## NOTES

Six Noteworthy Vascular Plants for Kentucky: Two State Records and Four Range Extensions-Since the authoritative work of Jones (2005), Plant Life of Kentucky: An Illustrated Guide to the Vascular Plants, recent collections and a herbarium search have documented two new vascular plants for the Commonwealth of Kentucky and additional county record range extensions for four other taxa. Four of these plants were discovered in the Berea College Forest of Madison and Rockcastle Counties. All representative vouchers have been deposited at the Berea College Herbarium (BEREA) with available duplicates on file at Appalachian State University Herbarium (BOON) and Eastern Kentucky University Herbarium (EKY). The precise label information for each species from herbarium specimen(s) is presented with the significance of the report for Kentucky. Nomenclature and vernacular names follow Weakley (2008).

Aphanes microcarpa (Boiss. & Reut.) Rothm. (Rosaceae)—Calloway County: Hancock Biological Station, 561 Emma Drive, Murray, mowed yard in front of Main Laboratory Building in brown silty loams, latitude 36°44'2.9"N and longitude 88°06'58.0"W and 122 m. elev. in the Rushing Creek Quadrangle. Associates: Cardamine hirsuta L., Krigia caespitosa (Raf.) K.L. Chambers, Kummerowia stipulacea (Maxim.) Makino, K. striata (Thunb.) Schindler, Plantago lanceolata L., P. rugelii Descne, Sherardia arvensis L., Taraxacum officinale G.H. Weber ex Wiggers, Trifolium dubium Sibth., and T. repens L. Occasional, naturalized annual from southern Europe; 06 June 2006; Derick B. Poindexter 06-152 (BEREA, BOON).

Significance. Thompson (2007) reported Slender Parsley Piert from the culturally disturbed habitat at the Hancock Biological Station of Murray State University in western Kentucky. Based on the Poindexter collection, it represents only the second documented county in Kentucky. Abbott et al. (2001) collected this exotic plant for the first time in Madison County in 1992. Browne and Athey (1992) and Medley (1993) did not list *Aphanes microcarpa* for Kentucky. It is included in Jones (2005) based on Abbott et al. (2005) and was mapped by Campbell and Medley (2006) and the USDA, NRCS (2008) from Abbott's Madison County state record. Habitats for this often overlooked inconspicuous annual include lawns, waste places, fields, pastures, and roadsides (Gleason and Cronquist 1991; Weakley 2008).

Erysimum capitatum (Douglas ex Hook.) Greene var. capitatum (Brassicaceae)—Madison County: Berea, Berea College Forest, near Brushy Fork Creek in an open grassy field with sandy shaley soils; latitude 37°33'46.0"N, longitude 84°17'26.0"W, and elev. 307 m., Berea Quadrangle. Associates: Barbarea vulgaris R. Br., Cardamine hirsuta L., Erigeron philadelphicus L., Galium aparine L., Geranium carolinianum L., Lamium purpureum L., Poa pratensis L., Schedonorus arundinaceus (Schreb.) Dumort, and Solidago canadensis L. Scarce (7–10 scattered plants) from unknown seed sources: 15 May 2008. *Ralph L. Thompson 08-296* (BEREA, BOON, EKY), *Glen E. Dandeneau 08-02* (BEREA).

Significance. This is the first report of Western Wallflower for the Commonwealth of Kentucky. It was not listed in Browne and Athey (1992), Jones (2005), Medley (1993), or Campbell and Medley (2006). Erysimum capitatum var. capitatum is a widespread native biennial or short-lived perennial of the western United States. It is mapped eastward to KS, OK, TX, AR, IA, WI, MI, all the contiguous states to Kentucky, and Maryland by the USDA NRCS (2008). The Great Plains Flora Association (1986) reported it from MN, ND, SD, and NE, but it was not mapped in these states by the USDA, NRCS (2008). Habitats include open slopes, calcareous and shale rocky outcrops, road cuts, and open wooded hillsides (Great Plains Flora Association 1986; Weakley 2008).

