UNITED STATES DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE KNOX CITY, TEXAS

And

TEXAS **PARKS** AND WILDLIFE DEPARTMENT KERR WILDLIFE MANAGEMENT AREA HUNT, **TEXAS**

NOTICE OF RELEASE OF KERR GERMPLASM WRIGHT PAVONIA SELECTED CLASS OF NATURAL GERMPLASM

The Natural Resources Conservation Service, U.S. Department of Agriculture in cooperation with the Texas Parks and Wildlife Department, Kerr Wildlife Management Area announce the release of a selected ecotype of Wright pavonia, Pavonia *lasiopetala* Scheele.

As a selected release **this** plant will be referred to **as** Kerr Germplasm Wright pavonia. It has been assigned the Plant Introduction (PI) number **477968**. Kerr Germplasm is released **as a** selected class of certified seed (natural **track**).

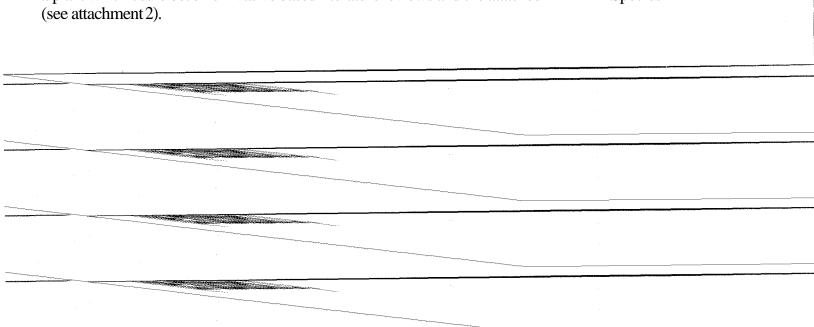
This alternative release procedure is justified because there are presently no commercial varieties of Wright pavonia available.

Collection Site Information: Kerr Germplasm was originally collected by RC Malden and sent to the old SCS San Antonio Nursery in the early 60's. After the nursery closed the germplasm was moved the Waco, TX and later to the Knox City PMC in 1966. Seed produced at Knox City PMC from the original germplasm was used to establish a native population at the Texas Parks and Wildlife *Kerr Wildlife Management Area near Hrt., TX. This site will be designated as the home collection site for Kerr Germplasm. (N. Lat. 30° 04', W Long 99° 31'). Elevation at the collection site is approximately 1761 feet; soils at the collection site are classified as Eckrant-Comfort association, and Eckrant-Rock outcrop association. Average precipitation for the area is around 27 inches. Other plants growing in association included sideoats grama, little bluestem, liveoak and Engelmanndaisy. The collection site is located in MLRA 81B * Central Edwards Plateau.

Description: Kerr Germplasm is a native perennial, warm-season, small shrub. Showy rose-red or pink **flowers are borne on** herbaceous stems rising **ficm** a woody base. Flowering and seed set is indeterminate throughout the summer and early fall in northern **areas** and may occur year around within the southern areas of adaptation. Leaves **are** heart-shaped with three coarsely toothed lobes. Wright pavonia may grow **as high as** four feet with a spread of three feet. Plants **are highly** palatable and utilized by all classes of **livestock** and deer. Wright pavonia **has** been almost eliminated from heavily stocked **ranges.** Wright pavonia occurs from western Texas through **the** Texas Hill **Country** and up into the southern Rolling Plains and down into Rio Grande Plains. Plants reproduce **from** seed and are considered good re-seeders.

Method of Breeding and/or Selection: Kerr Germplasm is a single collection selected for its palatability to livestock and wildlife, and its ascetic value when **used** in native landscapes. See attachment **1** for a *summary* of evaluations from 1971 until 1979 and seed production estimates.

Environmental Impact Assessment: Kerr Germplasm Wright pavonia is a selection of naturally occurring germplasm and has been unaltered from its original collection. **Kerr** Germplasm did not meet the assessment of a plant which could become invasive based literature reviews and the attached "Invasive Species Worksheet" (see attachment 2).



Conservation **Use:** Kerr Germplasm may be used in pure stands or **as** a component in **seed** mixtures for range seeding. Wright pavonia reseeds itself readily on rangeland where the plants **are** protected from overgrazing. **It** may be used for beautification and low input native landscapes. **Its** forage value is highly palatable to all livestock, white-tailed deer and many exotic herbivores. Wildlife will utilize the plants and **seed** for food. **Plants used** in perennial food plots for whit-tailed deer will have to be protected **and** managed using limited access **areas**.

Anticipated Area of Adaptation: Kerr Germplasm's anticipated areas of adaptation are MLRAs 78B,C,D, 80B, 81A,B,C, 82, 83A,B, 84B, and parts of 85, 86A and 87A. Wright pavonia is adapted to a wide range of soil types but will perform best on well drained sandy to medium textured soils.

