



Upper Colorado Environmental Plant Center Increase For CPNPP



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• **UCEPC Established 1975** •

CPNPP

-increase the availability of native plant materials, and to provide the knowledge and technology required for their use in restoring diverse native plant communities across the Colorado Plateau.
-increase and improve commercially available plant materials for restoration and reclamation, serving large portions of CO, UT, NM, and AZ.



Need



Collection



Testing/Evaluation (common
garden, Field eval. Etc)



Seed Increase



Commercial Production



Land user/mgr

Sustainable Materials

- **Has to be enough of a Demand for the product**
- **Materials selected for a potential release should be tested/evaluated (Selection shouldn't be based on location alone)**
- **Materials need to be able to be produced/harvested in an agronomic setting**



UCEPC Focus



- Focus on materials that are not commercially available
- AND materials from our region that can fill a void in the market



CO Plateau Examples

- Indian Ricegrass (*Achnatherum hymenoides*)
- Bottlebrush Squirreltail (*Elymus elymoides*)



Common available Indian Ricegrass

Name	Releaser	Release Type	Origin	Elevation	Precip.
Rimrock	Bridger/ARS- Logan/MT,WY	Cultivar	Billings, MT	3600	10-14"
Nezpar	Aberdeen PMC/ID AES	Cultivar	Whitebird, ID	> 5000	8" or up
Paloma	Los Lunas PMC/NM AES	Cultivar	Pueblo, CO	5000	
Star Lake	Logan ARS/AES	Selected Class	Mckinley Co., NM	6750	10"
White River	Logan ARS/AES	Selected Class	Rio Blanco Co, CO	5400	10-12"

Advanced ACHY Evaluation



1991-1998

Initial trial:

55 accessions

2004-2009

Advanced trial:

9 top accessions
and 3 standards
(Rimrock,
Paloma, Nezpar)

Accession/ Release	Seed Yield (lb/acre) Year				Seed yield(lb/Acre) 4-Year Avg.	Collection Site
	2006	2007	2008	2009		
9024741	191	96.2	121	149.12	139.33	Pagosa, CO
902661	113.8	180.7	58.1	229.21	145.45	Delta, CO
9024739	165.2	117.3	66.6	142.59	122.92	Pagosa, CO
9024749	95.7	195.3	51.2	225.08	141.82	Durango, CO
9024715	119.9	160.7	40.5	158.98	120.02	CO Springs, CO
Rimrock	165.5	77	66.1	153.25	115.46	Bridger, MT
9024735	103.1	97.8	51.2	149.12	100.31	G. Junction, CO
9024664	68.2	155.1	13.4	161.64	99.59	Moffat Co., CO
9024716	58.4	138.6	12.8	168.44	94.56	CO-Springs, CO
Paloma	24	138.8	33.6	92.22	72.16	Pueblo, CO
Nezpar	83.7	57.8	38.4	82.75	65.66	Whitebird, ID
9024818	13.3	90.1	3.2	68.76	43.84	Unknown
Mean	100.15	125.45	46.34	148.43	105.09	

Indian Ricegrass Common Garden

Rimrock



Experimental #661



Increase of top performers in Heavy soil

Accession 749 (Durango, CO)

