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TWO SPECIES REDISCOVERED IN ALABAMA AFTER 100 YEARS

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ABSTRACT

Rhynchosia minima has not been documented to occur in Alabama since 1869-70, when two collections were made by Charles Mohr — a large population was rediscovered in 2014 in a power line right-of way along a county road in Lowndes County. *Ageratum conyzoides* has not been documented in Alabama since 1886, when it was collected by Charles Mohr — a population of about 12 plants was discovered in 2014 under a bridge in Geneva County.

Rhynchosia minima (L.) DC. is an herbaceous, vining, perennial species of Fabaceae. It is pantropical in distribution, occurring in Asia, Africa, Australia, and the Americas (USDA, ARS, National Genetic Resources Program 2015). In the USA it is known from Alabama, Arizona, Arkansas, Florida, Georgia, Louisiana, Mississippi, New Mexico, and Texas (BONAP 2014). It is one of five species of *Rhynchosia* that have been documented from Alabama and one of only two twining *Rhynchosia* species in the state — the other is *R. difformis* (Ell.) DC., which differs from *R. minima* by having flowers in short racemes of 2–8 flowers (vs. elongated racemes of 5-15 flowers) and by having the corolla equal to or shorter than the calyx (vs. corolla exceeding calyx) (Woods & Key 2009).

Rhynchosia minima has been listed as "Historical" (not collected within the last 100 years) and "Introduced or Adventive" in Alabama by the Flora of Alabama Committee (Kral et al. 2011). Inclusion of this species in the Alabama flora has been based on two collections made by Charles Mohr. One collection was from Autauga County in July 1869, but the exact location was not recorded. The other collection was from along the West Fowl River in Mobile County in July 1870.

The species was rediscovered in August 2014 in Lowndes County, where the plants were growing in dry sandy soil in full sun under a power line right-of-way. The population was extensive and extended for approximately 100 meters along the power line corridor, not extending into the adjacent hardwood forest. Both flowering and fruiting plants were observed. The area was rural, with no other disturbance of the site other than the power line corridor and adjacent paved county road.

Alabama. Lowndes Co.: Major Ralph Road at the W side of Sullivan Creek, ca. 25 km SW of Hayneville, dry sandy soil in full sun under power line right-of-way, 32.122000° -86.836556°, elev. 206 ft, 29 Aug 2014, *Diamond 25482* (TROY).

Rhynchosia minima is relatively widespread in Florida and Louisiana but infrequent in Mississippi and Georgia (BONAP 2014). The apparent rarity in adjacent states and its long absence from Alabama is likely due to insufficient collecting activity. This species should be looked for in open disturbed habitats on the Coastal Plain.

Ageratum conyzoides L. is an herbaceous perennial (often flowering as annual) species of Asteraceae (Eupatorieae) native to Central and South America (Johnson 1971). It is now pantropical in distribution, occurring in Asia, Africa, Australia, and the Americas, Europe, and Oceania (CABI 2015; USDA, ARS, National Genetic Resources Program 2015). In the USA, it is known from

Alabama, California, Florida, Georgia, Kentucky, Louisiana, Maryland, Massachusetts, Mississippi, Missouri, and North Carolina (BONAP 2014). Within any state it is usually known only by a single county record (BONAP 2014). The apparent rarity of this species may represent repeated, short-lived colonization events.

Ageratum conyzoides is one of two species of *Ageratum* that have been documented from Alabama, the other being *A. houstonianum* Mill. It differs from *A. houstonianum* by having eglandular peduncles and phyllaries that are abruptly tapering to subulate tips with ciliate margins and eglandular faces (Nesom 2006).