Availability of Plant Materials: Generation **0** seed (equivalent to Breeder seed) will be maintained by **the** USDA-NRCS Plant Materials Center at **Knox** City, Texas and is available in limited quantities **to** interested parties for increase purposes.

References:

Correll D.S., Johnston M.S. Manual of the Vascular Plants of Texas, 1970, TX Research Foundation.

USDA-SCS Soil Survey, Kerr Texas, 1986.

Hatch, S.L., Checklist of the Vascular Plants of Texas, TX Ag Exper. Stn., TAMU, 1990.

Nokes, J., How to Grow Native Plants of **Texas** and the Southwest, Texas Monthly Press, 1986.

Rickett, H.W., Wild Flowers of the United States, McGraw-Hill Book Co., 1969.

Prepared by:

USDA-NRCS, Plant Materials Center, 3776 FM 1292, Knox City, TX 79529, 940-658-3922.

Signatures for release of :

Kerr Germplasm Wright pavonia (Pavonia lasiopetala)

Name

Texas Parks and Wildlife Department Kerr Wildlife Management Area Hunt, Texas

Moven sum

2-r-00 Date

Name/

John P. Burt, State Conservationist United States Department of Agriculture Natural Resources Conservation Service Temple, Texas 2-15-00

Date

Name

Director, Ecological Sciences Division United States Department of Agriculture Natural Resources Conservation Service Washington, D.C. 3/2/00 Date

Attachment 1: Summary of Initial Evaluation of *Pavonia lasiopetala*, Wright pavonia

	Evaluation Year	Vigor	Seed Prod	Leaf Prod	Disease Res.	Foliage Ht.(In)	Foliage Wt.(in)	Stand Rtng
	1971	3	3			15	30	1
_	1972	3	3	3	1	90	100	3
•	1973	3	3	3	1	75	90	5
	1974	3	5	3	1	30	50	7
	1975	3	3	3		85	120	3
	1976	3	3	3	3	80	100	1
	1977	3	5	5	3	60	100	1
	1978	7	5	5	5	30	35	7
	1979	5	7	5	3	80	120	3

Evaluation ratings 1-9, 1=Excellent, 9=None

Production Year	Area Planted	Production*	ConvertedLbs./ac,
1978	.10 ac.	34 lbs.	340 lbs.
1979	,10 ac.	14 lbs.	140 lbs.
1980	.10 ac.	10 lbs.	100 lbs.
1981	.10 ac.	29 lbs.	290 lbs.
1982	.10 ac.	35 lbs.	350 lbs.
1983	. 10 ac.	20 lbs.	200 lbs.
1984	.10 ac.	17 lbs.	170 lbs.
1985	.10 ac.	24 lbs.	240 lbs.

Proposed release species: Kerr Germplasm Wright pavonia

Instructions: Circle item under Yes or No column and follow to conclusion.

	Yes	No
Does the species invade elsewhere, outside of North America?		To 2
2. Is it a specific hybrid with known seed sterility?	To 3	To 4
3. Does it spread quickly by vegetative means?		To 16
4. Is it native to parts of North America other than the region of the proposed introduction?		To 6
5. Does it spread quickly by vegetative means?		To 16
6. Does it grow very rapidly in its first two years?		To 7
7. Does it reproduce quickly vegetatively?		To9
Does it reproduce quickly vegetatively?		To11
9. Is it in a family or genus with species that are already strongly invasive in North America?		To 16
10. Do the seeds require pretreatment for germination?		To 15
11. Do the seeds require nt fru germination?	15	To 17
12. Is rt in a family or genus with species that are aiready strongly invasive in North America?	15	To16
13. Is it in a family or genus with species that are already strongly invasive in North America?	To17	To14
14. Is it native to parts of North America other than the region a the proposed introduction?	To 15	To 17
15. Further analysis/monitoring needed on germplasm		
16. Accept germplasm		
17. Reject germplasm		

Adapted from article Predicting invasions of **woody** plants introduced into North America, Conservation Biology Vol. 11:193-203, Feb. 1997.

Reference(s) used for analysis of conclusion:

1. Correll and Johnston, Manual of the Vascular Plants of Texas, Texas Research Foundation, 1970.
2 Nokes, J., How to Grow Native Plants of Texas and the Southwest, Texas Monthly Press, 1986.
3. Rickett, H.W., Wild Flowers of the United States, McGraw-Hill Book Co., 1969.
4. Hatch, S.L., Checklist of the Vascular Plants of Texas, TX Ag Exper. Stn., TAMU, 1990.
5. Vines, R.A., Trees, Shrubs and Woody Vines of the Southwest, University of Texas Press, 1960.
6.