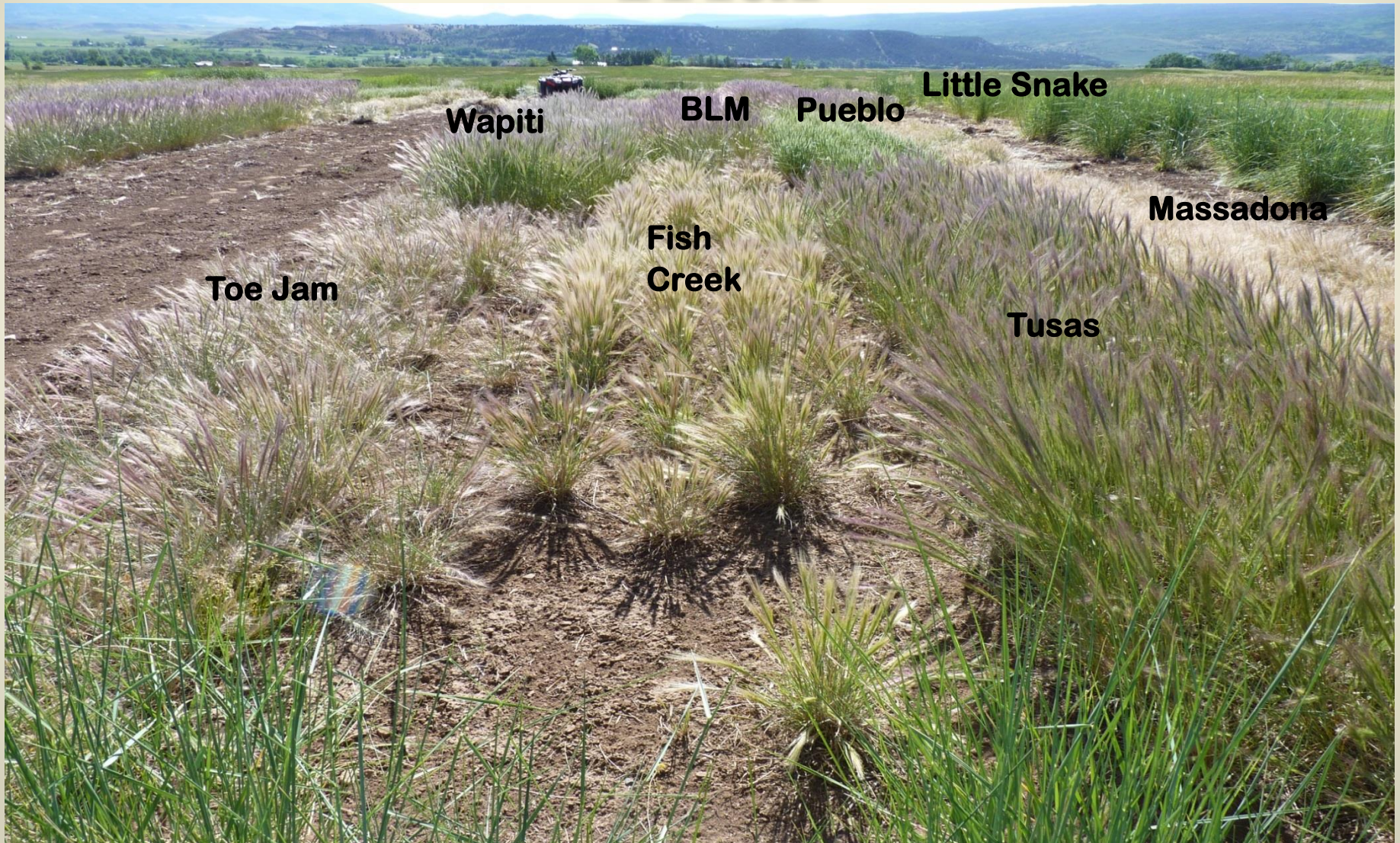


Accession 661 (Delta, CO)

Common available Bottlebrush

Name	Subspecies	Releaser	Release Type	Origin	Elevation	Precip.
Toe Jam	californicus	ARS-Logan	Selected C.	Elko Co. , NV	6000	12
Fish Creek	elymoides	ARS-Logan	Selected C.	Blaine Co. , ID	4760	14-15
Tusas	brevifolius	NRCS/NMSU	Selected C.	8 NM accessions	4800-9200	Varies
Wapiti	brevifolius	UCEPC/ARS	Selected C.	Wapiti Peak, RBC	7800	16+
Pueblo	brevifolius	UCEPC/ARS	Selected C.	Wet mtns near Pueblo, CO	7200	16+

Bottlebrush Squirreltail Trial



Colorado Plateau 'Massadona'



Massadona Increase



Conclusion

- **UCEPC will continue to partner with CPNPP in order to move ACHY 661/749 and Massadona ELEM toward eventual release**
- **It is hoped that these can be a sustainable option to fill vegetation needs on the Colorado Plateau in the near future.**

Thanks



coloradoplantcenter.org