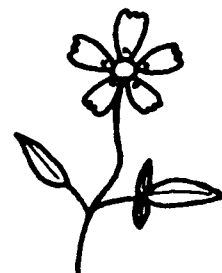


MISSISSIPPI NATIVE PLANT SOCIETY



MARCH 1985

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IN SEARCH OF THE NEEDLE PALM

Keith Clancy

Department of Biological Sciences, Mississippi State University

The needle palm, Rhapidophyllum hystrix (Pursh) H. Wendl. & Drude, is a fan-shaped (palmate) shrubby plant resembling the palmetto palm, Sabal minor (Jacquin) Pers. and the saw-palmetto, Serenoa repens (Bartr.) Small. All three are endemic to the southeastern United States. Needle palms are low-growing plants (6-8 feet tall) with large glossy-green leaves, which are silvery on their lower surfaces, and consist of a short stem that mostly remains underground. At the base of the plant are many long sharp-pointed spines, hence the common name, needle palm. Other common names used are blue palmetto, creeping palmetto, vegetable porcupine, dwarf saw-palmetto, and spine palm. The needle palm is a species of bottom lands in mixed hardwoods, swamps, and ravines that consist of calcareous clays or sandy soils rich in humus.

If you happen upon this plant you will soon discover that it often co-occurs with the palmetto palm. However, in Mississippi more often one finds populations of palmetto palms without finding any needle palms. Sometimes you might find a large population (in the hundreds) of needle palm at a specific location, however, this is the exception rather than the rule.

Rhapidophyllum hystrix is uncommon throughout most of its range. Current information indicates that it occurs sporadically in Mississippi from as far south as the Pascagoula River Bluffs in Jackson County, north to Okatibbee Creek in Lauderdale County, as far west as Simpson County where a single plant was located near Dabbs Creek, and east to the Mississippi-Alabama border counties south of Meridian.

It is thought that the limited distribution of needle palm is related to the morphology and position of the flowering branch. This structure is extremely reduced in comparison to other palms, and when present is found among the spines. While the spines seem to afford protection for the developing fruits, they hinder the dispersal of the mature fruit. It is not uncommon to find seedlings of Rhapidophyllum among the leaf bases and spines, however, these usually soon die due to the lack of available nutrients. Needle palms flower sporadically from year to year and do not produce many fruits when they do flower. These and other factors may contribute to the limited success of this palm in Mississippi.

Features which distinguish the needle palm from the more common Sabal and Serenoa are; 1) numerous long (approx. 6"-12") brownish-black sharp pointed spines which protrude up from the base of the plant near or beneath the soil, 2) a reduced flowering branch (4"-8") that occurs among the spines, 3) more upright fan-shaped leaves which are dark lustrous green with deeply dissected leaf segments, usually of more than one fold, and 4) mature plants with numerous offshoots from a subterranean stem resulting in a large clump of palms,

all derived from the same plant.

If anyone should locate the needle palm in the state, it would be appreciated if its location be noted and contact be made with the author at the above address.

About field trips

The Mississippi Native Plant Society has planned a total of five field trips for this year. Locations have been chosen to assure a broad geographical and floristic scope. A tentative outline is given below. For further information or suggestions for future trips please contact Sidney McDaniel, Box EN, Mississippi State, MS 39762 or call 325-3120.

March 30 - 8:30 AM. Picayune. Meet at the offices of the Crosby Arboretum at the end of Goodyear Blvd. (turn west at the bank in downtown Picayune). There is a big sign, so the office is hard to miss. The trip is given in cooperation with the Crosby Arboretum and should include many interesting plants. In particular this date should be the height of flowering for pitcher plants. For further information in Picayune call 798-6961 the week preceeding the trip. Be prepared for possibly wet conditions.

May 18 - 8:30 AM. Meridian-Newton area. Meet at the intersection of Highway 15 and the Interstate just north of Newton. This trip will include the spring floras of both the Central (or Jackson) prairie as well as the Tallahatta formation. Some especially rich areas with *Illicium*, bigleaf magnolia, and many others will be visited. Be prepared for rocky slopes.

July 27 - 8:00 AM. Starkville. Meet at MSU on west side of Harned Biology Building in parking lot. This trip will include the mid-summer floras of the flatwoods and the northeastern prairie. Could be hot!

September - Northwestern Mississippi, probably at Grenada Lake. Exact date to be announced later.

Late October - Southwestern Mississippi. Exact date and place to be announced later.

1985 DUES

Please Note! Dues for 1985 should be sent to Travis Sally at 202 North Andrews, Cleveland, MS 38732. The yearly dues help offset the cost of some field trips and the newsletter, therefore, your 1985 remittance would be greatly appreciated.

