

## Comments on the Flora of Bryan County, Oklahoma

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Bryan County, on the Red River approximately 80 miles west of Arkansas, represents an area from which only a few botanical specimens had been collected. During the last two years we have attempted to make a thorough collection of the vascular plants. A number of species were collected which constitute notable extensions of range. The list below contains information about some of them. All but two were collected in the county. One species and one variety are reported as new to the flora of Oklahoma and are starred.

All specimens cited were collected by John and Connie Taylor, unless otherwise indicated, and are deposited in the Bebb Herbarium, University of Oklahoma, Norman.

We wish to express our appreciation and sincere thanks to Dr. G. J. Goodman, University of Oklahoma, for his encouragement and advice.

***Pinus echinata* Mill.** This species is known from a number of counties in eastern Oklahoma. We have it from Bryan County as No. 556 from 2½ mi. W, 1½ mi. N of Matoy, and as No. 1035 from 5 mi. E, 1½ N of Bennington. It is represented from Coal Co. as No. 551 from 4 mi. W, 16 mi. N of Coalgate, and from Hughes Co. as No. 552 from 3 mi. N, 3 mi. W of Ashland. The Coal Co. specimen apparently represents the

westernmost record for this species in Oklahoma.

*Bromus mollis* L. was reported by Waterfall (1959) from Del. and Pitts. Counties. No. 1614, collected along the Lake Texoma shore near Willow Springs Resort, 2 mi. E, 1½ mi. S of Roosevelt Bridge, represents a westward and southward extension of the known range in Oklahoma.

*Erianthus giganteus* (Walt.) Muhl., reported by Waterfall (1954) from McCur. Co., was collected in a seepy area 1 mi. N, ¾ mi. E. of Bennington as No. 648.

*Paspalum Urvillei* Steud. Known from McCur. Co. and reported by Featherly (1946) from the Ft. Sill Military Reservation, this plant is of frequent occurrence on the Red River floodplain of Bryan Co. where it was collected as No. 1942, 2 mi. S of Cartwright.

*Sorghastrum Elliottii* (Mohr) Nash; no. 1032 from 1½ mi. S, 4 mi. E of Bennington. This species was previously reported for the state by Hopkins (1938) from McCur. Co. and by Goodman (1962) from Marshall County.

*Uniola sessilifolia* Poir. is represented in Bryan Co. by No. 1054, collected in a seepy area 3 mi. S, 2 mi. E of Bennington. Bebb Herbarium specimens indicate a previous range in SE Oklahoma in LeF. and McCur. counties.

*Zizaniopsis millacea* (Michx.) Doell & Aschers. was collected ½ mi. north of Armstrong above the Blue River Dam as No. 1947. This extends the known range from McCur. and LeF. counties.

*Peltandra virginica* (L.) Schott & Endl., was listed by Waterfall (1962) from Choc. Co. This species is represented from Bryan Co. by No. 1870 collected in a seepy area 3½ mi. E, 1 mi. S of Bennington.

*Alnus maritima* (Marsh.) Muhl. has been reported from along Blue River in Bryan Co. by Stemen and Myers (1937). We have been unable to collect or locate a specimen from the county. Extensive flood control and conservation activities have been carried out along Blue River in the last 20 years. It is possible that the population and its habitat have been destroyed.

*Quercus Phellos* L. This eastern oak species is found in the eastern part of Bryan Co. as a component of the bottomland forest. It is reported as No. 917 collected 2 mi. W, 1½ mi. N of Matoy.

*Planera aquatica* (Walt.) J. F. Gmel. No. 561, collected along the White Grass Creek, ½ mi. N of Oberlin, extends the known range of this species in Oklahoma from McCur. and Push. counties.

*Ranunculus recurvatus* Poir. was reported from Dripping Springs, Del. Co. by Benson (1941). No. 564, collected along White Grass Creek 3 mi. N, 2 mi. W of Oberlin, extends the known range of this species to the southwest. Bebb Herbarium specimens of this species from Oklahoma are from Del. south to McCur. counties.

*Thalictrum arkansanum* Boivin; no. 602 collected along White Grass Creek, ½ mi. N of Oberlin, extends the known range of this species from McCur. Co. where it was reported to occur by Waterfall (1951).

*Crataegus Marshallii* Egglest. Previously collected specimens indicate a range in Choc., LeF., and McCur. counties. It is represented in Bryan Co. by No. 631 collected 6½ mi. S., 6 mi. E of Bennington.

*Duchesnea indica* (Andr.) Focke, collected in a seepy area  $1\frac{1}{2}$  mi. S, 4 mi. E of Bennington as No. 648, was previously known from McCur. County.

*Lathyrus hirsutus* L., previously known only from McCur. Co., is now reported from Bryan Co. as No. 724, collected from a seepy area  $1\frac{1}{4}$  mi. S, 4 mi. E of Bennington.

*Trifolium resupinatum* L. This species, No. 1716, was collected  $\frac{1}{2}$  mi. S of Calera along the roadside on April 17, 1963. Waterfall (1951) has reported it from Muskogee County.

*Acer rubrum* L. This species, common in many forest stands in the very eastern part of Oklahoma, was found to be a major species in a seepy area  $1\frac{1}{2}$  mi. S and 4 mi. E of Bennington. It is represented from Bryan County as No. 870.

*Hypericum tubulosum* var. *Walteri* (Gmel.) Lott., previously known from McCur. Co., was collected as No. 975 in a seepy area in Bryan Co. where the following species was also collected.

