History, Mission, and Strategies of Native Seeds/SEARCH

and a custom platform for sourcing and sharing crop-specific information for climate change adaptation

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Las Capas, Tucson
1200 BC

- NGO founded in 1983 in Tucson, USA
- Conserves, documents and promotes local crop varieties and wild relatives in the Greater Southwest region
- *In situ, ex situ*, and cultural conservation programs
- Works toward regional food security, sovereignty and resiliency
  - High rates of food insecurity
  - High rates of farmland degradation
  - Pending critical water shortages
  - Rapidly growing populations
  - Reliant on fragile supply lines
  - At the frontlines of climate change

accessibility and adaptation




Ex situ conservation program: Seed Bank (*left*), Conservation Farm (*right*).


15th Annual INDIGENOUS SUSTAINABLE COMMUNITIES DESIGN COURSE
"INDIGENOUS SOLUTIONS FOR A SUSTAINABLE FUTURE" 2013

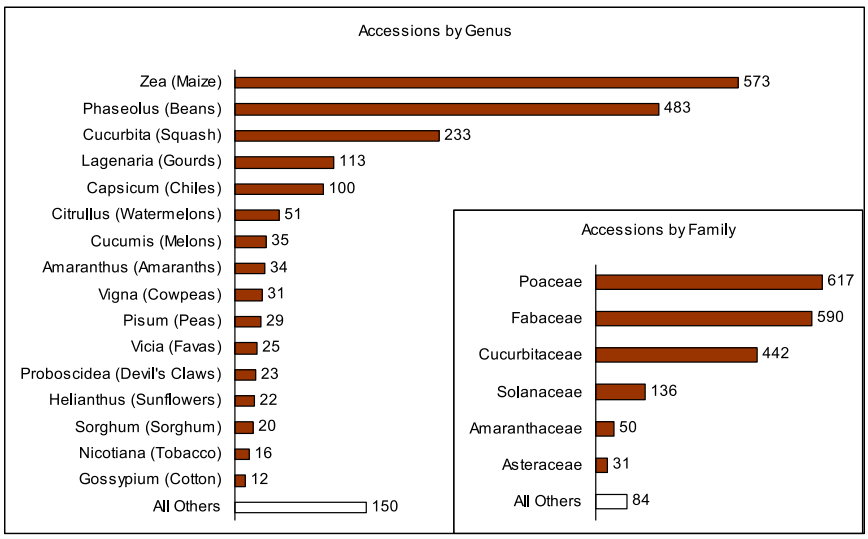

In situ and cultural conservation programs: Sierra Madre project; Wild Chile Botanical Reserve; Southwest Regis-Tree; Desert Foods for Diabetes; TNAFA; etc.

Distribution and education programs: Catalog, seed packets and Seed Watch (*top left*); Retail Store (*bottom left)*; Seed School (*top right*); Salons (*bottom right*).

NS/S Seed Bank Collection

- 1,900 accessions, 100 species
- Agricultural and ethnobotanical legacies of over 50 indigenous peoples
- Over past decade have distributed ~25,000 seed packets/year (now ~70,000/year)
  - 25% returned to indigenous farmers
- Consists largely of landrace/local varieties
- Increasing global importance due to climate change
- Expanding scope to include material from outside region
- Actively working on IPR/benefits sharing