MNPS LOGO SEARCH

In the February 1981 issue of the MNPS Newsletter there appeared a request for a logo. Five entries appeared in the October 1981 newsletter for membership vote. Only eight responses to the proposed logos were received. No further action was taken at this time due to the lack of responses.

MNPS again seeks suggestions for a logo. The previous entries will be given consideration along with any new suggestions. If anyone has any logo ideas please send your suggestions to the editor, Steve L. Timme, at P. O. Box EN, Mississippi State, MS 39762. It is requested that the entries be received before the end of May. A committee will be formed to decide on an appropriate logo. If there are any objections to a committee decision, please contact the editor.

National Wilderness in Mississippi

The first National Wilderness land in Mississippi was signed into law late in 1984 by President Reagan. The bill designates 4,560 acres in Perry County as the BLACK CREEK WILDERNESS and 940 acres in Greene County as the LEAF WILDERNESS. The land is to be used for recreational purposes only.

Taken from the BOLIVAR COMMERCIAL 22 October 1984

HORN ISLAND FIELD TRIP

This past November the MNPS sponsored a field trip to Horn Island off the coast of Mississippi. The trip proved successful with approximately ninety people in attendance. Transportation to the island was provided by Island Shuttle Service. MNPS extends a thanks for their excellent service.

Upon arrival we were escorted from the main boat to the island by inflatable boats. From the beach groups dispersed to enjoy the vegetation of Horn Island (description of the island appeared in the fall 1984 MNPS Newsletter). The following list of species are some of the more interesting found on the island.

Goldenrod; Chrysoma pauciflosculosa (Michx.) Greene

Honeycomb Head; Bauldiuna angustifolia (Pursh) B. L. Robins.

Arrowroot, Duck Potato; Sagittaria lancifolia L.

Saw-Grass; Cladium jamaicense Crantz

Fimbristylis castanea (Michx.) Vahl

Bluestem; Schizachyrium maritimus Chapm.

Sea Oats; Uniola paniculata L.

Yaupon; Ilex vomitoria Ait.

Railroad-Vine, Goat's Foot; Ipomoea pes-caprae (L.) R. Br. in Turkey

Rosemary; Ceratiola ericoides Michx.

Euphorbia ammannioides HBK

Blue Curls; Trichostemma dichotomum L.

Hibiscus grandiflorus Michx.

Wax-myrtle, Southern Bayberry; Myrica cerifera L.

Water-hyssop; Bacopa monnieri (L.) Pennell

Heterotheca subaxillaris (Lam.) Britton & Rusby

Seaside Goldenrod; Solidago sempervirens L. var. mexicana (L.) Fern.

Paronychia erecta (Chapman) Shinnars

Manatee-Grass; Cymodocea filiformis (Kutz.) Correll

Flat-topped Goldenrod; Euthamia leptcephala (T. & G.) Greene

CALL FOR ARTICLES

The editor wishes to encourage members to submit short articles, notes of interest, or announcements for publication in the MNPS Newsletter. The success of the quarterly publication schedule will depend on the number of articles received. Please submit information to Steve L. Timme, P. O. Box EN, Mississippi State 39762.

Crataegus L. of the Upper

Pearl River Basin

Timothy E. Smith

Department of Biological Sciences, Mississippi State University

The Upper Pearl River Basin includes all of Leake and Neshoba counties and portions of Kemper, Attala, Winston, Noxubee, and Choctaw counties (see fig. 1). The woody flora of this region was surveyed in 1984 and eleven native species of Crataegus (Hawthorns) were determined. Collections from various habitats were identified to species within this difficult genus using a number of floras and herbarium sources. A key to the species within the area surveyed is presented below.

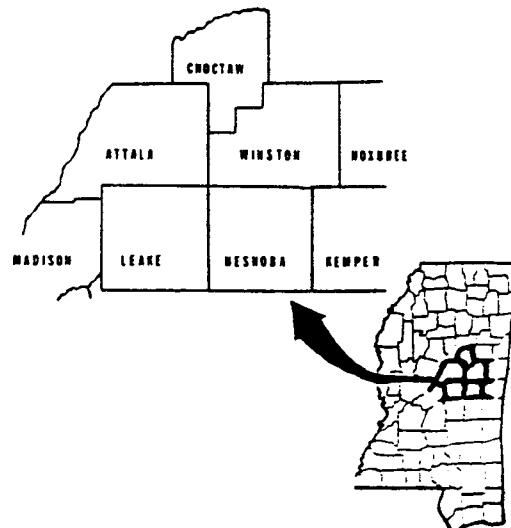


Fig. 1. Upper Pearl River Basin.

