

La Semilla, The Seed, Volume 8, Issue 2

A Newsletter for the Tucson Plant Materials Center ☀ Fall 2012

Greetings from Tucson!

With fall approaching, our attention turns toward seed collections. State Plant Materials Committee members recently sent out a request for input on species selection to each field office. Input from cooperators is also requested. The species identified by field office personnel as “needed” are listed in our annual call for collections on page 3. Please don’t hesitate to contact the center if your office is in need of seed collection envelopes or training.

Sincerely, The Tucson PMC Staff



PMC Releases

'Loetta' Arizona cottontop
(*Digitaria californica*)

Saltillo germplasm
Cane beardgrass
(*Bothriochloa barbinodis*)

'Stevan' Plains bristlegrass
(*Setaria leucopila*)

Cochise germplasm Spike dropseed
(*Sporobolus contractus*)

Pima germplasm Whiplash pappusgrass
(*Pappaphorum vaginatum*)

Vegas germplasm Alkali sacaton
(*Sporobolus airoides*)

Moapa germplasm Scratchgrass
(*Muhlenbergia asperifolia*)

Batamote germplasm Desert zinnia
(*Zinnia acerosa*)

NEW in 2010!!

Bonita germplasm Plains lovegrass
(*Eragrostis intermedia*)

Farm Developments

Field Planting Establishment

On August 6, Plant Materials Center (PMC) employees worked with a land owner and Tucson Field Office employee, Katie Cline, to establish a 0.5 acre field planting of bush muhly (*Muhlenbergia porteri*). The PMC has two composites of bush muhly in initial evaluation. One of the composites was developed for use in MLRA 40 and the other in MLRA 41. During initial evaluation at the PMC, it was found that bush muhly seed is relatively easy to harvest but incredibly difficult to clean. The recently installed study will determine the efficacy of establishing bush muhly using baled material and

will also compare the performance of the two composites. The study will be in place and evaluated for five years. If you would like further information on the study and/or have questions about establishing a field planting, please contact PMC staff.



Figure 1: Bush muhly field planting established from hay bales.

State Plant Materials Committee

The State Plant Materials Committee convened August 28th at the PMC. The committee is comprised of PMC, regional plant materials, state, Field and Area Office employees. Committee meetings are critical for the integration of plant materials activities into field office operations and their needs regarding the Plant Materials Program.

During the meeting, committee members were assigned as points of contact for specific field offices. Members will coordinate with their assigned field offices to better access and communicate plant materials needs across the state. The PMC welcomes the committee members and asks that all Field Offices support the committee members assigned to assist them. Table 1 lists the names of each area and field office committee member and their field offices of responsibility. If you have plant materials needs please contact the PMC and/or the committee member assigned to your field office.

Name	Field offices of responsibility
Katie Cline	Tucson, Sells, Chandler
Jan Pertruzzi	White River, San Carlos, Springerville, Holbrook
Scott Stratton	Safford, Douglas, Willcox
Emilio Carrillo	Casa Grande, Avondale, Yuma, Parker, Tucson Area Office
Felix Nez	Dilkon, Shiprock, St. Michaels, Kayenta, Chinle, Keams Canyon
Clare Poulsen	Fredonia, Kingman, Flagstaff, Prescott

Table 1: State Plant Materials Committee members and their offices of responsibility.

Tonto National Forest and Coronado National Memorial Final Deliveries

This summer the PMC concluded two interagency agreements. In early May, approximately 1,400 containerized plants of ten

different species were delivered to the Tonto National Forest. This was the second and final delivery of plants grown to both stabilize areas around Camp Creek experiencing erosion and replace invasive species being removed.



Figure 2: Tonto National Forest plant delivery.

On the 9th of August, a delivery of approximately 1,600 containerized Palmer’s agave concluded an agreement with Coronado National Memorial. The agaves are being used to revegetate areas within the grasslands of the Memorial to protect the habitat of the endangered Lesser long-nosed bat. Many of these areas were disturbed during the construction of the border fence and/or during the fires of 2011.



Figure 3: Palmer’s agave loaded for delivery.

Call for Collections

With guidance from the State Plant Materials Committee and collaborators, the PMC develops a list of species for study at the center farm. This list of species is represented in the annual call for seed collections. The PMC relies on field office personnel and others to aid in the collection of seed for the development and installation of these studies. The seed you collect may be used in the next PMC release!

The species on the 2012 call for collections and the MLRA's they are needed from are listed in table 2. Figure 4 is a map generated from [NOAA's website](#) that illuminates areas that received greater than normal precipitation this summer and is useful for targeting seed collection areas. For example, the southeastern portion of MLRA 40 has received 200-400% of its normal precipitation and could have exceptionally heavy seed production this fall.