Ageratum conyzoides has been listed as "Historical" (not collected within the last 100 years) and "Introduced or Adventive" in Alabama by the Flora of Alabama Committee (Kral et al. 2011). Inclusion of this species in the Alabama flora has been based on a single collection made by Charles Mohr. Mohr's report (1901) listed *A. mexicanum* Sims in synonymy and noted that 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." Johnson (1971) treated Mohr's plant as *Ageratum houstonianum*, placing a dot on the distribution map for Mobile, Alabama. However, in his discussion he noted 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.

Most of Mohr's specimens are located at UNA and US. The University of Alabama has a single sheet of *Ageratum* collected by Mohr, and the label bears Mohr's determination as *A. conyzoides*. This identification was confirmed by M. Guzman in 1983. Steve Ginzbarg, UNA Collections Manager, examined the specimen and noted (pers. comm.) that the specimen lacks glandular hairs on the peduncles and phyllaries and keys to *A. conyzoides* in Cronquist (1980), Weakley (2015), and the FNANM treatment for *Ageratum* (Nesom 2006).

Ageratum conyzoides was rediscovered in Geneva County in November 2014. The plants were in dry sandy soil on the north side of the Pea River under the Alabama Hwy 87 bridge. The population consisted of approximately a dozen plants, flowering and fruiting, in a highly disturbed area, not extending into the adjacent hardwood forest.

Alabama. Geneva Co.: Alabama Hwy 87 at the N side of the Pea River, 0.49 km N of the Florida state line, sandy disturbed area under the bridge, 30.997158° -85.997038°, elev. 87 ft, 16 Nov 2014, *Diamond 25669* with P. C. Harris (TROY).

LITERATURE CITED

Alabama Plant Atlas Editorial Committee. 2015. Alabama Plant Atlas [S.M. Landry and K.N. Campbell (original application development), Florida Center for Community Design and Research. University of South Florida]. Univ. of West Alabama, Livingston.

BONAP. 2014. North American Plant Atlas (US county-level species maps). Maps generated from J.T. Kartesz. Floristic Synthesis of North America, Version 1.0. Biota of North America Program. <http://www.bonap.org/genera-list.html>

CABI. 2015. *Ageratum conyzoides* (billy goat weed). Invasive Species Compendium. CAB International, Wallingford, UK. <www.cabi.org/isc>

Cronquist, A. 1980. Vascular Flora of the Southeastern United States, Vol. 1. Asteraceae. Univ. of North Carolina Press, Chapel Hill.

Johnson M.F. 1971. A monograph of the genus *Ageratum* L. (Compositae-Eupatorieae). Ann. Missouri Bot. Gard. 58: 6–88.

Kral, R., A.R. Diamond Jr., S.L. Ginzbarg, C.J. Hansen, R.R. Haynes, B.R. Keener, M.G. Lelong, D.D. Spaulding, and M. Woods. 2011. Annotated Checklist of the Vascular Plants of Alabama. Botanical Research Institute of Texas, Fort Worth.

Lackey, J.A. 1981. Phaseoleae. Pp. 301–327, in R.M. Pohill, and P.H. Raven (eds.). Advances in Legume Systematics, Vol. 1. Royal Botanical Garden, Kew, Richmond, England,

Mohr, C. 1901. Plant Life of Alabama. Contr. U.S. Natl. Herb., Vol. 6. U.S. Govt. Printing Office, Washington, D.C.

Nesom, G.L. 2006. *Ageratum* (Asteraceae). Pp. 481–483, in Flora of North America North of Mexico, Vol. 21. Oxford Univ. Press, New York and Oxford.

USDA, ARS, National Genetic Resources Program. 2015. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. <http://www.ars-grin.gov.4/cgi-bin/npgs/html/taxon.pl?31750>

Weakley, A.S. 2015. Flora of the Southern and Mid-Atlantic States. Working draft of 21 May 2015. Univ. of North Carolina Herbarium, North Carolina Botanical Garden, Chapel Hill. Accessed 10 June 2015.

Woods, M. and J. Key. 2009. The genus *Rhynchosia* (Fabaceae) in Alabama. Phytologia 91:3–17.