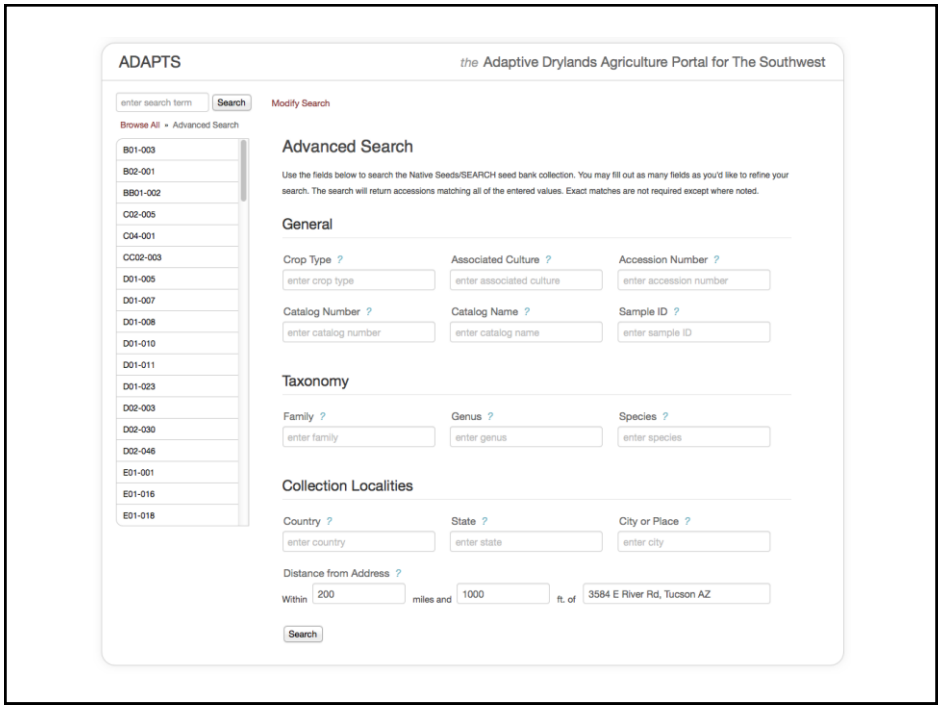
Native Seeds/SEARCH Collection



Restoration of Heritage Grains in the Borderlands

- A two-year grant-funded project involving nearly 20 non-profits and businesses in southern Arizona
- Aimed at market recovery of two of the oldest grains grown in Arizona: White Sonora soft bread wheat and Chapalote flint corn
- Includes production, research, milling, distribution, marketing, and education

WESTERN SARE Sustainable Agriculture Research & Education


ADAPTS
the Adaptive Drylands Agriculture Portal for The Southwest
enter search term
Search
Modify Search
Browse All » Advanced Search
B01-003
B02-001
BB01-002
C02-005
C04-001
CC02-003
D01-005
D01-007
D01-008
D01-010
D01-011
D01-023
D02-003
D02-030
D02-046
E01-001
E01-016
E01-018
Advanced Search
Use the fields below to search the Native Seeds/SEARCH seed bank collection. You may fill out as many fields as you'd like to refine your search. The search will return accessions matching all of the entered values. Exact matches are not required except where noted.
General
Crop Type ?
enter crop type
Associated Culture ?
enter associated culture
Accession Number ?
enter accession number
Catalog Number ?
enter catalog number
Catalog Name ?
enter catalog name
Sample ID ?
enter sample ID
Taxonomy
Family ?
enter family
Genus ?
enter genus
Species ?
enter species
Collection Localities
Country ?
enter country
State ?
enter state
City or Place ?
enter city
Distance from Address ?
Within
200
miles and
1000
ft. of
3584 E River Rd, Tucson AZ
Search

Passport Data

Status | Passport | Traits | Photos | Inventory

Solanaceae » *Capsicum annuum*

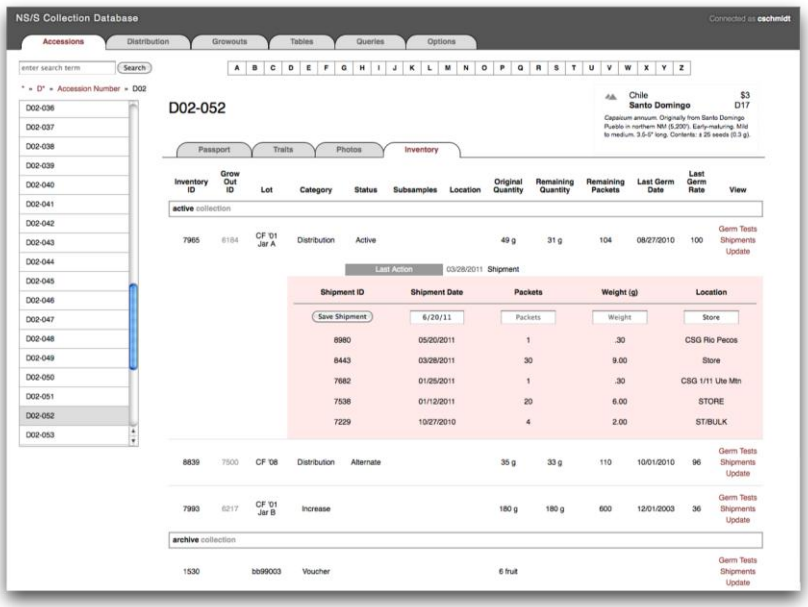
Names: Del Arbol (English) Chile De Arbol (Spanish)

Associated Tribe:

Collection Site: Mexico » Chihuahua » Parral Mun. » Allende, 55 km E of Parral

Donor » Collector: John Doe1 » GN (12-31-1985)

