ADDITIONS TO THE HERBACEOUS FLORA OF THE MIDDLE TENNESSEE CEDAR GLADES

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ABSTRACT

Sixty-three species of herbaceous, vascular plants are reported from the Middle Tennessee cedar glades. These species were not included on a preliminary check list published in 1968. Most of the 64 additional species were collected from disturbed cedar glades and are weeds of disturbed habitats.

INTRODUCTION

In 1968 a preliminary check list of the herbaceous, vascular plants of cedar glades of Middle Tennessee, Northern Alabama and Northern Georgia was published (Boston, Quarterly and Caudle, 1968). Since the publication of this list the authors have continued botanical studies in the Middle Tennessee cedar glades and have made many visits to numerous glades in Middle Tennessee. During these studies we have found a number of species growing on the glades that were not included on the preliminary check list. The following is a list of the herbaceous, vascular species that occur on open cedar glades of Middle Tennessee but were not reported in the 1968 check list. Many of the species are weedy and have invaded disturbed glade sites from nearby fields, roadsides and waste places. None of them are restricted solely to cedar glades.

Nomenclature follows mainly that of Fernald (1950) and Gleason (1952). The organization of families essentially follows Fernald (1950). Species listed under each family are in alphabetical order. Voucher specimens of the species listed below are on deposit with us at the University of Kentucky.

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POLYPODIACEAE

Christensenia cavanata (Michx.) D. C. Eaton Infrequent; at edges of glades near shrubs

GRAMINEAE

Agropyron cristatum Host Infrequent; highly disturbed areas
Avena strigosa Michx. Occasional especially on glades in the Cedars of Lebanon State Park and north of Lavergne
Bromus ciliatus L. Rare; in highly disturbed areas
Echinochloa colonum (L.) Link Infrequent; may be locally abundant in seasonally wet ditches
Elymus repens (L.) Nees Infrequent; seasonally wet ditches
Hordeum pusillum Nutt. Rare; lightly disturbed glades and rocky roadsides
Panicum dichotomiflorum Michx. Rare; in seasonally wet ditches

Cyperaceae

Carex gracillima Michx. Infrequent; in seasonally wet ditches
Carex riparia Michx. Infrequent, seasonally wet ditches
Cyperus esculentus (L.) Four. Infrequent; disturbed areas that are seasonally wet

Juncaceae

Juncus marginatus Rottl. Occasional; edges of seasonally wet pools and ditches

Liliaceae

Allium vineale L. Occasional; disturbed glades
Yucca filamentosa L. Rare; deeper soil at edges of disturbed glades developed on thick bedded limestone

Aizoaceae

Mollugo verticillata L. Rare; only location in glades that we have found it is on a small cinder pile in a disturbed glade near Murfreesboro. According to Sharp et al. (1960) this species is all over Tennessee except for the Cumberland Plateau and the Central Basin.

CARYOPHYLLACEAE

Arenaria serpyllifolia L. Common; rocky roadsides and disturbed glades
Dianthus armeria L. Rare; lightly disturbed glades
Holosteum umbellatum L. Common; glade roadsides, lightly disturbed glades and occasionally on undisturbed glades
Silene antirrhina L. forms apetala Farw. Occasional; disturbed glades
Stellaria media (L.) Cyrillo. Common; rocky roadsides and disturbed glades

RANUNCULACEAE

Ranunculus setosus Crantz Infrequent; in and around seasonally wet ditches and other places on glades subject to flooding in winter and spring

CRUCIFERAE

Arabidopsis thaliana (L.) Hexnold. Occasional; disturbed glades
Cardamine hirsuta L. Common; on undisturbed glades near thickets where shallow soil over limestone is covered with moss, also on deeper soil of disturbed glades
Thlaspi perfoliatum L. Infrequent; locally abundant, lightly disturbed glades and rocky roadsides

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ROSACEAE

Pogonia vespertina Douglas ex Sharp. Infrequent; edges of glades in partial shade

LEGUMINOSAE

Lupinus cuneatus (Douglas) G. Don. Frequent; disturbed glades and rocky roadways

LINACEAE

Lithospermum Riddell Occasional; lightly disturbed and undisturbed glades

MALVACEAE

Silene spinosa L. Rare; disturbed glades

PASSIFLORACEAE

Passiflora incarnata L. Occasional; in relatively undisturbed glades Passiflora hawaiensis L. Infrequent; edges of relatively undisturbed glades, often in shade of shrubs and trees

