ADDITIONS TO AND NOTEWORTHY RECORDS FOR THE VASCULAR FLORA OF WEST VIRGINIA

Cynthia M. Morton

Section of Botany Carnegie Museum of Natural History 4400 Forbes Avenue Pittsburgh, Pennsylvania 15213, U.S.A.

Bonnie Isaac

Section of Botany Carnegie Museum of Natural History 4400 Forbes Avenue Pittsburgh, Pennsylvania15213, U.S.A.

John Kartesz

Biota of North America Program 9319 Bracken Lane Chapel Hill, North Carolina 27516, U.S.A.

Robert Coxe

Western Pennsylvania Conservancy/ Pennsylvania Natural Heritage Program 209 4th Avenue Pittsburgh, Pennsylvania15223, U.S.A.

ABSTRACT

Sixteen vascular plant taxa not previously documented for West Virginia are reported with vouchers for each county of occurrence. These comprise of 2 lycophytes, 1 gymnosperm, 6 monocots and 7 dicots. Eleven species are native to the United States while 5 species have been introduced to the United States.

KEY WORDS: vascular plants, West Virginia

RESUMEN

Dieciséis plantas vasculares que no habían sido previamente documentadas para West Virginia son reportadas con testigos para cada condado en donde están presentes. Estas incluyen 2 licopodios, una gimnosperma, 6 monocotiledóneas y 7 dicotiledóneas.

This study presents new information for the flora of West Virginia resulting from reexaminations of existing specimens and additional recent collections at Carnegie Museum of Natural History (CM). The following sixteen taxa are documented for their presence in West Virginia: Brassica oleracea, Castanea mollissima, Chloris verticillata, Corallorhiza maculata var. occidentalis, Hordeum vulgare, Lycopodiella alopecuroides, Lycopodiella × copelandii, Moehringia lateriflora, Pinus sylvestris, Platanthera × andrewsii, Rubus elegantulus, Rubus immanis, Rubus meracus, Rubus porteri, Secale cereale, and Viola × malteana.

METHODS

Since the publications of the Flora of West Virginia (Strausbaugh and Core, 1970) additional plant collections from the state have been made along with reexaminations of existing specimens by specialists. Voucher specimens were prepared using the standard herbarium practices and are deposited at the Carnegie Museum of Natural History Herbarium (CM). Nomenclature follows

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Kartesz (1999). Authorities are abbreviated according to Brummitt and Powell (1992). Every county for which there is a voucher specimen at CM is included.

RESULTS

The following entries are additions to the vascular flora of West Virginia. These taxa have not been reported previously as occurring in West Virginia. Taxa are listed alphabetically by family, genus and species with comments and citation of voucher specimens.

BRASSICACEAE

Brassica oleracea L.-Monongalia Co.: Morgantown, 20 May 1910, K.S. Lashley s.n.

Significance.—Determined by S.I. Warwick in 1995 for Flora of North America. First report for the state. This introduced species is also present in Pennsylvania, Maryland, Virginia, Ohio and Kentucky (USDA Plants Database).

CARYOPHYLLACEAE

Moehringia lateriflora (L.) Fenzl—Tucker Co.: Monongahela National Forest, ca. 4 mi SE of St. George on county 7 near junction of Horseshoe Run & Cheat River, sandy soil; dry slope along woodlot edge, 15 Jun 1984, *F.H. Utech* 84-331.

Significance.—This is the first report of this species from West Virginia. This native species occurs along the east coast from Maine to Pennsylvania and is rare in Maryland and Virginia.

FAGACEAE

Castanea mollissima Blume—Pendleton Co.: 4 km N of Franklin on US 220, roadside, 21 Aug 1994, S.A. Thompson & J.E. Rawlins 11904.

Significance.—This is the first report of this Asian species from West Virginia however it is present in Kentucky (USDA Plants Database).

LYCOPODIACEAE

Lycopodiella alopecuroides (L.) Cranfill—Tucker Co.: W of Thomas, bog, 12 Jul 1947, *H.A. Davis, T. Davis & H.P. Sturm 8310*; 1.5 mi E of junction with SR32 along SR93, turn onto dirt road on right, in old strip mine area 100 yards down dirt road, 30 Jul 1974, *J.G. Bruce, J. Reese & R. Fortney* 74054.

Significance.—Determined by R.E. Preston 2000. First report for the state. This native species also occurs in Pennsylvania, Maryland and Virginia (USDA Plants Database).

Lycopodiella × **copelandii** (Eig.) Cranfill [L. *alopecuroides* × *appressa*]—Tucker Co.: 6 mi S of Thomas, bog, 5 Sep 1976, D. Jolley s.n.

Significance.—Determined by R.E. Preston 2000. First report of this hybrid for the state. This native hybrid also occurs in Pennsylvania, Maryland, Virginia and Kentucky (USDA Plants Database).

ORCHIDACEAE

Corallorhiza maculata (Raf.) Raf. var. **occidentalis** (Lindl.) Ames—Pocahontas Co.: Monongahela National Forest, Cranberry Glades Botanical Area at base of Kennison Mountain, bog forest, 17 Jul 1993, *J.S. Shriver, A. Shriver & C. Smith 94*; ca. 20 mi E of Richwood, Monongahela National Forest, bog forest, 11 Jun 1994, *J.S. Shriver, A. Shriver & C. Smith 213*.

