

NEW AND NOTEWORTHY VASCULAR PLANT RECORDS FROM ALABAMA

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ABSTRACT

Seven species of vascular plants are documented as new to the native and naturalized flora of Alabama: *Ageratum houstonianum*, *Chlorophytum comosum*, *Exochorda racemosa*, *Euphorbia graminea*, *Hosta ventricosa*, *Phyllanthus evanescens*, and *Tithonia rotundifolia*. Complete sets of the specimens are housed at TROY, UWAL, and VDB. Records were determined using the Alabama Plant Atlas (Alabama Plant Atlas Committee 2014), the North American Plant Atlas (BONAP 2013), and other pertinent literature.

New records of vascular plants have accumulated for Alabama as a result of field studies. Six of the species reported represent non-native species established (at least locally) in the flora. The seventh species is possibly native to the state — *Phyllanthus evanescens* is a weedy taxon that may have been overlooked by previous collectors. It occurs in an area with other disjunct western species.

AGERATUM HOUSTONIANUM Mill. (Asteraceae)

Alabama. Montgomery Co.: Montgomery, Federal Drive at Alabama State Farmer's Market adjacent to Garrett Coliseum, weeds around parking lot, full sun, 32.405528° -86.267333°, 3 Nov 2013, *Diamond 24687*.

Native to Mexico and portions of Central America, *Ageratum houstonianum* has a long history of cultivation and establishment as a weed in many areas of the world (Johnson 1971). This species was not included in the Annotated Checklist of the Vascular Plants of Alabama (Kral et al. 2011) nor has it been included on the Alabama Plant Atlas website (Alabama Plant Atlas Committee 2014). It has previously been reported for Alabama but there seems to be some confusion on this report.

Mohr (1901) reported *Ageratum conyzoides* L., listing *Ageratum mexicanum* Sims in synonymy, and noted this: the species is “escaped from cultivation. Waste and cultivated places near dwellings. Mobile County. Flowers lilac; July to October. Becoming a troublesome weed in the gardens.” The original description of *A. houstonianum* was based on a specimen collected by William Houston in Mexico. Seeds were sent to Europe and the plant soon became a weed in greenhouses. The original description of *A. mexicanum* was based on plants grown from seed sent from Mexico, and Johnson (1971) states there is no question that this species is identical to *Ageratum houstonianum*. de Candolle later reduced *A. mexicanum* to one of four varieties of *Ageratum conyzoides*. Johnson (1971) treated Mohr's plant as *Ageratum houstonianum*, placing a dot on the distribution map for Mobile, Alabama. However in his discussion he stated that the “report of establishment in Alabama is probably based on errors in identification.” Johnson did not list any specimens of *A. houstonianum* or *A. conyzoides* that he examined from Alabama.

The majority of Mohr's specimens are located at The University of Alabama Herbarium (UNA) and the United States National Herbarium (US). The University of Alabama has a single sheet of *Ageratum* collected by Mohr. The label bears Mohr's determination as *Ageratum conyzoides*. This identification was confirmed by M. Guzman in 1983. Steve Ginzburg, Collections Manager at

UNA, examined the specimen at my request — he notes that the specimen lacks glandular hairs on the peduncles and phyllaries and keys to *A. conyzoides* in Cronquist (1980), Weakley (2012), and the Flora of North America North of Mexico treatment for *Ageratum* (Nesom 2006) (Ginzburg, pers. comm.). Since previous reports of *A. houstonianum* from Alabama have cited either Mohr or Johnson, and since Mohr's specimen is clearly *A. conyzoides*, *Diamond 24687* apparently represents the first documentation of *Ageratum houstonianum* in Alabama (Figs. 1, 2).

CHLOROPHYTUM COMOSUM (Thunb.) Jacques (Agavaceae)

Alabama. Conecuh Co.: Evergreen, along a small creek in wooded area S of US Hwy 31, west of Bowles Street, and E of Park Street, W of old Evergreen Cemetery, 31.434910° -86.950095°, 22 Jun 2013, *Diamond 24273*.

A native of southern Africa, *Chlorophytum comosum* has been reported as naturalized in Australia and the United States (The University of Queensland 2011; USDA, NRCS 2013). Known by the common names “Spider Plant” or “Airplane Plant”, it is one of the most popular cultivated plants in the world (Mucina and Rutherford 2006). This represents the first report of this taxon from Alabama. It was not included in the Annotated Checklist of the Vascular Plants of Alabama (Kral et al. 2011), nor has it been included on the Alabama Plant Atlas website (Alabama Plant Atlas Committee 2014). This species has previously been reported from Hillsborough and Indian River counties in Florida (Wunderlin & Hansen 2008) and Lowndes County in Georgia (BONAP 2013). The plants were growing in a disturbed woodland adjacent to a small stream. Plants were observed to persist over several winters, dying back to ground level with freezing temperatures. Flowering was observed but no fruit were seen. Reproduction appears to be by plantlets produced on the inflorescence.

EXOCHORDA RACEMOSA (Lindl.) Rehd. (Rosaceae)

Alabama. Conecuh Co.: County Hwy 107, 0.06 mi NW of the Covington County line, overgrown lot adjacent to a closed gas station, with *Pyrus calleryana*, *Triadica sebifera*, *Prunus caroliniana*, and *Ligustrum sinense*, 31.505461° -86.701802°, 20 Mar 2014, *Diamond 24892*.