Inventory/Availability

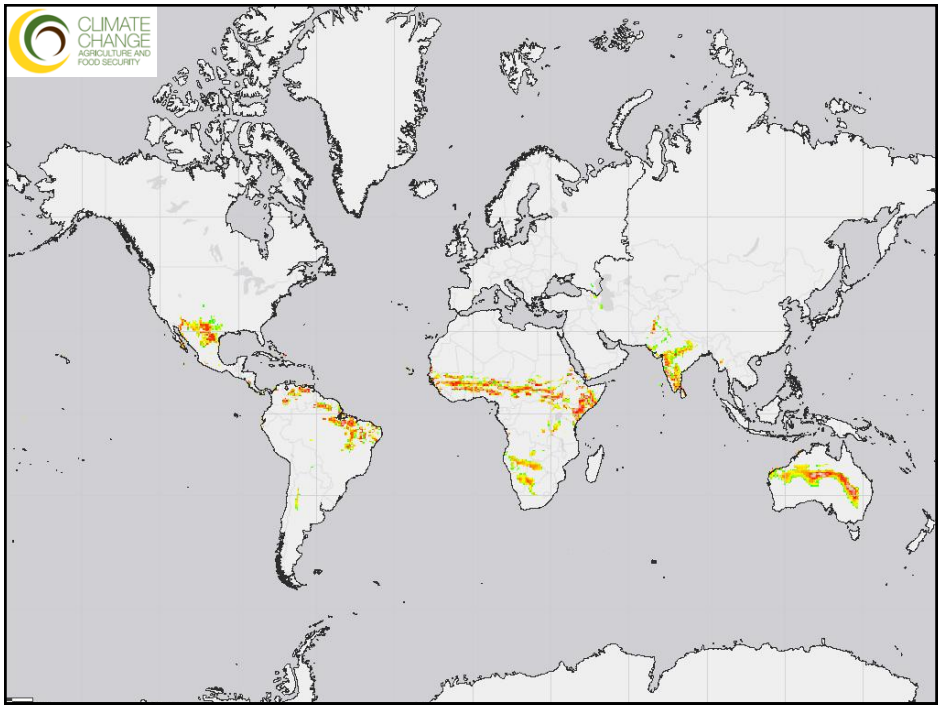


Traits

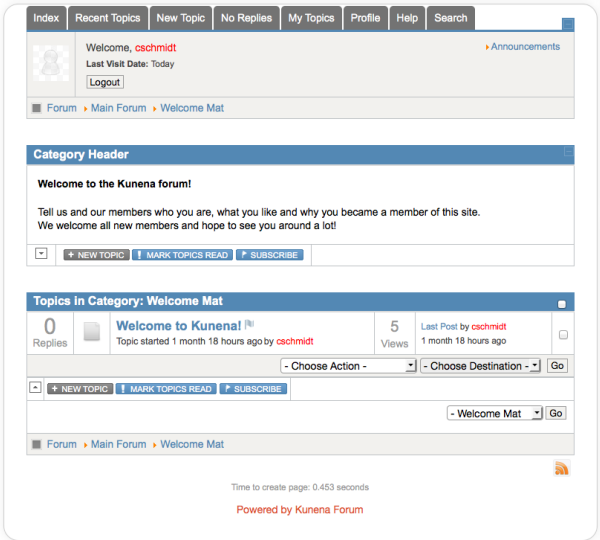
Status | Passport | Traits | Photos | Inventory

Character	Observation	Frequency	Comments	Lot	Character Description (Source: Code)
Corolla Color	white			CF '01	(Bioversity 7.2.1.4)
Corolla Shape	rotate			CF '01	(Bioversity 7.2.1.6)
Date Of 50% Flower	6/24/2001			CF '01	
Date Of 50% Fruit Set	8/24/2001			CF '01	
Date Of 50% Maturity	9/3/2001			CF '01	
Date Of First Flower	6/21/2001			CF '01	
Date Of First Fruit Set	6/24/2001			CF '01	
Days To 50% Flower	86			CF '01	
Days To 50% Fruit Set	147			CF '01	
Days To 50% Maturity From Planting	157			CF '01	
Days To 50% Maturity From Transplanting	98			CF '01	
Days To First Flower	83			CF '01	
Days To First Fruit Set	86			CF '01	
Flower Position	intermediate			CF '01	Recorded at anthesis. (Bioversity 7.2.1.3)
Fruit Color At Intermediate Stage	green			CF '01	Recorded on fruits just before the ripening stage (Bioversity 7.2.2.3)
Fruit Color At Mature Stage	red			CF '01	(Bioversity 7.2.2.6)
Fruit Length	8.06 cm			CF '01	Average fruit length of 10 ripe fruits of the second harvest (Bioversity 7.2.2.8)
Fruit Shape	elongate			CF '01	(Bioversity 7.2.2.7)
Fruit Shape At Blossom End	pointed			CF '01	Average of 10 fruit (Bioversity 7.2.2.15)
Fruit Shape At Pedicel Attachment	acute			CF '01	(Bioversity 7.2.2.13)
Fruit Shape At Pedicel Attachment	obtuse			CF '01	(Bioversity 7.2.2.13)
Fruit Width	1.37 cm			CF '01	Measured at the widest point. Average fruit width of 10 ripe fruits of the second harvest (Bioversity 7.2.2.9)

Photographs



Discussion Forum



Crowd-Sourced Data

CORN

INFORMATION FORM

Please fill out the following questions for each corn variety that you grow. When applicable, all measurements should be metric. Weight can be in lbs. as it's easily converted to grams or kilos.

