

Plants for the Heartland

A newsletter in support of the Plant Materials Program for Colorado, Kansas, Nebraska, and Oklahoma

VOLUME 13, ISSUE 2

APRIL 2006

**MANHATTAN PLANT
 MATERIALS CENTER**
 Manhattan, Kansas



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Common Buttonbush Selection

Off To A Good Start

The Plant Materials Center (PMC) staff anxiously awaits the 2006 growing season and looks forward to a good seed production year. One area of great interest is the newly established Breeder's Block of common buttonbush. Last April 2005, 12 accessions were selected from a pool of 36 accessions that had been under evaluation for the past five years at the PMC. Twenty plants were selected from the 12 accessions. The plants were lifted with a tree spade and moved to a Breeder's Block in Field B-1 on April 20, 2005. The composite was assigned Accession Number

9050496. Plant selection criteria focused on plant growth characteristics, form, plant vigor, and



Showy flowers make buttonbush attractive to a large variety of insects.

insect resistance. Other factors that were considered included blooming period and winter injury. Horticulturists may be

interested in the following observations that were made while studying over 300 plants. Color variation was noted on inflorescence and leaf petioles and young stems. The variations ranged from red, rose-pink, green to green-yellow, green-red, and green. Green was the predominant color. Fruit color ranged from red to yellow to green turning to tan. However, the undersides of plant parts were green. Flower color was mainly white with the exception of a few plants with flowers with pink corolla tubes and lilac stamens.

Wildflowers & Grasses of Kansas, a field guide

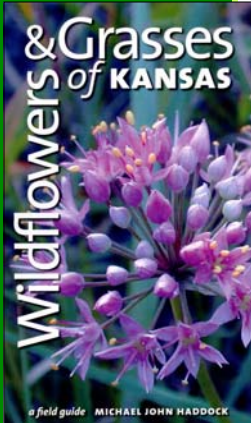
Published in 2005 by the University Press of Kansas and written and photographed by Michael John Haddock, *Wildflowers & Grasses of Kansas* is a publication any plant enthusiast should own. The field guide was created to help people recognize some of the major wildflowers, grasses, and sedges that occur in

Kansas. It contains color photographs and descriptions of 323 plant species. Included are many of the most common and conspicuous wildflowers observed in the state, as well as some species that are encountered infrequently and not often listed in field guides. Most of the plants included are native to Kansas, although a few

have been introduced. A handful of trees and shrubs with particularly attractive or unique blooms can be found here, but the primary focus is on forbs, grasses, and grasslike plants. Many of these plants also occur in states surrounding Kansas which makes this guide of interest to anyone wishing to explore the natural

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Wildflowers & Grasses of Kansas continued from page 1



Cover: **Wildflowers & Grasses of Kansas.**

“Switchgrass may
one day be king”



‘Kanlow’
switchgrass

vegetation of the central Great Plains region. The majority of the species included in this field guide are portrayed by a single color photo taken by Haddock. He has attempted to capture a good image of each plant. Where close-up photos of the flowers have been used, the author has provided a good description to allow the reader to gain an understanding of the overall size and growth form of the plant. In some

cases, secondary illustrations, provided by the author’s father, Dean Haddock, have been included to portray unique characteristics of the plant that will aid in its identification. Each plant entry in the book has been arranged as follows: scientific name, family, common name(s), flowering period, height, distribution and habitat, life span, basic morphological characteristics, and comments.

The *Wildflowers & Grasses of Kansas*, a field guide, can be purchased at local bookstores or by contacting the University Press of Kansas at Lawrence, Kan. 66049. Haddock is an Agricultural Librarian and Chair of the Sciences Department at Kansas State University Libraries. He created the Kansas Wildflower and Grasses Web site, at www.lib.ksu.edu/wildflower/.

From the Literature

Switchgrass may one day be king. It may seem far-fetched, but consider the growing attention being paid to bioenergy. Switchgrass is a perennial grass that can be grown on millions of acres of land. It has the potential of becoming a profitable agricultural crop. Here at the PMC switchgrass is perhaps our easiest crop to establish. Not everyone shares

that view, however. In recent years, with all the talk about biofuels, concerns have been raised regarding producers being able to establish a stand of switchgrass. Research has shown that a number of factors need to be considered when planting switchgrass. Seeding depth, soil type, soil temperature, soil pH, seed size, and seed dormancy are factors one

must consider. There are also varietal differences and environmental factors when it comes to seed size and seed dormancy. Soil temperatures ranging between 25 to 35°C and soil pH between 5.0 and 8.0 are thought to be ideal for germination success in switchgrass. The lighter textured soils are also an advantage to emerging seedlings.

