSIONS



# ☑ DISTRIBUTIONS

# 25,990

Number of seed lots distributed between 2018 -2022



## ☐ CATEGORIES

Order sum by requestor category to which seed was sent to over the 2018 - 2022 year period.

- U.S. State and Universities
- Foreign non-commercial
- Foreign Individual
- U.S. Commercial
- Foreign Commercial
- U.S. AID
- U.S. Individual
- U.S. NGO
- Foreign Genebank
- U.S. ARS
- U.S. Other Fed. Agency

## 🧬 IDENTITY & INTEGRITY

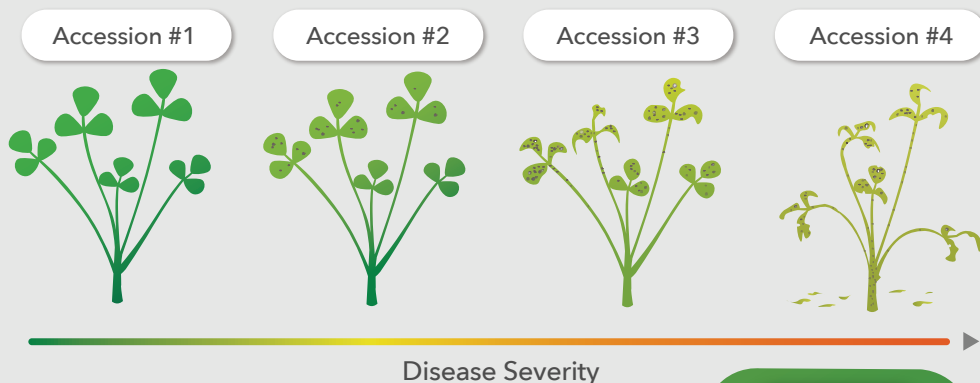
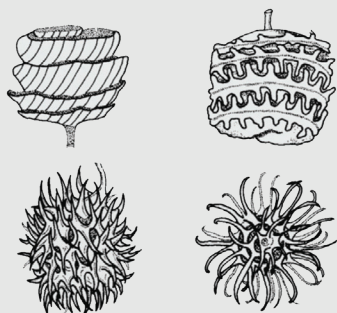


Maintaining genetic identity and integrity in accessions is a high priority. All regenerations are carefully labelled, digitally imaged, and correctly classified using DNA marker technologies. During regeneration of seed, insect-proof cages are used to prevent cross-pollinations and sentinel plots are now regularly used to screen potential movement of transgenic traits into the collections.

## ✍ CHARACTERIZATION & EVALUATION

Highly heritable characters are collected for germplasm accessions during regenerations with additional subsets of the collection evaluated for agriculturally important traits. Traits might include disease/insect resistance, heat/drought tolerance or focus on forage quality and could be incorporated into modern day cultivars by breeding.

### Medicago Pod Diversity (IBPGR, 1991)



## 📄 ACCESS & DOCUMENTATION

Passport, characterization and evaluation data as well as germplasm can be accessed for TFL genetic resources publicly via the GRIN-Global database.

