



United States Department of Agriculture

Natural Resources Conservation Service Plant Materials Program

An 80-Year History of Plant Development -
Delivering Results for Agriculture and Conservation
Through Effective Vegetation

Helping People Help the Land



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Some background on NRCS...





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NRCS work begins with **Resource Concerns**

SOIL EROSION:
Sheet, rill, & wind erosion

WATER QUALITY DEGRADATION:
Excessive sediment in surface waters

LIVESTOCK PRODUCTION LIMITATION:
Inadequate feed and forage

SOIL QUALITY DEGRADATION:
Organic matter depletion

WATER QUALITY DEGRADATION:
Excess nutrients in surface and ground waters

INADEQUATE HABITAT FOR FISH AND WILDLIFE:
Habitat degradation

DEGRADED PLANT CONDITION:
Excessive plant pest pressure

DEGRADED PLANT CONDITION:
Inadequate structure and composition

We use **Conservation Practices**

- Forage and Biomass Plantings (512)
- Critical Areas (342)
- Cover Crops (340)
- Range Planting (550)
- Field Border (386)
- Conservation Cover (327)
- Early Successional Habitat Development/Management (647)

Locations of NRCS Plant Materials Centers



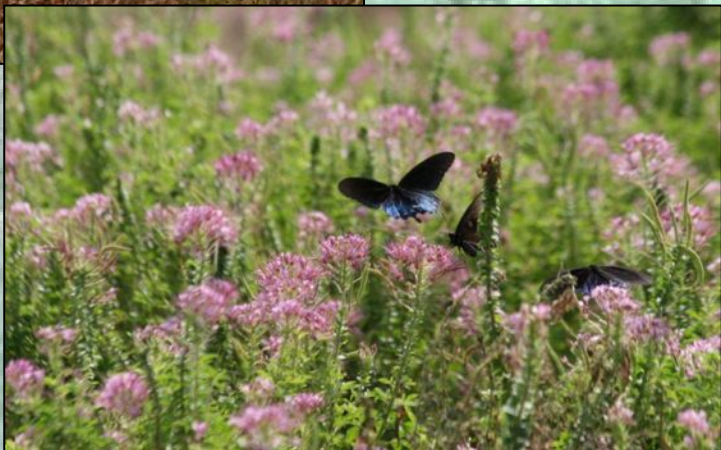
An 80 Year History



“Nature has evolved a plant for every purpose.”

- Dr. Franklin J. Crider

Plant Materials Centers Provide Turn-key Solutions



Plant Materials Center Plant Development

- Address a Resource Concern
- Support a Conservation Practice
- Must be practical to use by farmers and ranchers
- Must be cost-effective
- Must be viable for commercial growers



The PMC Plant Development Process

Collect

Evaluate

Select

Test

Release

How Much Selection?

- Cover Crops (340)
- Forage and Biomass Plantings (512)
- Critical Areas (342)
- Range Planting (550)
- Field Border (386)
- Conservation Cover (327)
- Early Successional Habitat Development/Management (647)

Specific Characteristics
More Uniformity
Wider Adaptation



Typical Characteristics
Increased Diversity
Local Adaptation

What Type of Release?

Cultivars

Specific Characteristics
More Uniformity
Wider Adaptation

Tested

Selected

Source-Identified

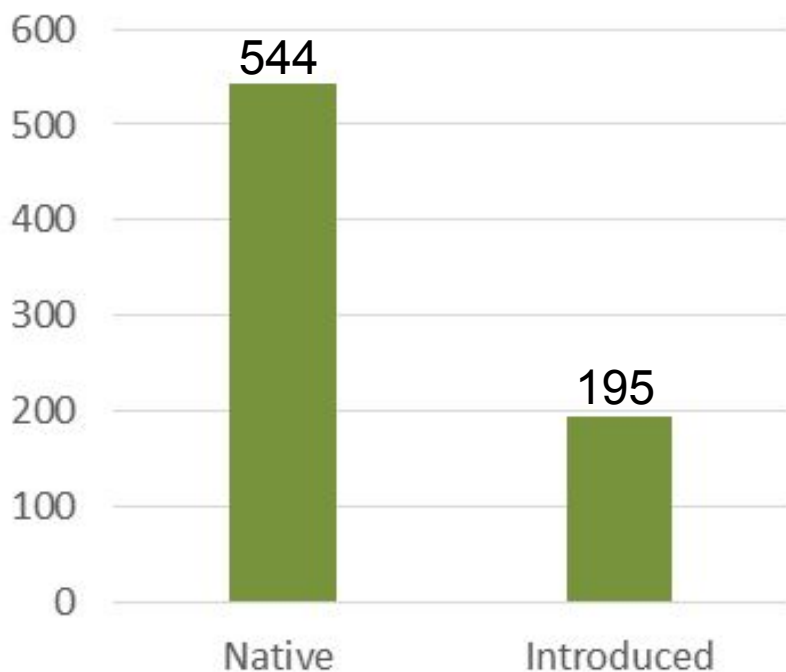
Typical Characteristics
Increased Diversity
Local Adaptation



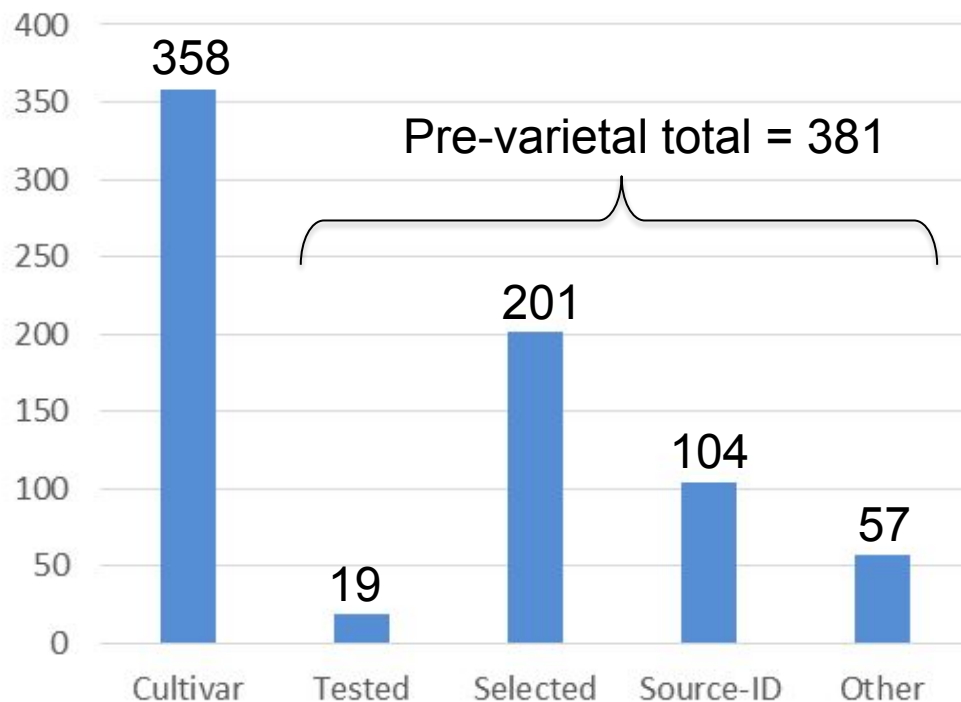
Summary of NRCS Plant Releases

Total from 1939 to present = 739

Origin of PMC Releases



Types of PMC Releases





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PMC Efforts Yield Significant Benefits





The preceding presentation was delivered at the

2017 National Native Seed Conference

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This and additional presentations available at <http://nativeseed.info>

