

17. Ensuring the long-term conservation of wild relatives of potato in Peru

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Crop wild relatives are important sources of genes useful for the genetic improvement of domesticated species. However, crop wild relatives are threatened worldwide due to climate change and human-based factors such as changes of land-use and growth of urban settlements, among others. The National Institute for Agricultural Innovation (INIA) is leading a team to collect the wild relatives of potatoes in Peru. The project focuses in collecting seeds, tubers and plants of the species classified as high priority for collection due to lack or low number of accessions conserved in international genebanks, based on a recent gap analysis developed by the Global Crop Diversity Trust. A special feature of this project is that it is the first collecting project after a period of over twenty years, and part of a global initiative to conserve crop wild relatives. The methodology includes database analysis, prospection, collection and regeneration of germplasm. In 2017, three collecting missions targeting the south and central Andes of Peru were conducted, collecting a total of 82 accessions. Mission 1 visited Tacna, Arequipa, Puno, Moquegua and Apurimac, collecting 34 accessions. Mission 2 visited Tacna, Arequipa, Puno and Moquegua, and collected 5 accessions. Mission 3 visited sites in Cusco, Apurimac and Ayacucho, collecting 43 accessions. In 2018, the number of collecting missions will increase in order to collect most of the prioritized species of wild potatoes. The collected material will be conserved at INIA, with a copy at the CIP genebank, and distributed under the multilateral system.