key to species of Crataegus

1. Leaf veins running to the sinuses as well as to the points of the lobes...C. marshallii
(upland woods, very common)
1. Leaf veins running only to the points of the lobes
 2. Leaves predominantly cuneate to attenuate at base, sometimes widely cuneate but not truncate, rounded, or cordate
 3. Leaf serrations and petioles conspicuously glandular.....C. flava
(sandy upland woods, uncommon)
 3. Leaf serrations inconspicuously glandular and petioles remotely glandular or eglandular
 4. Leaves elliptic to obovate, short petiolate (usually less than 1.0 cm), coriaceous to membranaceous, serrations mostly restricted to above midleaf
 5. Leaves usually coriaceous and shining above
 6. Plant a shrub, 0.5 m to 2.0 m, flowers usually solitary, twigs of current year's growth hirsute.....C. uniflora
(upland woods, uncommon)
 6. Plant larger with many-flowered compound cymes
 7. Pedicels and twigs glabrous to glabrate.....C. crus-galli
(upland woods and wooded stream-bottoms, uncommon)
 7. Pedicels and twigs villous.....C. engelmannii
(low, rich woods, uncommon)
 5. Leaves membranaceous to subcoriaceous, fruit often conspicuously punctate.....C. collina
(sandy upland woods, uncommon)
 4. Leaves variable, mostly elliptic to ovate, longer petiolate (1 to 4 cm), membranaceous to subcoriaceous, serrations extending below midleaf
 8. Leaves glabrous beneath except for small tufts of tomentum in vein axils, flowers mostly 8-20 in compound, glabrous corymbs.....C. viridis
(hardwood stream- and riverbottoms, common)
 8. Leaves glabrous beneath, flowers 3-7 in glabrous corymbs
 9. Leaves mostly elliptic, sharply serrate.....C. iracunda
(hardwood creekbottom, uncommon)
 9. Leaves ovate to widely ovate, crenate.....C. alma
(upland woods, uncommon)
2. Leaves predominantly rounded, truncate, or cordate at base
 10. Leaves larger (up to 6 cm wide and 9 cm long), thick, drying to a yellow-green color, petioles and midribs stout, usually glabrous.....C. opima
(upland woods, uncommon)
 10. Leaves smaller (less than 4 cm wide and 8 cm long), thin, drying to a dark green, petioles and midribs slender, often hirsute.....C. gattingeri
(hardwood riverbottoms, frequent)

BOOK REVIEW

Steve L. Timme

Department of Biological Sciences, Mississippi State University 39762

WILDFLOWERS OF ARKANSAS* -- This is a well-done field guide for anyone interested in Arkansas wildflowers. The book presents brief descriptions of 600 species of which 484 are represented by color photographs.

The introductory section briefly discusses the history of botanical investigations within the state. This is followed by short discussions covering the status of wildflowers, endangered species, purpose of the field guide, use of the guide, plant names, and physiographic regions of Arkansas. The next section introduces a general overview of each of the 80 families of plants covered in the book and is followed by species descriptions and corresponding color plates. The last section presents a glossary of terms, line drawings illustrating various plant terminology, references, list of contributing photographers, and the index.

Each of the 600 species found in this book are described in non-technical terminology. A common name and scientific name are given as are habitat, physiographic distribution, and flowering months. Short interesting facts are included for many species.

Many field guides seem to have poor reproduction of color photographs. This book is one of the few exceptions. Most of the photographs have reproduced with excellent color. Another plus for the photographs is that they present the reader an angle which shows well most of the species gross characteristics, i. e., they were not photographed to far away nor to close.

Wildflowers of Arkansas is lacking with respect to an identification key. The book would have been greatly enhanced by the addition of a simple to use key.

In these times it seems the cost of books continue to inflate while getting fewer and fewer pages in return. Wildflowers of Arkansas is no different. This 296 page field guide is priced at \$32.95 for a hardcover copy. Much of this cost is undoubtedly tied up in the color photographs.

*Wildflowers of Arkansas, by Carl G. Hunter. The Ozark Society Foundation, Little Rock, AR 72203. viii + 296 pages. 1984. \$32.95 cloth, \$24.95 paper.

line drawings wanted

Beginning with the June 1985 newsletter a line drawing of a native Mississippi plant will appear on the cover page. Any drawing(s) submitted must fit into a 7 inch by 7 inch space and only black ink used. Please submit your drawing(s) to the editor.

mississippi native plant society

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