Shop Notes **Equipment Mobilization Project**

You say your equipment is stored four rows deep and it’s too much trouble hitching up three other pieces of equipment to get to the cultivator for a little job that will take only ten minutes? No problem, just put your equipment on casters.

Jerry Longren, Biological Science Technician, has mobilized most of the PMCs equipment so that all a person has to do is simply shove one piece of equipment aside to get to another. This reduces the amount of time that was previously spent

getting ready to go to the field and frees up more time for the actual field work itself. Much of the PMCs equipment used to set on stationary stands, pallets, or on the concrete floor of the machinery building. Need the seed

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People Make The Difference

The Plant Materials Program is truly a “Team Effort”; it takes the involvement of lots of people to make the program work. The PMC recognizes the collectors whose buttonbush seed collection efforts resulted in a plant selection and thanks all 36 individuals in Kansas and Oklahoma who helped to make this study a success by making a contribution. Accessions making up the composite, their origin, and the person or persons that made the collection are listed in the following table.



Button-bush plant being positioned in Breeder’s Block.

Accession Number	No. of Plants Selected	Origin	Collector
9050287	3	Hodgeman Co., Kan.	Shaun Vickers and Robert Schiffner
9050296	2	Miami Co., Kan.	Robert Allen
9050311	1	Douglas Co., Kan.	Fran Collins and Coleen Davison
9050323	1	Harvey Co., Kan.	Mark Religa
9050340	1	Cleveland Co., Okla.	Wayne Fjeseth
9050359	1	Reno/Harvey Co., Kan.	Joyce Wade
9050360	1	Osage Co., Kan.	Art Hastert
9050371	1	Butler Co., Kan.	Charles Jones
9050375	4	Montgomery Co., Kan.	Jodi Cushenbery
9050389	2	Douglas Co., Kan.	Larry Kichler
9050392	1	Johnston Co., Okla.	William Hall
9050395	2	Logan Co., Okla.	Dale Poindexter

Shop Notes continued from page 2

stripper? No problem, just roll it on out. And the hydraulic tank that goes with it? It’s no longer sitting on a pallet, it’s on wheels, too. If the tank is in your way, no need to get the fork lift, just push it out of the way.

Jerry first builds a frame of angle iron to accommodate the piece of equipment. He

then attaches casters of a size sufficient to handle the weight of the equipment. The cost of the casters and the steel frame they support is well worth the investment reaping the PMC savings in time and labor for years to come.



Under cutter on three-point hitch is ready to roll.



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**SEEKING VEGETATIVE SOLUTIONS
TO CONSERVATION PROBLEMS**

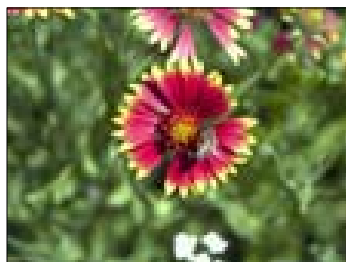
The mission of the Plant Materials Program is to develop and transfer state-of-the-art plant science technology to meet customer and resource needs. The primary products produced by the program include the production of improved varieties of plants for commercial use and the development of plant science technology for incorporation into the electronic Field Office Technical Guide (eFOTG).



Wildflower Workshop

You know spring can't be far away when you hear that the Oklahoma Native Plant Society and the Oklahoma Department of Transportation are advertising their 29th Annual Wildflower Workshop. The workshop will be held this year on May 5 and 6 in the town of Grove, Oklahoma. Grove is nestled in an arm of Grand Lake in eastern Oklahoma not far from the eastern border of Oklahoma where Missouri and Arkansas meet. Grove is the home of the Cherokee Queen, a Mississippi style paddle boat. Grove is also the home of Lendonwood Gardens, a three-acre area that includes over 1200 plants in a constantly changing panorama. The meeting on Friday, May 5, begins at 9:00 a.m. with a welcome. Speakers that day will discuss such topics as: Vitamin K in Wild Plants,

Attracting Butterflies with Wildflowers, Wildflowers in Your Yard, Native Woodland Plants, and Photographing Wildflowers and Grasses. A field tour on Saturday, May 6, will assemble at Grove City Hall and depart by bus for wildflower and woodland sites, plus Lendonwood Gardens. A box lunch will be provided at the Bernice State Park stop. An extra large wildflower market will include native plants, seeds, crafts, books, and gifts for sale. There will be a display about Oklahoma



Indian blanket flower

Department of Transportation's (ODOT) Roadside Wildflower Program. To receive more information and registration material, call the ODOT Beautification Office (405) 521-4037. Registration will cost \$8.00 per individual and lunch, dinner, and field trip costs are extra. Call about registration details.

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