This represents the first report of this taxon from Alabama. It was not included in the Annotated Checklist of the Vascular Plants of Alabama (Kral et al. 2011), nor has it been included on the Alabama Plant Atlas website (Alabama Plant Atlas Committee 2014). Widely cultivated, this native of China has escaped in several eastern and southern states of the USA (Invasive Plant Atlas of the United States 2014). It was first reported for South Carolina by Hill and Horn (1997). The plants at this site seem to be reproducing through root sprouts rather than by seed, as was speculated by Hill and Horn (1997) for the population in South Carolina. Seed capsules were observed but all “seedling” sized plants were connected to roots from larger plants.

EUPHORBIA GRAMINEA Jacq. (Euphorbiaceae)

Alabama. Conecuh Co.: Evergreen, Cooper Street, ca. 70 feet W of U.S. Hwy 31, growing in roadside gutter and in cracks in the side walk, 31.432966° -86.956310°, 16 Nov 2013, *Diamond 24693*. Montgomery Co.: Montgomery, Federal Drive at Alabama State Farmer's Marker adjacent to Garrett Coliseum, weeds around parking lot, full sun, 32.405528° -86.267333°, 3 Nov 2013, *Diamond 24686*.

This species is native from Mexico to northern South America (Webster & Bruch 1967). First collected in the USA from Florida in 1993 (Herndon 1994), it has now been reported from several additional Florida counties including two that are adjacent to Alabama (Wunderlin & Hansen 2008). It has also been reported from Arkansas and Texas (BONAP 2013). These collections represent the first reports of this taxon from Alabama. It was not included in the Annotated Checklist of the

Vascular Plants of Alabama (Kral et al. 2011). Although it has been included on the Alabama Plant Atlas website (Alabama Plant Atlas Committee 2014), no collections are represented. Vincent (2013) reported this species as new for the Bahamas and stated that it was collected “from disturbed sites where horticultural plants had recently been introduced from Florida nurseries.” Both Alabama collections were from areas near where ornamental plants were being sold. The plants produce large numbers of seed and have persisted at the sites.

HOSTA VENTRICOSA (Salisb.) Stearn (Agavaceae)

Alabama. Coosa Co.: Intersection of Coosa County Hwy 40 and 0.28 mi E of U.S. Hwy 231, hardwood forest edge, with Hunter Hill, 32.837198° -86.223031°, 27 Jun 2013, *Diamond* 24303.

A native of China, this species is widely planted as an ornamental (Weakley 2012). It has previously been reported as an escape from several northeastern states and as far south as Kentucky and North Carolina (BONAP 2013). This represents the first report of this taxon from Alabama. It was not included in the Annotated Checklist of the Vascular Plants of Alabama (Kral et al. 2011), nor has it been included on the Alabama Plant Atlas website (Alabama Plant Atlas Committee 2014).

TITHONIA ROTUNDIFOLIA (Mill.) S.F. Blake (Asteraceae)

Alabama. Crenshaw Co.: County Hwy 37, 1.85 mi N of Alabama Hwy 106, disturbed roadside in full sun, several plants over 6 ft tall, 31.616154° -86.347875°, 14 Nov 2012, *Diamond* 23558.

A native of Mexico and Central America, *Tithonia rotundifolia* is widely cultivated in warm climates and may persist (La Duke 2006). Previous reports of this species as naturalized in the USA are from Florida, Louisiana, and Texas (La Duke 2006; BONAP 2013). This represents the first report of this taxon from Alabama. It was not included in the Annotated Checklist of the Vascular Plants of Alabama (Kral et al. 2011), nor has it been included on the Alabama Plant Atlas website (Alabama Plant Atlas Committee 2014). The species was collected on a disturbed roadside and was in early flower at the time of the first killing frost. Apparently some of the plants were able to produce seed and it has persisted at the site.

PHYLLANTHUS EVANESCENS Brandeg. (Phyllanthaceae)

Alabama. Macon Co.: County Hwy 1, 0.54 mi N of Macon County Hwy 23, Blackbelt roadside along a pasture fence, 32.240833° -85.795361°, 5 Oct 2012, *Diamond* 23492.

This represents the first report of this taxon from Alabama. It was not included in the Annotated Checklist of the Vascular Plants of Alabama (Kral et al. 2011), nor was it reported from Alabama by Webster (1970), Weakley (2012), or BONAP (2013). Weakley reports the species from St. Charles Parish in Louisiana west to Texas and south into Mexico and Central America. The North American Plant Atlas maps the occurrence of this species in Arkansas, Louisiana, and Texas. Three other species with primarily western distributions have been collected as disjuncts in this or adjacent counties in the Blackbelt prairie — *Scutellaria drummondii*, *Atrema americanum*, and *Calylophus berlandieri*. This species was growing on a roadside near a cow pasture and it is possible that it could have been introduced. However, it was also growing with typical prairie species such as *Agalinis heterophylla*, *Heliotropium tenellum*, *Ratibida pinnata*, and *Glandularia bipinnatifida*. It is equally as plausible to view this population as another native disjunct prairie species. This species is similar in appearance to the widespread *Phyllanthus caroliniensis*. *Phyllanthus evanescens* has winged stems, connate filaments, larger seed, and occurs in dry habitats on prairie clay soils (Webster 1970). Botanists working in the Blackbelt prairie region of Alabama and Mississippi should be on the lookout for this species.

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Figure 1. *Ageratum houstonianum*, general aspect of the plant.



Figure 2. *Ageratum houstonianum* in flower.



Figure 3. *Chlorophytum comosum* growing along a small stream.



Figure 4. *Chlorophytum comosum* with vegetative plantlet.



Figure 5. *Exochorda racemosa* in flower.



Figure 6. *Euphorbia graminea* growing along the base of a building in Montgomery, Alabama..



Figure 7. *Hosta ventricosa* with fruit.



Figure 8. *Tithonia rotundifolia* growing on the roadside in Crenshaw County, Alabama.