

long; and bulblets are present at the base of the bulb, but are absent in *A. mobilense*. *A. Zenobiae* takes over the southwestern end of the distribution of *A. mobilense* given by Ownbey. As we know it, the latter species is uniform throughout its Texas area, and it should not be spoiled by being made to include an endemic species of limited distribution quite different from it.

### Botanical Notes

**ALLIUM LAVENDULARE** J. M. Bates var. *Fraseri* (M. Ownbey) Shinners, comb. nov.—*A. canadense* var. *Fraseri* M. Ownbey, Res. Stud. State College of Washington 18: 195. 1950. *A. Fraseri* (M. Ownbey) Shinners, Field & Lab. 19: 104. 1951. I am indebted to Mr. V. L. Cory for calling to my attention Bates's species, described from Nebraska (Amer. Botanist 22: 58, 1916), and differing from the Texas plant in having colored instead of white tepals. Both are distinct from *A. canadense* L., but hardly differ specifically from each other.—  
*Lloyd H. Shinners.*

**DALEA LAXIFLORA** Pursh var. *pumila* Shinners, var. nov.—Caulis abbreviate 20-30 cm. longo, foliolis angustioribus foliorum majorum 0.5-1.1 mm. latis. TYPE: 2.4 miles west of Midlothian, Ellis Co., Texas, V. L. Cory 53337, July 2, 1946 (in Herb. Southern Methodist University). One additional collection seen, also from Texas. HILL Co.: north-east of Hillsboro, *Eula Whitehouse 10515*, June 28, 1945 (SMU). For seven years I have observed a large colony of what appeared to be dwarfed *Dalea laxiflora* along the railroad right-of-way about two miles southwest of Mr. Cory's locality, in black prairie clay. The plants were abundant and uniformly low, though with inflorescences nearly as broad and bushy branched as in the normal form, which is common farther west, and has stems 30-60 cm. long up to the inflorescence, with leaflets on larger leaves 1.2-3 mm. wide. The dwarfing is certainly not the result of mowing or burning, nor of soil conditions (var. *laxiflora* remains tall whether growing in sand or on limestone), and it is characteristic of all plants found east of the East Cross Timbers, so far as known. Consequently the naming of a genetic and geographic variety seems warranted.—*Lloyd H. Shinners.*

**IPOMOEA TRICHOCARPA** Ell. var. *Torreyana* (Gray) Shinners, comb. nov.—*I. trifida* var. *Torreyana* Gray, Syn. Fl. N.A. 2 pt. 1: 212. 1878. *I. trifida* sensu Small, Fl. S.E. U.S. 963, 1903; not (H.B.K.) Don. Distinctly perennial, though flowering the first year from seed; sepals entirely glabrous. Found from Dallas and Travis counties westward, and south to the Rio Grande. Var. *trichocarpa*, with sepals sparsely to densely ciliate and either glabrous or pubescent on the back, occurs in eastern Texas, west to Dallas and San Patricio counties, intergrading with var. *Torreyana* where the ranges meet. Also definitely perennial, at least in Texas, though originally described and keyed as an annual.—This note was submitted to Dr. Carlos O'Donell, Instituto Miguel Lillo, Tucuman, Argentina, who is monographing the Convolvulaceae of the Western Hemisphere. Dr. O'Donell agrees that *Ipomoea trifida* has been erroneously credited to the United States, but questions the taxonomic validity of var. *Torreyana* because he has seen similarly glabrous plants from Florida, and because there is intergradation with var. *trichocarpa*. There are numerous cases of bicentric distribution between Texas and Florida—*Hedyotis nigricans* var. *filifolia* and *Phlox nivalis*, for example, and pairs of allied species such as *Lygodesmia texana* and *L. aphylla*, *Astragalus Soxmaniorum* and *A. oboordatus*, *Pyrrhopappus multicaulis* (or *P. Geiseri*, or *P. grandiflorus*) and *P. georgianus*. I believe that *Ipomoea trichocarpa* var. *Torreyana* deserves nomencla-

tural recognition because it is a distinctive population and is of phyto-geographic importance in relation to the history of the flora of the Gulf States—*Lloyd H. Shimmers.*