\**Hypericum virginicum* L. This species of the eastern United States is now added to the flora of Oklahoma. No. 2048 was collected from a seepy area 1 mi. N,  $3\frac{3}{4}$  mi. E of Bennington in Bryan Co.

*Helianthemum rosmarinifolium* Pursh, reported new to the state by Goodman (1961), was collected in Bryan Co. as No. 789 from  $2\frac{1}{2}$  mi. N,  $3\frac{3}{4}$  mi. E of Bennington.

*Nyssa sylvatica* Marsh. This tree of eastern Oklahoma was collected as No. 652, 1 mi. N,  $3\frac{3}{4}$  mi. E of Bennington. It is known to occur as far west as Coal Co. where *Ahshapanek* No. 20 was collected Nov. 3, 1956, from east of Devil's Springs Creek.

*Proserpinaca palustris* var. *crebra* Fern. & Grisc. No. 881 from the NE corner of Bryan Co. near Clear Boggy,  $2\frac{1}{2}$  mi. N,  $1\frac{1}{2}$  mi. E. of Cade extends the range of this species from McCur. and LeF. counties.

*Cynociadium digitatum* DC. Listed by Waterfall (1950a) from McCur. Co., this species western range in Oklahoma is now extended to Bryan Co. where it was collected as No. 812 along White Grass Creek, 3 mi. N, 2 mi. W of Oberlin.

*Ptilimnium costatum* (Ell.) Raf. This species is reported from Atoka Co. by Stratton (1949). Collection No. 1736 is from a seepy area  $1\frac{1}{4}$  mi. S, 4 mi. E of Bennington where it is quite common. This is the second reported collection of this species in Oklahoma.

*Torilis nodosa* (L.) Gaertn. Stemen and Myers (1937) reported this species from Oklahoma Co. growing in waste places. Our No. 1558 establishes its presence in Bryan Co. where it was collected at the fish hatchery 1 mi. NE of Armstrong. The habitat indicated by Stemen and Myers and our collection suggests this species may be introduced and not be able to establish itself extensively.

*Monotropa uniflora* L. This rare saprophytic plant was reported by Barclay (1946 and 1948) from Tulsa and LeF. cos. respectively, and by Little (1951) from McCur. County. It was collected in Bryan Co. as No. 1036,  $1\frac{1}{2}$  mi. N, 5 mi. E of Bennington.

*Forestiera acuminata* (Michx.) Poir. We have collected this species as No. 634,  $2\frac{1}{2}$  mi. E, and 1 mi. N of Matoy, and No. 1973, from Lake Oberlin. These represent a westward extension of range from northeast Oklahoma and McCur. Co. to Bryan Co.

**Phlox glaberrima** L., reported by Wherry (1934) from McCur. Co., No. 727 collected in a seepy area  $1\frac{1}{2}$  mi. S, 4 mi. E of Bennington extends the known range of this species to Bryan County.

**Cynoglossum virginianum** L. Bebb Herbarium specimens indicate this species was known only from LeF., McCur., and Push. counties. Our No. 912 collected 2 mi. W,  $1\frac{1}{2}$  mi. N of Matoy extends its known range to Bryan Co.

**Lonicera sempervirens** L., listed by Waterfall (1962) from LeF., and McCur. cos., was collected in a moist woods 6 mi. S.,  $6\frac{1}{4}$  mi. E of Bennington as No. 1443.

**Baccharis halimifolia** L. was first reported (Waterfall 1952) from McCur. Co., and later (1959) from LeF. Co. No. 1068 was collected along the Red River floodplain,  $2\frac{1}{2}$  mi. SE of Albany.

**Cirsium horridulum** forma *Elliottii* (T. & G.) Fern. was reported by Waterfall (1950b) from McCur. County. Our No. 1530 was collected 5 mi. S, and 8 mi. E of Durant. The plant was over 2 m. in height, and had a hollow stem over 5 cm. in diameter.

**Cirsium texanum** Buckley was reported by Goodman (1962) from Marshall Co. Although this species was looked for, further collections were not made until the summer of 1963, when it was found frequently growing in the Lake Texoma area of Bryan Co., and was collected as No. 1821 from the Willow Springs area, and No. 1624  $\frac{1}{2}$  mi. E of Mead.

**Gnaphalium falcatum** Lam. was reported by Goodman (1962) from Marshall Co.; No. 1881 was collected near the Johnson Creek Arm of Lake Texoma just east of Roosevelt Bridge across Lake Texoma.

**Helianthus angustifolius** L., reported by Waterfall (1950a) from McCur. Co., was collected as No. 2047 from a seepy area 1 mi. N,  $3\frac{1}{4}$  mi. E of Bennington.

**Rudbeckia missouriensis** Engelm. collected in pine woods 2 mi. W,  $1\frac{1}{2}$  mi. N of Matoy as No. 834, is a western extension of range in Oklahoma. It has been reported from Choctaw Co. by Waterfall (1949).

The following species are represented by specimens from McCurtain Co. only.

\***Hypericum tubulosum** var. *tubulosum* Walt. While verifying the identification of *Hypericum virginicum*, Dr. G. J. Goodman noted that M. Hopkins No. 5575 was misidentified. It is now placed under the name *Hypericum tubulosum* var. *tubulosum*, a variety not previously known to occur in Oklahoma. Hopkins' specimen was collected from a woods in McCur. Co. 5 mi. SE of Broken Bow on Oct. 12, 1960.

**Ranunculus flabellaris** Raf. This delicate aquatic species was collected as No. 498 from Little River south of Idabel near U. S. Hy 70 bridge in McCur. County. This is one of the few collections of this species in Oklahoma.

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