

Plant Breeding Coordinating Committee Survey of U.S. Public Plant Breeding Capacity

<u>Sarah Kostick</u>¹, Ksenija Gasic², Michael Kantar³, David Francis⁴, Michael Coe⁵, Dorrie Main¹, Kate Evans¹

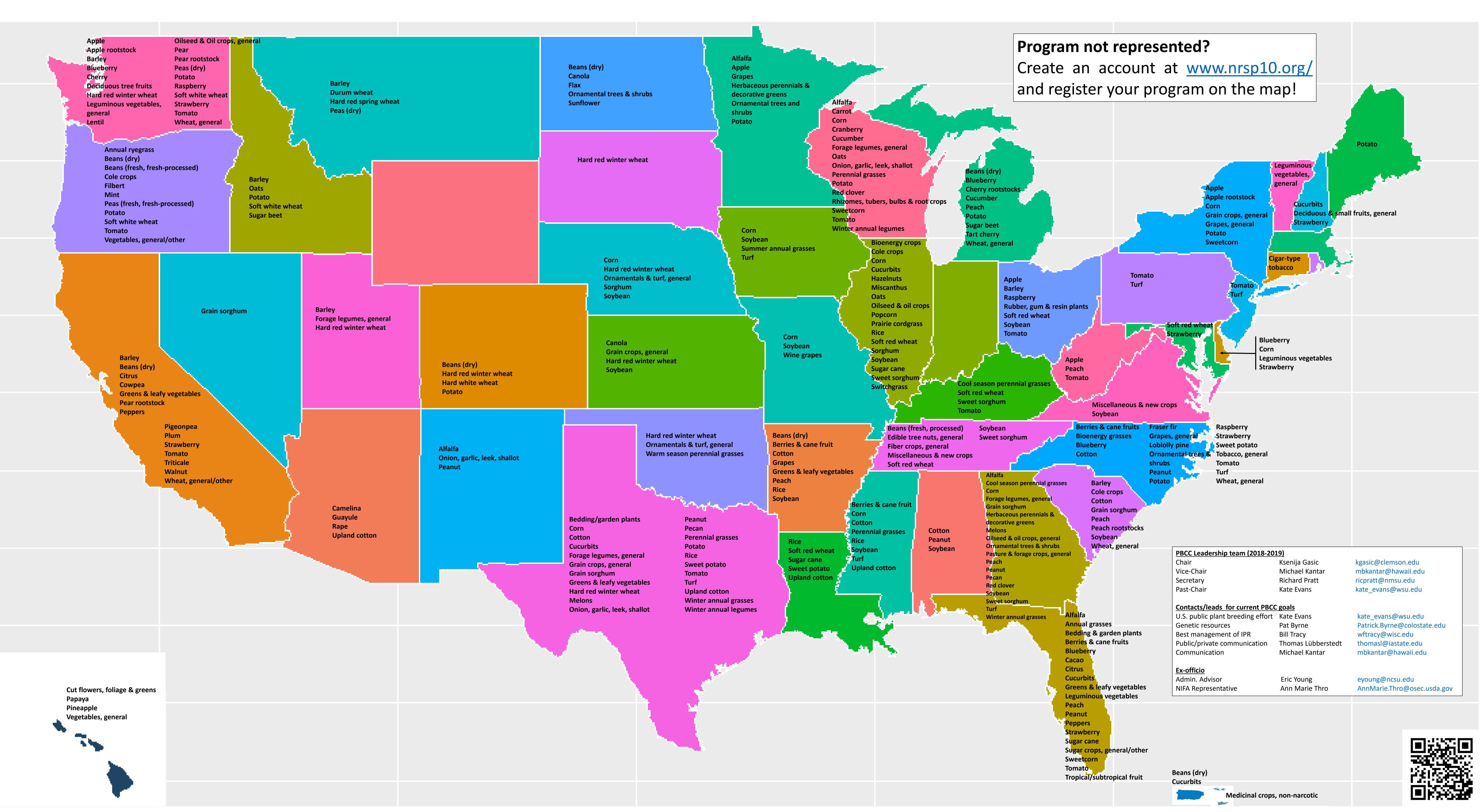
¹ Washington State University; ²Clemson University; ³University of Hawaii at Manoa; ⁴Ohio State University; ⁵Cedar Lake Research Group

Plant breeding has been a central part of the Land Grant Mission for more than 150 years. Over the last 25 years there has been a decline in public sector plant breeding efforts. Causes of this erosion are varied, but in order to revitalize, public plant breeding institutions need to describe the features of successful and viable programs across the country. As funding models and markets change, the public sector needs to adapt; defining how capacity has changed is central to the public sector maintaining its social contract and helping to ensure food, nutrition and environmental security into the future.

Get more involved https://www.plantbreeding.org/content/pbcc

The Plant Breeding Coordinating Committee (SCC-80) surveyed public plant breeding programs in 2018 to gauge current capacity and understand the challenges public plant breeding faces. Funded by USDA NIFA and NSF's Plant Genome Research Program, a standard survey instrument was created and implemented in the National Research Support Project (NRSP) 10 database that can be reused every five years to create a time series to understand ongoing changes in capacity and inform US agriculture policy. A total of 287 U.S. public plant breeding programs located in 44 states provided data on their overall capacity and specifically on three major categories of selective plant breeding activities: plant breeding research, germplasm enhancement, and variety development.

To complement the survey, NRSP10 hosts a searchable and interactive US map showing participating public plant breeding programs (https://www.nrsp10.org/). Since the survey, an additional 79 programs have registered with the NRSP10. Here we present the 366 programs now registered, state by state, delineated by crop group.



For more on the SCC-80 project: https://www.nimss.org/projects/view/mrp/outline/17576

To learn more about the Multistate Research Program or the Impact Writing Initiative that produced this Impact Statement, visit www.multistateresearchimpacts.org.

Acknowledgements

Survey design and analysis by Michael Coe, Cedar Lake Research Group LLC.

Multistate research projects, including coordinating committees (CCs), enable research on high-priority topics among State Agricultural Experiment Stations (SAES) in partnership with USDA's National Institute of Food and Agriculture (NIFA), other research institutions and agencies, and the Cooperative Extension Service (CES), through opportunities and problem-solving abilities beyond the scope of a single SAES (Guidelines for Multistate Research Activities. SAES Directors, USDA (NIFA), and Experiment Station Committee on Organization & Policy (ESCOP), 2013. See: Agricultural Research, Extension, & Education Reform Act of 1998 (AREERA) amendments to the Hatch Act of 1887). We acknowledge with thanks Victor Unda and support from NIFA NRSP10 and NSF PGRP Award #1444573. Survey committee was comprised of Kate Evans, Ksenija Gasic, Mikey Kantar, David Francis and Sarah Kostick.