

**AGERATINA ROANENSIS (ASTERACEAE),
A NEW COMBINATION FOR AN ENDEMIC SPECIES
FROM THE SOUTHERN APPALACHIAN MOUNTAINS**

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ABSTRACT

Ageratina roanensis (Small) E.E. Lamont, **comb. nov.**, is proposed based on *Eupatorium roanense* Small (Asteraceae). This species, which is endemic to the Southern Appalachian Mountains of eastern North America, has been treated for many years as a variety of *Ageratina altissima* (L.) King & H. Robins. [= *Eupatorium rugosum* Houtt.] but differs consistently from it in morphology and ecology.

Small (1933) described *Eupatorium roanense* Small from “Roan Mt., in the Blue Ridge, N. C. and Tenn.” Subsequently, Fernald (1942) reduced *E. roanense* to varietal rank as *E. rugosum* Houtt. var. *roanense* (Small) Fern. [= *Ageratina altissima* King & H. Robins. var. *roanensis* (Small) Clewell & Wooten] and for the following 75 years the taxon has been treated as a variety (Fernald 1950; Clewell & Wooten 1971; Cronquist 1980; Gleason & Cronquist 1991; Nesom 2006; Weakley 2015).

Ageratina roanensis is morphologically distinct from *A. altissima* and is endemic to higher elevations (ca. 4000–6600 ft) of the Southern Appalachian Mountains. The two differ consistently in morphology and ecology and both are justifiably recognized as distinct species. Small (1933), Fernald (1950), and Cronquist (in Gleason & Cronquist 1991) have noted distinguishing characteristics, as summarized in the following couplet.

1. Florets mostly 18–34 per head; phyllaries mostly 5–7 mm long, apices cuspidate to acuminate; involucre campanulate or nearly so; leaf blades generally deltate ***Ageratina roanensis***
1. Florets mostly 9–20 per head; phyllaries mostly 3–5 mm long, apices acute to obtuse; involucre turbinate; leaf blades narrowly to broadly ovate ***Ageratina altissima***

A new combination is needed for a forthcoming treatment of Asteraceae tribe Eupatorieae in *New Manual of Vascular Plants of Northeastern United States and Adjacent Canada* (Naczi 2016).

AGERATINA ROANENSIS (Small) E.E. Lamont, **comb. nov.** *Eupatorium roanense* Small, Man. S.E. Fl. 1326. 1933 (as *roanensis*). **TYPE: USA. Tennessee.** [Carter Co.]: Roan Mt., 10 Sep 1885, *N.L. Britton s.n.* (holotype: NY!; Fig. 1).

Representative specimens. USA. Georgia. Towns Co.: Brasstown Bald Mt., summit, elev. 4780 ft, 9 Sep 1961, *Jones 866* (NCU). Union Co.: Brasstown Bald, forested slopes and ravines, 25 Aug 1966, *Bozeman 7927* (NCU). **Kentucky.** Harlan Co.: Top of Black Mt., 4100 ft, in woods, 28 Sep 1940, *McFarland & Rogers 29* (TENN). **North Carolina.** Ashe Co.: Near Creston, moist, rich, rocky wooded slope, 13 Aug 1935, *Correll 3989* (GH). Avery Co.: Access road to Blue Ridge Parkway just NE of Linville, ca 4000 ft, roadside and woods’ edge, 19 Sep 1981, *Carter 2875* (NY). Buncombe Co.: Ca. 5 mi NE of Barnardsville on Hyw 197, common along edge of mountain stream and shaded roadside bank, 30 Aug 1955, *Wilbur 4798* (NCSC). Cherokee Co.: Mountainside near Junalusko Creek, 8 Sep 1932, *Harbison & Totten s.n.* (NCU). Clay Co.: Buck Creek Area, near Hwy 64 W of Black Gap, bog, 21 Aug



Figure 1. *Ageratina roanensis*, holotype (NY).

