

DALEA CANDIDA MICHAUX EX WILLDENOW (FABACEAE) NEW TO THE RIDGE AND VALLEY PHYSIOGRAPHIC PROVINCE

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ABSTRACT

Dalea candida has been collected from the Ridge and Valley Physiographic Province in Meigs County, Tennessee and Catoosa County, Georgia. This is the first report of the species from eastern Tennessee, Georgia and the Ridge and Valley Physiographic Province.

Dalea candida (Michaux) Willdenow var. *candida* (= *Petalostemon candidum* Michaux) is an erect, herbaceous, perennial legume that is widely distributed throughout the tallgrass prairie region of central North America, and it also is known from several states in the southeastern United States. The reported geographical range of the taxon is from southern Manitoba and Saskatchewan, south to Texas and Louisiana and eastward to Wisconsin, Indiana, central Kentucky, central Tennessee and eastern Alabama (Wemple, 1970; Barneby, 1977). According to Wemple (1970), it occurs primarily in "... prairie habitats, open woodlands and glades, occasionally adventive along railroads." Weaver (1954) lists it as one of the "principle forbs of upland prairie," and Steyermark (1963) gives it habitat in Missouri as "... prairies, rocky open glades, along railroads and rocky or open woodland."

The range of the other segment of *Dalea candida*, *Dalea candida* Michaux ex Willdenow var. *Oligophylla* (Torrey) Shinnars (= *Petalostemon occidentale* (Gray ex Heller) Fernald), is mostly west of that of var. *candida*, with some overlap occurring in the central North American grassland region (Isely and Welsh, 1960; Wemple, 1970).

On 22 June 1981 while botanizing in cedar (limestone) glades in the Ridge and Valley Physiographic Province in Meigs County in eastern Tennessee and in Catoosa County in northwestern Georgia, we discovered a population of *D. candida* var. *candida* in each of the two counties (Fig. 1). The population in Meigs County occurred at the edges of a small cedar glade and adjacent open deciduous woodland just north of Eastview School (J. & C. Baskin # 1985). We counted about 200 plants in this population. The population in Catoosa County, Georgia occurred in a small glade-like opening and extended along the rocky roadside of Viniard-Alexander Road through an open deciduous woodland in the Chickamauga and Chattanooga

National Military Park (J. & C. Baskin # 1986). There were about 25 plants at the site. Fig. 1.

Dalea candida previously has not been reported from eastern Tennessee (Mahler, 1970; Collins *et al.*, 1978), Georgia (Duncan and Kartesz, 1981; Van Horn, 1981) or the Ridge and Valley Physiographic Province (Wemple, 1970; Barneby, 1981). In Tennessee, *D. candida* previously was thought to be restricted to Davidson, Rutherford and Wilson counties in the Nashville Basin of Central Tennessee (Collins *et al.*, 1978; Mahler, 1970), and in northern Alabama Wemple (1965) cites it only from Colbert County in the northeastern part of that state. Thus, the populations in the Ridge and