Significance.—This species has been listed by the West Virginia Natural Heritage Program as critically imperiled. This native species also occurs in Pennsylvania and Virginia.

Platanthera ×**andrewsii** (M. White) Luer [P. *lacera* ×*psycodes*]—Pocahontas Co.: ca. 7 mi ENE of Marlinton, open exposure in marsh, 30 Jul 1994, *J.S. Shriver, A. Shriver & C. Smith* 262.

Significance.—Determined by J.S. Shriver in 1995. First report for the state. This native hybrid also occurs in Pennsylvania and Ohio (USDA Plants Database).

PINACEAE

Pinus sylvestris L.—Pendleton Co.: Mouth of Seneca, pasture border, 29 Sep 1973, *D.E. Boufford* 12132.

Significance.—This is the first report of this species from West Virginia. This European species has been reported to occur from Maine to Maryland along the east coast and from New Jersey through Illinois as far west as Minnesota. This introduced species occurs in the following surrounding states: Ohio, Pennsylvania and Maryland (USDA Plants Database).

POACEAE

Chloris verticillata Nutt.—Marshall Co.: 2.4 mi N along St. Rt. 2 from the Wetzel-Marshall Co. line, dry gravel soil in open riverbottom field, 18 Sep 1980, *E.E. Estep* 1367.

Significance.—"Report as new record for WV in 1981" on annotation, however apparently never published. This native species occurs in Pennsylvania, Ohio, Maryland, Kentucky and Virginia (USDA Plants Database).

Hordeum vulgare L.—Pendleton Co.: along North Fork River, field, 1 Jun 1940, H.A. Davis & T. Davis 3633. Randolph Co.: Huttonsville, along roadside, 6 Jun 1945, H.A. Davis & T. Davis 6678.

Significance.—West Virginia was one of only two states in the US not having reported this exotic species (the other state is Georgia) (USDA Plants Database).

Secale cereale L.-Ohio Co.: Wheeling, Thomson's Hill, 23 Jun 1877, G. Guttenberg s.n.

Significance.—West Virginia is one of only two states in the US not having reported this exotic species (other is Oklahoma) (USDA Plants Database).

ROSACEAE

Rubus elegantulus Blanch.—Randolph Co.: W side of river at Old Cheat Bridge, 9 Jul 1972, *E.E. Hutton D-16157*.

Significance.—This is the first report of this species from West Virginia. This record is the southern limit for this native species, which ranges from Maine to Pennsylvania and is disjunct in Wisconsin.

Rubus immanis Ashe—Hampshire Co.: in Gunbarrel Hollow near Capon Bridge, 1 Jul 1948, H.A. Davis & T. Davis 8575. Nicholas Co.: Mt. Nebo, on bank between road and run, 26 Aug 1947, H.A. Davis & T. Davis 8279.

Significance.—Sheets have Rubus jugosus written in H.A. Davis' handwriting. Davis (1990), synonymizes R. jugosus with R. immanis. This native species also occurs in Pennsylvania, Kentucky, and Virginia (USDA Plants Database).

Rubus meracus Bailey—Nicholas Co.: Strouds Creek, sandy ballast along railroad, 4 Jul 1946, *H.A. Davis & T. Davis 7409.* Webster Co.: near Nicholas Co. line, along road from Camden-on-Gauley, 1 Jun 1949, *H.A. Davis & T. Davis 8765*; Stroud's Creek, near Stemple's garden, across railroad, 2 Jun 1949, *H.A. Davis & T. Davis 8763*; Stroud's Creek at Grassy Run, 25 Jun 1953, *H.A. Davis & T. Davis 10376.*

Significance.—Determined by M.P. Widrlechner 2001. First report for the state. This native species also occurs in Pennsylvania and Kentucky (USDA Plants Database).

Rubus porteri Bailey—Tucker Co.: Roaring Plains, N of Dolly Sods, at picnic grounds, 3 Sep 1960, W.H. Davis & Mrs. W.H. Davis 12985.

Significance.—Sheets have written in H.A. Davis handwriting, *R. porteri.* A.M. Fuller in 1970 added "has all the earmarks for *R. porteri.*" Although considered as a synonym *of R. hispidus* by some, we are following the most current classification of Davis et al. (1967). Previously thought to be endemic to Pennsylvania.

VIOLACEAE

Viola __malteana House [V. *conspersa __rostrata*]—Monongalia Co.: White Day Creek, rocky woods, 26 Apr 1942, H.A. Davis & T. Davis 5308.

Significance.—Determined by H.A. Ballard, Jr. in 1991. First report for West Virginia. This native hybrid also occurs in Ohio and Pennsylvania (USDA Plants Database).

DISCUSSION

As a result of this study the number of species known from West Virginia has increased. The most notable discovery is a new population of *Corallorhiza maculata*. Specimens were collected by J.S. Shriver, A. Shriver and C. Smith in July 1993 and June 1994 in Pocahontas County. *Corallorhiza maculata* var.

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occidentalis was recently rated by West Virginia Natural Heritage Program at a S1 ranking. The state ranking of S1 indicates that the taxon is considered critically imperiled.

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