**RUELLIA NUDIFLORA** (Engelm. & Gray) Urban var. *hispidula* Shimmers, var. nov.—Sepalis hispidulo-ciliatis glabris vel obscure granulosis vel parce puberulis omnino vel fere omnino eglandulosis. Differing from var. *nudiflora* and var. *occidentalis* (Gray) Leonard (the only other varieties entering or approaching northern Texas) in having sepals without abundant gland-tipped hairs, but conspicuously hispid-ciliate with hairs longer and coarser than those sometimes found in var. *nudiflora* and commonly in var. *occidentalis*. TYPE: 1.1 miles south by east of Robinson, McLennan County, Texas, *V. L. Cory 55632*, May 4, 1949 (in Herb. Southern Methodist University), with chasmogamous flowers, their corollas 4-4.5 cm. long. Four additional specimens have been seen, all from central or northern Texas, and all with cleistogamous flowers. DALLAS Co.: near Bachman Dam northwest side of Dallas, *C. L. & Amelia A. Lundell 9168*, May 30, 1940. NAVARRO Co.: Corsicana, *J. Reverchon reg. no. 3273*, April 25, 1902. TRAVIS Co.: along Shoal Creek Boulevard below 26th St., Austin, *B. C. Tharp 46031*, n.d.; Shoal Creek Boulevard below 24th St., Austin, *Tharp 46034*, April 27, 1946. The rather similar *R. Metzae* Tharp, Amer. Midl. Nat. 42: 19-20, 1949 (type from Travis County), with larger white corollas, is found on limestone north to Bosque and McLennan counties. Both of the varieties of *R. nudiflora* found in northern Texas (*nudiflora* and *hispidula*) are confined to sandy soils.—*Lloyd H. Shimmers.*

**DALEA HELLERI** Shimmers, nom. nov.—*Petalostemon virgatum* Scheele, Linnaea 21, 461. 1848. (Not *Dalea virgata* Lag., 1816.) *Kuhnistera pulcherrima* Heller, Bot. Explor. S. Texas (Contrib. Herb. Franklin & Marshall College 1): 50. 1895. (Not *Dalea pulcherrima* Sesse & Moc. ex G. Don, 1832.) *Petalostemon pulcherrimus* Heller, Bull. Torr. Bot. Club 26: 593. 1899. This was incorrectly treated as synonymous with *D. Stanfieldii* (Small) Shimmers by me in Field & Laboratory, vol. 17, pp. 84-85, 1949. The latter is strikingly different from the much more common *D. HELLERI* in the field, as I was able to observe for the first time in June, 1953. *D. HELLERI* is much coarser, the spikes 11-14 mm. thick, excluding corollas (compared with 6-9 mm.), and the calyx tube is glabrous or pubescent only on the nerves (instead of over the entire surface). Considerably resembling *D. HELLERI* is *D. purpurea* Vent. var. *tenuis* (Coulter) Shimmers, comb. nov. (*Petalostemon violaceus* var. *tenuis* Coulter, Contrib. U.S. Nat. Herb. 1: 34, 1890), which has the calyx tube pubescent throughout with more or less appressed hairs, instead of loose or spreading ones as in var. *purpurea*. *D. purpurea* var. *tenuis* is known from Coleman and Taylor counties; var. *purpurea*, of which I had seen no Texas collections in 1949, enters the state in Montague County (bordering the Red River) and in Culberson County (Guadalupe Mountains, near the New Mexico boundary). I am indebted to Jason R. Swallen, Head Curator, U.S. National Herbarium, for the loan of the type of *Petalostemon violaceus* var. *tenuis* Coulter.—

*Lloyd H. Shimmers.*

#### NEW SPECIES, TRANSFERS, ETC., IN VOLUME XXI

- ALLIUM** *lavendulare* var. *Fraseri* (M. Ownbey) Shimmers (164), *Zenobiae* Cory (162).  
**ASTER** *lateriflorus* var. *flagellaris* Shimmers (157), var. *indutus* Shimmers (158), *scabri-caulis* Shimmers (156), *subulatus* var. *australis* (Gray) Shimmers (158), var. *cubensis* (DC.) Shimmers (161), var. *ligulatus* Shimmers (159), *texanus* var. *parviceps* Shimmers (156).  
**DALEA** *Helleri* Shimmers (165), *laxiflora* var. *pumila* Shimmers (164).  
**IPOMOEA** *trichocarpa* var. *Torreyana* (Gray) Shimmers (164).  
**LUPINUS** *perennis* var. *austrinus* Shimmers (152).  
**MONARDA** *punctata* var. *arkansana* (McClintock & Epling) Shimmers (90), var. *Coryi* (McClintock & Epling) Cory (90), var. *villicaulis* (Pennell) Shimmers (90).  
**PYRRHOPAPPUS** *georgianus* Shimmers (93).  
**RUELLIA** *nudiflora* var. *hispidula* Shimmers (165).  
**SALVIA** *farinacea* var. *latifolia* Shimmers (92).  
**SIDA** *ciliaris* var. *mexicana* (Moricand) Shimmers (94).  
**VALERIANELLA** *florifera* Shimmers (93).