1956, *Radford 16140* (NCU). Graham Co.: 9 mi S of Tapoco near Stratton Meadows, oak-hickory forest, 19 Aug 1956, *Radford 16103* (NCU). Haywood Co.: Just W of Maggie on Hwy 19, common on borders of rich hardwood forest, 11 Aug 1965, *Raven 20479* (NY). Jackson Co.: Soco Gap, 31 Aug 1957, *Justice s.n.* (UNC). Macon Co.: Wayah Bald Mt., Nantahala Forest Rd, 4.5 mi W of fish checking station, rocky stream bed on steep mountain slope, 18 Aug 1949, *Godfrey 49986 & Fox* (NCSC). Madison Co.: 4.4 mi W of Canto on Hwy 63, wooded roadbank, 8 Oct 1958, *Ahles 50512 & Duke* (NCU). McDowell Co.: 1.6 mi ENE of Deep Gap on Blue Ridge Parkway, Green Knob Lookout, mountain top, 1 Sep 1956, *Bell 4424* (NCU, NY). Mitchell Co.: Roan Mt., on slope of Roan High Bluff, 6100 ft, in opening in woods of *Abies fraseri* and *Rhododendron catawbiense*, 6 Sep 1941, *Clausen 5599* (NY). Swain Co.: Roadside at Mollie Gap, near Mile High, just outside Blue Ridge Parkway boundary, ca. 5300 ft, 18 Aug 1956, *Mouzon 139* (NCU). Transylvania Co.: NE slope of Fryingpan Mt., 18 Jul 1957, *Freeman 57588* (NCU). Watauga Co.: Blowing Rock, shaded hillside, 15 Oct 1963, *Smyth 804* (VPI). Yancey Co.: Mt. Mitchell, 5500 ft, woods, 14 Sep 1926, *Hunnewell 9990* (GH). **South Carolina.** Oconee Co.: Hwy 130 ½ mi SW of Whitewater Falls, disturbed roadside, 4 Sep 1993, w/o coll name and number (EKY). Pickens Co.: Sassafras Mt., mixed deciduous forest, 22 Aug 1956, *Radford 1655* (NCU). **Tennessee.** Blount Co.: Thunder Head, Great Smoky Natl Park, 17 Aug 1929, *Cain 1* (TENN). Carter Co.: Roan Mt., 6200 ft, in rich loam borders of woods, 22 Aug 1937, *Jennison 21* (TENN). Cocke Co.: Maddron Bald, ca 4500 ft, vicinity of Cosby, moist woods, loam on wooded slope, 3 Aug 1936, *Jennison & Raper 3336* (TENN). Sevier Co.: Clingman's Dome, 6600 ft, moist, rich humus loam, 3 Sep 1935, *Jennison 712* (TENN). Unicoi Co.: Big Bald Mt., 5 Sep 1955, *James s.n.* (TENN). **Virginia.** Bland Co.: Little Walker Mt., Hwy 600, 0.6 mi SE of 601 jct, rich, damp woods, 17 Sep 1969, *Uttal 6770* (LYN). Floyd Co.: Summit of Buffalo Mt., under trees, 25 Sep 1976, *Porter & Condit 2069* (VPI). Giles Co.: In "Bob's field" N of Mt. Lake, 9 Sep 1937, *Givens s.n.* (VPI). Grayson Co.: White Top Mt., 25 Sep 1938, *Roller s.n.* (VPI).

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LITERATURE CITED

- Clewell, A.F. and J.W. Wooten. 1971. A revision of *Ageratina* (Compositae: Eupatorieae) from eastern North America. *Brittonia* 23: 123–143.
- Cronquist, A. 1980. Asteraceae. Vascular Flora of the Southeastern United States, Vol. 1. Univ. North Carolina Press, Chapel Hill.
- Fernald, M.L. 1942. The seventh century of additions to the flora of Virginia. *Rhodora* 44: 341–405, 416–452, 457–479.
- Fernald, M.L. 1950. Gray's Manual of Botany, 8th (centennial) ed., corrected printing, 1970. Van Nostrand Reinhold Co., New York.
- Gleason, H.A. and A. Cronquist. 1991. Manual of Vascular Plants of Northeastern United States and Adjacent Canada, 2nd ed. The New York Botanical Garden Press, Bronx.
- Naczi, R.F.C. 2016. New Manual of Vascular Plants of Northeastern United States and Adjacent Canada. *Brittonia* 68: 238–244.
- Nesom, G.L. 2006. *Ageratina*. Pp. 547–553, in *Flora of North America* Editorial Committee (eds.). *Flora of North America north of Mexico*, Vol. 21, Magnoliophyta: Asteridae (in part): Asteraceae, part 3. Oxford Univ. Press, New York.
- Small, J.K. 1933. *Manual of the Southeastern Flora*. Univ. North Carolina Press, Chapel Hill.
- 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 Bot. Gard., Univ. of North Carolina at Chapel Hill, Chapel Hill.