Catalog No./Crop name:

Date planted: .....

Date transplanted into garden (if applicable): .....

Date of 1st germination: .....

No. seeds planted:
No. seeds germinated (date):

.....

Did the crop receive full sun, partial sun, or full shade?

.....

continued

PHOTOGRAPHING CORN

Getting get good photographs of plants in the field can be difficult. Mostly what we're looking for with corn is some **sense of the overall plant**, the **ear and color of the kernels** and any other **interesting features**. At right are several examples to help you best document each variety you grow. If you're growing more than one corn variety, be sure to label each photograph with the catalog name and number. If you're only growing one variety, it's still a good idea, but less critical. A ruler helps give scale to your photograph and is an important feature for NS/S. If possible, be sure to include **something for scale** in each photograph—a yard/meter stick, shovel, person, etc. for whole plants; a ruler, business card, etc. for close-ups.

If you don't have a good meter stick, a person standing near the corn is a good way to "measure" plant height. Be sure to provide us with the person's height!

Photo-documentation of the ears is extremely important for maize—it shows both kernel color but also the general size and shape of the ears, both important in determining which race of maize an accession belongs to.

continued

SAMPLE PHOTOS

NS/S Gardener's Network

Crowd-Sourced Data (cont'd)

CORN

QUESTION KEY

Date planted: the date you sowed the seeds, either directly into the ground or in a seedling tray.

Date transplanted into garden: the date you transplanted the seedlings into the garden.

Date of 1st germination: the date you noticed the first seedling emerge (either from the ground or in a seedling tray; if a seedling tray, be sure to let us know how/where you started the plants).

Number of seeds planted/germinated (date): please count the number of seeds you plant before you plant them! When you decide that no more plants are likely to germinate, count the number of seedlings; include the date.

Date of 1st tasseling: the date when you see the first tassel sticking up above the plants.

Date of 1st silking: the date you see the first silks form. These emerge from the shoots that eventually form ears.

Length of time that tassels and silks were produced: Once no more silks are being produced, ears can no longer be pollinated. Tassels are usually produced prior to silks, so look for the last plant producing tassels.

What color were the tassels? Silks? Most tassels and silks are "yellow", but both can be colored. Tassel colors can vary from all yellow (stems and anthers) to yellow anthers with purple stems to purple anthers with purple stems. Please try to indicate both anther and stem colors. Silks are mostly yellow but can also be purple- or pink-tinged.

Were leaves/veins other colors besides green? If so, estimate the number or percentage of plants. Leaves are usually green with green colored venation (the veins). However, other pigments, particularly anthocyanins, may result in purple leaves and/or veins. We have rarely seen an entire plot that is colored, but please indicate if yours is!

Were aerial roots produced? If so, on how many nodes? Aerial roots are produced just above the soil **(see photograph)** and can help stabilize plants. Please indicate whether you noticed aerial roots, on approximately how many plants in your plot, and the average number of nodes on which they were produced **(see photograph)**.

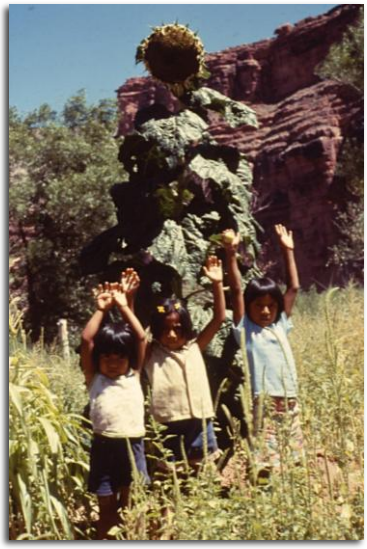
Did you have any problem with lodging? In windy locations, corn plants may easily lodge (fall over). Some varieties are less susceptible to lodging. Please indicate whether your plants tended to lodge and whether they recovered on their own or not.

How tall is the plant at maturity? Try to measure from the ground to the highest average point of the plants; a metric ruler (cm) is best, but use whatever you have. A photograph with a person of known height works well for this. Be sure to indicate the person's height!

Date of harvest: this may depend on how you harvest cobs. If you've been harvesting green ears to eat roasted as "sweet" corn, let us know when you started/stopped harvesting like this. Otherwise, we're interested in the date when your corn is considered "done".

continued

NS/S Gardener's Network



Any questions?