LYTHRACEAE

Lycium alatum Pursh Rare; cracks in limestone in seasonally wet ditches

ONAGRACEAE

Gaura filipendula Spach Infrequent; relatively undisturbed glades in Cedars of Lebanon State Park

UMBELLIFERAE

Sporochnus divaricatus (Walters) Raf. Common; lightly disturbed glades

ASCLEPIADACEAE

Asclepias tuberosa L. Rare; relatively undisturbed glades

BORAGINACEAE

Lithospermum arvense L. Common; glade roadides especially on rocky banks

Mysorella verona Nutt. Rare; disturbed glades

LABIATAE

Medicago hispida Pursh Occasional; often locally abundant in shallow soil around rock outcroppings on glades that have been disturbed by pasturing

Lamium amplexicaule L. Infrequent; mostly along rocky roadides

SCROPHULARIACEAE

Leucopogon multifidus (Michx.) Nutt. Occasional; shallow soil of relatively undisturbed glades

Mecardonia arizonica (Walt.) Small Occasional; in seasonally wet ditches

Penstemon cuneatus Britt. Rare; edges of glades in partial shade

PLANTAGINACEAE

Plantago paucifolia Nutt. Rare; on glades lightly disturbed by pasturing

Rubiaceae

Galium aparine L. Occasional; lightly disturbed glades

Galium cocculinum (L.) Scop. Rare; lightly disturbed glades

Houttuynia cordata H. L. Fruh. Occasional; on relatively undisturbed glades in Leverea area

Houttuynia sibirica (L.) Fruh. Common; undisturbed glades in Cedars of Lebanon State Park

COMPOSITAE

Ambrosia trifida L. Rare; in highly disturbed areas

Artemisia annua L. Occasional; mostly in disturbed glades

Asper undulatus L. Occasional; edges of glades in partial shade

Catalpa tuberosa Nutt. Rare; prairie-like areas of glades in soil

15 to 25 cm deep over solid limestone

Eupatorium serotinum Michx. Rare; edges of glades in deep soil in full sun

Helianthemum anemonifolium L. Infrequent; over ditches and in seepage areas

Helianthus spartulus Raf. Occasional; edges of glades

Helianthus mollis Linn. Rare; more abundant on deeper soils in badly eroded old fields dominated by Juncus virginicus L. and Andropogon spp.

Helianthus occidentalis Riddell Occasional; edge of relatively undisturbed glades

Purshiothea integrifolia L. Rare; an eroded glade area in Cedars of Lebanon State Park

Polygonia camadensis L. Occasional; locally abundant in Cedars of Lebanon State Park, at edge of glades and containing iron glade woods

Silphium terebinthinaceum Jacq. var. pinnaeifolium (Ehr.) Gay Rare; we have found it only on glades in Cedars of Lebanon State Park

Solidago albissima L. Rare; at edges of highly disturbed glades

Solidago nemoralis L. Occasional; deeper soil at edges of glades, more abundant in eroded old fields

Veronica alpina L. Nutt. Infrequent; mostly on disturbed glades

The following species were reported in the 1968 check list, but the variety (=s) of these species (of which there may be several) was not given.

Arenaria pusilla Michx. var. pusilla All specimens of this species that we have examined from the Middle Tennessee cedar glades are variety pusilla

Physalis heterophylla Nees var. heterophylla

Physalis heterophylla Nees var. ambiguus (Gray) Rydb.

Phacelia dubia (L.) Trel. var. dubia

In addition to the species listed above several other taxa have been reported from the Middle Tennessee cedar glades since the publication of the preliminary check list in 1968. These taxa include Sanurea arizonica (Nutt.) Britt. (Rogers and Baskin, 1969), Salvia reflexa Hornem. (Baskin and Baskin, 1971), Leuvenworthia exigua var. hawaiensis (Baskin and Baskin, 1972), Medicago minima (L.) Desr. M. orbicularis (L.) Bart. and Gutierrezia dracunculoides (DC.) Blake (Kral, 1973).

One more note should be added. In the 1968 check list Rumex spp. is listed, indicating that there are several species of Rumex on the glades. In our studies we have collected only Rumex crispus L.

LITERATURE CITED