One of the species we are especially interested in studying at the PMC is curly mesquite. Curly mesquite has an **earlier maturity date** (early to mid-October) than other native grasses. However, due to the rains we have received, curly mesquite may mature later than normal this year. A good indicator of seed maturity is that the seed falls off easily into your hand. If you need information on how to collect a specific species, please feel free to contact PMC staff. Happy collecting!

Species Needed	MLRA's needed from
Tanglehead (<i>Heteropogon contortus</i>)	38, 40, 41
Big galleta (<i>Plueraphis rigida</i>)	30, 40
Vine mesquite (<i>Panicum obtusum</i>)	38, 40, 41
Curly mesquite (<i>Hilaria belangeri</i>)	38, 40, 41
Rothrock grama (<i>Bouteloua rothrockii</i>)	40, 41
Desert panicgrass (<i>Panicum urvilleanum</i>)	30, 31, 40

Table 2: Species targeted for collection in 2012.

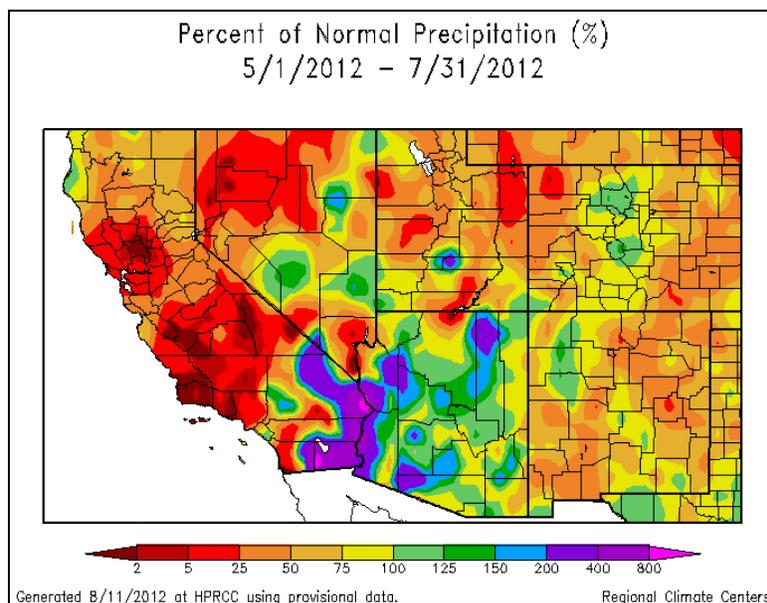


Figure 4: Percent of Normal Precipitation Map May-July 2012.

Sunn hemp Trial with the University of Arizona

A cover crop trial was planted on August 6th as part of a cooperative project with a local producer, the University of Arizona and the NRCS-Plant Materials Program. The trial is being conducted in the Marana, AZ area on irrigated cropland and includes: 'Tropic Sun' sunn hemp (*Crotalaria juncea*), sesbania (*Sesbania herbacea*) and sudangrass (*Sorghum bicolor* ssp. *Drummondii*).

The purpose of the seven acre trial is to evaluate species performance and the nitrogen fixing ability of the two legumes (sunn hemp and sesbania) in a typical southern Arizona cropping system. The trial was drill seeded after the harvest of a small grain crop into existing stubble. Soil samples were taken prior to planting the cover crop. Soils will be re-sampled after termination of the cover crop and prior to planting cotton to determine available nitrogen, by species, for the cotton crop.

Summer weeds, morning glory and pigweed, are an issue with summer cover crops and this trial has not been an exception. September 2012 observations indicate that sudangrass has excellent weed smothering ability while the two legumes did not initially provide adequate shading to smother the emerging weeds.



Figure 5: Sunn hemp approximately one month after planting

Pima County Master Gardeners

The PMC hosted classes for two groups of Pima County Master Gardeners this summer. Attendees were presented seed collection protocols, native plant propagation techniques and given the opportunity to practice their skills to plant their own native plant. Future classes are being planned now. Please contact PMC personnel with any training requests!



Figure 6: A group of Pima County Master Gardeners learning native plant propagation techniques.

Tohono O'odham Range Day

In June, PMC personnel assisted Tucson Field Office Range Conservationist, Alisha Phipps, during the annual Tohono O'odham Youth Range Day. Approximately 50 Range Day attendees were presented information on the identification of native plants and some of their ethnobotanical uses.



Figure 7: Range Day attendees reviewing handouts on native plants.

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