Hosta ventricosa (Salisb.) Stearn (Hemerocallidaceae)-Rockcastle County: John B. Stephenson Memorial Forest State Nature Preserve within the Berea College Forest, 1.8 mi N of Disputana and 0.9 mi ENE on Anglin Falls Road; latitude 37°29'33.2"N, longitude 84°13'31.0"W, and 247 m elev., Johnetta Quadrangle. Infrequent, three large colonies growing in sandy loams of the Anglin Creek floodplain. Associates: Agrimonia parviflora Aiton, Carex lurida Wahlenb., Conoclinium coelestinum (L.) DC., Dichanthelium clandestinum (L.) Gould, Impatiens capensis Meerb., Lobelia cardinalis L., L. siphilitica L., Microstegium vimineum (Trin.) A. Camus, Sanicula odorata (Raf.) Pryer & Phillippe, and Solidago canadensis L. Scarce, East Asian perennial; 17 July 2004. Ralph L. Thompson 04-920 (flower) (BEREA, EKY); 8 September 2007, Ralph L. Thompson and Edward W. FitzGerald 07-365 (fruit) (BEREA). Lee County: Riparian habitats along Little Sinking Creek; Little Sinking Creek Road, ca. 0.1 mi NE of jct. with Ky 1036; N of Greely, KY. Associates: Alnus serrulata (Aiton) Willd., Asimina triloba (L.) Dunal, Cornus alternifolia L. f., Pyrularia pubera Michx., and Staphylea trifolia L. Colony of 12-14 crowns on low sloping creek bank; 30 June 1996. T. J. Weckman, J. C. Weckman, J. E. Rozeman 2920 (EKY).

Significance. Blue Plantain Lily was not reported for Kentucky by Jones (2005) or Browne and Athey (1992). Medley (1993) listed it at edges of mesic woods in Lee and Wolfe Counties of the Cumberland Plateau. Campbell and Medley (2006) mapped these two counties based on two collections from old home sites and gardens. Because it is readily grown as an ornamental, they stated, "it does not seem generally able to become naturalized." These were the same two counties mapped by the USDA, NRCS (2008) and was the basis for state recognition in FNA (2002).

The new population on the Northern Cumberland Plateau from Rockcastle County was composed of three

colonies over  $1.0 \text{ m} \times 1.5 \text{ m}$ , each on a wet meadow floodplain of Anglin Creek. We believe the Blue Plantain Lily had reproduced from seed and consider these populations to have been locally naturalized. The 1996 collection from Little Sinking Creek being the second report from Lee County, was from a habitat similar Anglin Creek, and these plants were viewed "as naturalized" (T.J. Weckman, pers. comm., 26 May 2008.). The available evidence suggests that Hosta ventricosa has become established at several sites in the state and should now be considered as a member of the naturalized flora of Kentucky. Thompson and Fleming (2004) did not list it in the vascular flora of Anglin Falls Ravine because it was not present at the time collections were made in 1997-1998. Habitats include disturbed open areas, although it is frequently grown in anthropogenic settings as a shade ornamental (FNA 2002; Weakley 2008).

Nuttallanthus canadensis (L.) D.A. Sutton (Plantaginaceae)—Madison County: Berea, Berea College Forest, Cross-Country Trail, 0.2 mi past foot bridge crossing to the east side of Brushy Fork Creek between open area of blackberries and Virginia pine copse adjacent to an old field, latitude 37°33′50.6″N, longitude 84°17′29.4″W, and elev. 305 m., in the Berea Quadrangle. Associates: Acer rubrum L., Dichanthelium acuminatum (Sw.) Gould & C.A. Clark, Packera anonyma (Alph. Wood) W.A. Weber & A. Löve, Pinus virginiana Mill., Potentilla simplex Michx., and Rubus argutus Link. Rare; 24 May 1997. Rudy A. Gelis 310 (BEREA).

