## Rubus duplaris, a New Species from Northeastern Texas

## Lloyd H. Shinners

RUBUS duplaris Shinners, sp. nov. (Verotriviales.) Ad R. trivialem spectat, sed foliis subtus pubescentibus, nullis sempervirentibus, et caulibus simul aculeatis, glandulosohispidis, et pubescentibus. TYPE: 13.6 miles south of Fair-field, Freestone Co., Texas, Shinners 14465, May 2, 1953 (in Herb. Southern Methodist University). Known from two additional collections, made in the same county: type lo-cality, Shinners 15319, July 18, 1953 (sterile); 15 miles south of Fairfield, Shinners 14515, May 3, 1953.

Very similar to R. trivialis Michx. (including var. seorsus Bailey and R. riograndis Bailey), the commonest and most wide-ranging species in Texas, and one easily recognized in spring by its red-bristly primocanes. Like it, R. duplaris has trailing floricanes and low-spreading primocanes, and solitary flowers, but the leaves are soft-pubescent beneath instead of glabrous, and both old and new canes bear a mixture of red. gland-tipped bristles and soft pubescence (only evident on branches of flowering canes, dense and conspicuous on primocanes). R. Macvaughii Bailey (Gentes Herb. 7: 254, 1947) has prickly and densely bristly but not pubescent primocanes, which are upright, stout and ridged as in R. louisianus Berger (including R. arvensis Bailey, R. ramifer Bailey, R. texanus Bailey, R. abundiflorus Bailey, and doubtless a number of others; from the specific epithet of R. louisianus, it would appear that an indigenous Louisiana should be regarded as the type, not a cultivated blackberry of unknown origin, as was done by Bailey: cf. Gent. Herb. 5: 626, 1945). The other two trailing species known from northeastern Texas lack the bristles on the canes: R. apogaeus Bailey (including R. lassus Bailey, and probably R. uncus Bailey), with glabrous or pubescent leaves and 4-9flowered inflorescences; and R. aboriginum Rydberg (including R. austrinus Bailey, R. Bollianus Bailey, R. neonefrens Bailey, and R. velox Bailey; probably also R. almus Bailey and R. nefrens Bailey), with soft-pubescent leaves and 1-5-flowered inflorescences. R. aboriginum, as I interpret it, is the only extremely variable species or species complex in northern Texas, comparable to those of the

northeastern United States and Europe. *R. louisianus* Berger, noted above, is the common tall, thicket-forming species, chiefly of low grounds, in the Pine Belt of eastern Texas. A second erect species, with shorter and broader petals and broader terminal leaflets, found only west of the Pine Belt, is *R. oklahomus* Bailey (including *R. largus* Bailey, *R. putus* Bailey, and *R. valentulus* Bailey). The six native species of north central and northeastern Texas (a seventh, *R. bifrons* Vest., is introduced) can be conveniently grouped



into trailers with rather slender canes (R. trivialis and R. duplaris with bristly primocanes, R. apogaeus and R. aboriginum without), and coarse, erect species (often arched or with long slender branches) with stout, riged canes (R. louisianus and R. oklahomus). The groups Verotriviales. Flagellares, and others recognized by Bailey do not satisfactorily accommodate the Texas plants. R. largus, referred by Bailey to the *Flagellares*, is not distinguishable from R. oklahomus, R. putus, and R. valentulus, all placed in the Arguti. On the basis of approximately 220 Texas and Oklahoma specimens in the S.M.U. Herbarium (including the extensive collections made by McVaugh in 1945 and 1947, among which are isotypes of most of Bailey's Texas species), and of extensive field observations made principally at flowering time, I distinguish the North Texas species as follows:

1a. Leaves whitened beneath with dense, closely matted pubescence; flowers in open panicles; pedicels armed with small stout thorns . . . 1. R. bifrons