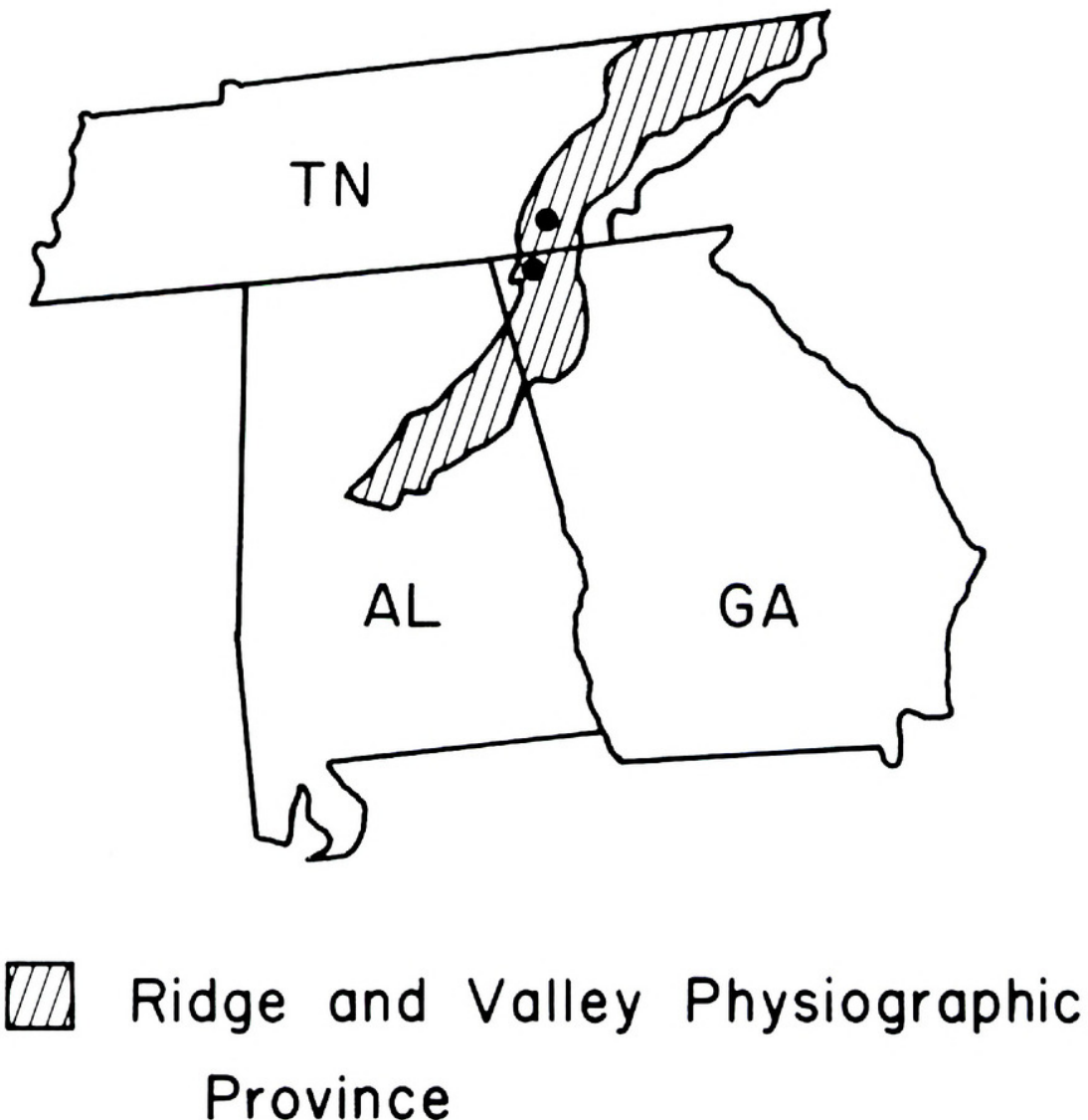


Figure 1. Presently known locations of populations of *Dalea candida* (dots) in the Ridge and Valley Physiographic Province. The dots are in Meigs County, Tennessee and Catoosa County, Georgia.

Valley Physiographic Province of Georgia and Tennessee represent significant eastward range extensions of this taxon.

Interestingly, the cedar glade flora of northwestern Georgia contains several prairie species that are at the southeastern limit of their range and are characteristic of prairies and glades to the west and northwest. These species include: *Bouteloua curtipendula* (Michaux) Torrey, *Sporobolus heterolepis* Gray, *Aster sericeus* Ventenat and *Onosmodium molle* Michaux var. *occidentale* (Mack.) I. M. Johnston. *Dalea candida* var. *candida* is another addition to this western prairie element.

Voucher specimens of *D. candida* var. *candida* have been sent to VDB and SMU.

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