Significance. Canada Toadflax is documented for the first time in Kentucky based on Jones (2005), Medley (1993), Campbell and Medley (2006), and USDA, NRCS (2008). Although reported for Kentucky by Browne and Athey (1992), their inclusion is based on a misidentified specimen. Jones (2005) stated that this plant, "is to be expected." This widespread annual/biennial has been mapped throughout the eastern United States, except for Kentucky, by the USDA, NRCS (2008). Habitats are quite varied and include relatively dry or sterile sandy, loamy soils, ruderal roadsides and meadows, as well as more natural areas such as thin soils over rock outcrops (Gleason and Cronquist 1991; Weakley 2008).

Sagina procumbens L. (Caryophyllaceae)—Boone County: First rest stop south of Florence, KY, on I-75 at mile marker 176; latitude 38°56'19.95"N, longitude 84°38'1.30"W; and elev. 296 m, Union Quadrangle. Individuals were found growing in brick sidewalk crevices surrounding the main rest stop building and entranceway. Associates: Bryum argenteum Hedw., Chamaesyce maculatum (L.) Small, Cyperus squarrosus L., Plantago major L., and Poa annua. Frequent (100+ plants), native perennial; 7 April 2007. Derick B. Poindexter 07-155 (BOON), Ralph L. Thompson 07-299 (BEREA).

*Significance.* This is the first published record of Northern Pearlwort from Boone County and only the second report for Kentucky. Prior indications of this plant in Kentucky were based on Medley (1993) and Campbell and Medley (2006) who listed a record from Bracken County and an ambiguous listing for Kentucky by the PLANTS Database (USDA, NRCS 2008). *Sagina procumbens* was not accredited to Kentucky in Browne and Athey (1992) and FNA (2005) although it was listed as "to be expected" by Jones (2005).

The perennial habit, persistent basal leaves, and 4merous perianth of this taxon distinguish it from its more widespread and sympatric congener, S. *decumbens* (Elliott) Torr. & A. Gray. The absence of S. *procumbens* in adjacent counties in Ohio (USDA, NRCS 2008) is enigmatic but a testament to the sporadic occurrence of this taxon to occupy weedy, moist habitats such as trail margins, pathways, parking areas, and crevices (FNA 2005; Weakley 2008).

Thermopsis mollis (Michx.) M.A. Curtis ex A. Gray (Fabaceae)—Madison County: Berea College Forest, Lower Silver Creek, an old-field adjacent to a *Pinus-Querons-Carya-Acer* stand, ca. 0.2 mi south of KY 21 and 1.9 mi east of Berea city limits: latitude 37°32′54.0″N, longitude 84°14′31.0″W, and elev. 305 m, Berea Quadrangle. Associates: Andropogon virginicus L., Carex hirsutella Mack., Danthonia spicata (L.) P. Beauv., Houstonia caerulea L., Krigia biflora (Walt.) S.F. Blake, Packera anonyma (Alph. Wood) W.A. Weber & A. Löve, Potentilla simplex Michx., Rosa carolina L., Rubus flagellaris Wild., Tridens flavus (L.) Hitchc Rare: a population of 25–35 flowering stems: 04 May 2007. Ralph L. Thompson and John T. Perry 07-390 (BEREA).

Significance. Appalachian Golden-Banner is statelisted as "Endangered" by the KSNPC (2000). Our Madison County voucher is the second county recorded for the Commonwealth of Kentucky. This population is from one of two sites in the Berea College Forest, and "it represents a natural population that has not been planted" (John T. Perry, pers. comm., 04 May 2008). Browne and Athey (1992) and Jones (2005) list it for Kentucky. The first occurrence in Kentucky was from a 1982 specimen cited by Medley (1993) from Clay County. The Clay County specimen was the basis for this taxon being mapped in Kentucky by Campbell and Medley (2006) and USDA, NRCS (2008). Isley (1998) did not map it for Kentucky. This native perennial is found on a few rich sandy slopes to dry woods and ridges in the southern Appalachian region (Isley 1998; Weakley 2008).