- 1b. Leaves green or gray beneath, glabrous to rather densely spreading-pubescent; flowers solitary, corymbose, or racemose, or in compact panicles; pedicels unarmed or with small prickles
  - 2a. Floricanes slender or medium, 1-4 mm. thick between middle and base, terete and smooth or closely striate or ribbed, occasionally slightly angled, unarmed or with thorns up to 4 mm. long from enlarged bases up to 2 mm. long (two species also with glandular bristles), suberect (shorter ones) or arched to partly or wholly reclining, 0.2-3.5 m. long (longer ones reclining and often rooting), usually 0-1.3 m. above ground; primocanes at first erect, eventually arched or trailing, terete or angled and grooved
    - 3a. Plant with glandular bristles on either primocanes or floricanes or both (primocanes always evident at flowering time), the bristles varying from dense and abundant throughout to sparse and confined to youngest parts
      - 4a. Leaflets glabrous beneath or pubescent only on main veins . . . 2. R. trivialis
      - 4b. Leaflets soft-pubescent over the surface beneath ... 3. R. duplaris
    - 3b. Plant without glandular bristles (either pubescent or glabrous, prickly or unarmed)
      - 5a. Flowers 4-9 (5 or more on most branches), borne from terminal, middle, and usually lower portion of flowering branchlet, on ascending to widely spreading pedicels...4. *R. apogaeus*
      - 5b. Flowers 1-5 (1-3 on most branchlets), borne from terminal and sometimes middle portion of flowering branchlet, on erect or ascending pedicels...5. R. aboriginum
  - 2b. Floricanes stout, 3.5-10 mm. or more thick between middle or coarsely ridged and grooved, armed with thorns 3-6 mm. long from enlarged bases 2-7 mm. long, erect to over-arched, often reclining on other shrubs or small trees (rarely touching ground, never rooting), 1-7 m. long, usually 1-5 m. above ground; primocanes (often late to appear, not evident till after flowering has begun) erect, strongly angled or ridged and grooved

- 6a. Petals oboval or suborbicular, 10-15 mm. long by 8-14 mm. wide, 1-1½ times as long as wide; flowers solitary or few (1-5); terminal leaflet or floricane leaves 1.1-2.2 times as long as wide, oblong-lanceo-late to rhombic or elliptic-ovate; E. Oak Belt west to W. Cross Timbers ... 6. R. oklahomus
- 6b. Petals oblong-elliptic to obtusely oblanceolate or oboval, 6-15 mm. long by 3.5-10 mm. wide,  $1\frac{1}{2}-2\frac{1}{2}$ times as long as wide; flowers usually few to many (4-15 on most branchlets, rarely 1-3); terminal leaflet of floricane leaves 2-2.8 times as long as wide, oblong-lanceolate to elliptic-lanceolate or ovate-lanceolate; E. Oak Belt and Pine Belt...7. R. louisianus

## **Botanical Notes**

CAREX CAROLINIANA Schwein. var. cuspidata (Dewey) Shinners, comb. nov.—C. hirsuta var. cuspidata Dewey in Wood, Class-Book of Botany (edition copyrighted 1860), p. 758. "Ill. (Vasey)"; type not seen, variety listed as synonym of the following by Mackenzie in N. Am. Fl. 18 (pt. 6): 325, 1935. Carex Bushii Mackenzie, Bull. Torr. Bot. Club 37: 241. 1910. Type from Fulton, Arkansas; not seen. In Northern Texas, var. caroliniana occurs east of the Blackland Prairie; cuspidata and forms with glabrous or glabrate leaves (placed here because of the prominent awned pistillate scales, and perigynia of intermediate size) are found west to the East Cross Timbers.— Lloyd H. Shinners.

CYPERUS VIRENS Michx. var. arenicola (Steudel) Shinners, comb. nov.—C. arenicola Steudel, Syn. Pl. Glum. p. 51, 1855. C. cyrtolepis var. arenicola (Steudel) Boeckeler, Linnaea 35: 558, 1868. C. pseudovegetus var. arenicola (Steudel) Kukenthal in Engler, Pflanzenreich IV. 20 (Heft 101): 176, 1936. Intergrades with var. virens (which has generally been called C. pseudovegetus; cf. Fernald, Rhodora 47: 109-110, 1945); our plants usually referred to C. acuminatus Torr. & Hook., described as an annual species, but they are distinctly perennial.—Lloyd H. Shinners.

HYPNUM LINDBERGII Mitt. var. americanum (Ren. & Card.) Whitehouse, comb. nov.—Hypnum arcuatum Lindb. var. americanum Ren. & Card. Bot. Gaz. 14: 99. 1889. In compiling a catalogue of the mosses of Texas, I find that this transfer is necessary. I am indebted to Dr. W. C. Steere for calling to my attention the fact that Hypnum arcuatum Lindb. is synonymous with Hypnum lindbergii Mitt.—Eula Whitehouse.

## **News Notes**

On January 16, 1954, a meeting was held in Fondren Science Building, Southern Methodist University, to consider the formation of a wildlife and conservation society for the Dallas area. The meeting, called to order by Dr. Eula Whitehouse of the Southern Methodist University Hebarium, organized a Dallas Audubon Society; and the National Audubon Society accepted the group as a branch society in February. The charter membership roll contains more than eighty