LITERATURE CITED. Abbott, J. R., R. L. Thompson, and R. A. Gelis. 2001. Vascular plants new to Kentucky. Sida 19:1199–1202. Browne, E. T., Jr., and R. Athey. 1992. Vascular plants of Kentucky: an annotated checklist. The University Press of Kentucky, Lexington, KY. Campbell, J., and M. Medley. 2006. Illustrated atlas of vascular plants in Kentucky: a first approximation. July 2006 draft. Unpublished bound manuscript distributed by authors, Lexington, KY. Flora of North America Editorial Committee (eds) (FNA). 2002. Flora of North America North of Mexico. Volume 26. Magnoliophyta: Liliidae: Liliales and Orchidales. Oxford University Press, New York, NY. Flora of North America Editorial Committee (eds) (FNA).

2005. Flora of North America North of Mexico. Volume 5. Magnoliophyta: Caryophyllidae, part 2. Oxford University Press, New York, NY. Gleason, H. A., and A. Cronquist. 1991. Manual of vascular plants of northeastern United States and adjacent Canada, 2nd edition. New York Botanical Garden, Bronx, NY. Great Plains Flora Association. 1986. Flora of the Great Plains. University Press of Kansas, Lawrence, KS. Isley, D. 1998. Native and naturalized Leguminosae (Fabaceae) of the United States (exclusive of Alaska and Hawaii). Monte L. Bean Science Museum, Brigham Young University, Provo, UT. KSNPC (Kentucky State Nature Preserves Commission). 2000. Rare and extiripated biota of Kentucky. Journal of the Kentucky Academy of Science 61:115-132. Jones, R. L. 2005. Plant life of Kentucky: an illustrated guide to the vascular flora. The University Press of Kentucky, Lexington, KY. Medley, M. E. 1993. An annotated catalog of the known or reported vascular flora of Kentucky. Ph.D. dissertation, University of Louisville, Louisville, KY. Thompson, R. L. 2007. The vascular flora of the Hancock

Biological Station, Murray State University, Calloway County, Kentucky. Journal of the Botanical Research Institute of Texas 1:609-630. Thompson, R. L., and C. A. Fleming. 2004. Vascular flora and plant communities of the John B. Stephenson Memorial Forest State Nature Preserve (Anglin Falls Ravine), Rockcastle County, Kentucky. Castanea 69:125-138. USDA, NRCS. 2008, The PLANTS Database (http://plants.usda.gov/), accessed 16 May 2008. National Plant Data Center, Baton Rouge, Louisiana 70874-4490 U.S.A. Weakley, A. S. 2008. Flora of the Carolinas, Virginia, Georgia, northern Florida, and surrounding areas. Working draft of 7 April 2008. University of North Carolina Herbarium, N.C. Botanical Garden, Chapel Hill, NC. -Derick B. Poindexter, Department of Biology, Appalachian State University, Boone, NC 28608-2027 and Ralph L. Thompson, Berea College Herbarium, Department of Biology, Berea College, Berea, KY 40404-2121. Corresponding author e-mails: poindexterdb@appstate.edu; ralph\_thompson@berea.edu.



Poindexter, Derick B and Thompson, Ralph L. 2008. "Six Noteworthy Vascular Plants for Kentucky: Two State Records and Four Range Extensions." *Journal of the Kentucky Academy of Science* 69(1), 66–68. <u>https://doi.org/10.3101/1098-7096(2008)69[66:snvpfk]2.0.co;2</u>.

View This Item Online: <a href="https://www.biodiversitylibrary.org/item/175490">https://doi.org/10.3101/1098-7096(2008)69[66:snvpfk]2.0.co;2</a> Permalink: <a href="https://www.biodiversitylibrary.org/partpdf/335747">https://www.biodiversitylibrary.org/partpdf/2.0.co;2</a>

**Holding Institution** Smithsonian Libraries and Archives

**Sponsored by** Biodiversity Heritage Library

## **Copyright & Reuse**

Copyright Status: In Copyright. Digitized with the permission of the rights holder Rights Holder: Kentucky Academy of Science License: <u>http://creativecommons.org/licenses/by-nc-sa/3.0/</u> Rights: <u>https://www.biodiversitylibrary.org/permissions/</u>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.