

FLORISTIC DISCOVERIES IN DELAWARE, MARYLAND, AND VIRGINIA

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ABSTRACT

Over the past decade studies in the field and herbaria have yielded significant advancements in the knowledge of the floras of Delaware, Maryland, and the Eastern Shore of Virginia. We here discuss fifty-two species newly discovered or rediscovered or whose range or nativity is clarified. Eighteen are additions to the flora of Delaware (*Carex lucorum* var. *lucorum*, *Carex oklahomensis*, *Cyperus difformis*, *Cyperus flavicomus*, *Elymus macgregorii*, *Glossostigma cleistanthum*, *Houstonia pusilla*, *Juncus validus* var. *validus*, *Lotus tenuis*, *Melothria pendula* var. *pendula*, *Parapholis incurva*, *Phyllanthus caroliniensis* subsp. *caroliniensis*, *Ranunculus septentrionalis*, *Rhynchospora rariflora*, *Planodes virginicum*, *Schoenoplectiella mucronata*, *Schoenoplectus purshianus* var.

williamsii, *Thlaspi alliaceum*). Eighteen are additions to the flora of Maryland (*Arctostaphylos uva-ursi*, *Cardamine impatiens*, *Carex fissa* var. *fissa*, *Carex oklahomensis*, *Cyperus acuminatus*, *Cyperus flavicomus*, *Eriophorum gracile* var. *gracile*, *Glossostigma cleistanthum*, *Juncus megacephalus*, *Lysimachia japonica*, *Modiola caroliniana*, *Platanthera shriveri*, *Rhamnus alnifolia*, *Rhynchospora inexpansa*, *Rubus bifrons*, *Schoenoplectiella mucronata*, *Stenanthium leimanthoides*, and *Tribulus terrestris*). Four are rediscoveries to Delaware (*Carex tetanica* var. *canbyi*, *Cyperus compressus*, *Kyllinga pumila*, *Phyllanthus caroliniensis* subsp. *caroliniensis*) and nine reports are rediscoveries to Maryland (*Amelanchier nantucketensis*, *Axonopus furcatus*, *Ludwigia glandulosa* subsp. *glandulosa*, *Muhlenbergia uniflora*, *Puccinellia fasciculata*, *Ranunculus laxicaulis*, *Rhynchospora rariflora*, *Sisyrinchium arenicola*, *Utricularia cornuta*). Ten reports are additions to the flora of Maryland's Eastern Shore (*Calepina irregularis*, *Cyperus difformis*, *Houstonia pusilla*, *Juncus articulatus*, *Juncus elliotii* var. *elliotii*, *Melothria pendula* var. *pendula*, *Montia linearis*, *Parapholis incurva*, *Phyllanthus caroliniensis* subsp. *caroliniensis*, *Senna obtusifolia*). One report is an addition to the flora of Virginia's Eastern Shore (*Houstonia pusilla*) and another is a rediscovery (*Quercus virginiana*). Additional reports clarify the nativity of *Ludwigia leptocarpa* in Delaware, the status of *Thlaspi alliaceum* in Maryland, and the range and history of *Gelsemium sempervirens* on the Eastern Shore of Virginia. Of these reports twenty eight represent native taxa and twenty four are non-native.

Field work and herbaria study have yielded fifty-two species newly discovered or rediscovered or whose range or nativity are here clarified from Delaware, Maryland, and the Eastern Shore of Virginia. Most of these discoveries are new or rediscoveries to Delaware or Maryland. Some reports represent new documentations to areas within a state such new reports for the Coastal Plain of Delaware (Bailey 1995), the Eastern Shore of Maryland, which is the Coastal Plain of Maryland east of the Chesapeake Bay (Schmidt 1993) or the Eastern Shore of Virginia, the Coastal Plain of Virginia east of the Chesapeake Bay (Woodward and Hoffman 1991). We provide detailed information that can aid researchers in the future as well as specimen citations. Non-native species that have shown rapid expansion and establishment within the treatment area are heavily cited with specimens to help document this expansion.

Materials and Methods

Surveys yielding these discoveries were conducted for a number of different reasons and at varying intensities. Many of these discoveries were made while conducting vascular plant inventories associated with work for the Delaware or Maryland Natural Heritage Programs. Natural Heritage Program inventories include efforts associated with community classification and rare, threatened, and endangered species surveys. Some discoveries were made during independent consulting work, and others were discovered while conducting a variety of other research-based efforts.

Nomenclature follows USDA PLANTS DATABASE (2011), except for species for which we include the name found on PLANTS in brackets “[]” below the accepted name. We then cite the reasons for our nomenclatural difference in the species entry. Herbarium acronyms follow Index Herbariorum (2011) with the exceptions of (a) the Assateague Island Nation Seashore Herbarium (7206 National Seashore Lane, Berlin, MD), and (b) the herbarium of the Patuxent River Naval Air Station (Natural Resources Office at 22541 Johnson Rd, Building 1410, Patuxent, MD).

Results

Eighteen reports are new additions to the flora of Delaware (*Carex lucorum* var. *lucorum*, *Carex oklahomensis*, *Cyperus difformis*, *Cyperus flavicomus*, *Elymus macgregorii*, *Glossostigma cleistanthum*, *Houstonia pusilla*, *Juncus validus* var. *validus*, *Lotus tenuis*, *Melothria pendula* var.

pendula, *Parapholis incurva*, *Phyllanthus caroliniensis* subsp. *caroliniensis*, *Ranunculus septentrionalis*, *Rhynchospora rariflora*, *Planodes virginicum*, *Schoenoplectiella mucronata*, *Schoenoplectus purshianus* var. *williamsii*, *Thlaspi alliaceum*). Eighteen reports are new additions to the flora of Maryland (*Arctostaphylos uva-ursi*, *Cardamine impatiens*, *Carex fissa* var. *fissa*, *Carex oklahomensis*, *Cyperus acuminatus*, *Cyperus flavicomus*, *Eriophorum gracile* var. *gracile*, *Glossostigma cleistanthum*, *Juncus megacephalus*, *Lysimachia japonica*, *Modiola caroliniana*, *Platanthera shriveri*, *Rhamnus alnifolia*, *Rhynchospora inexpansa*, *Rubus bifrons*, *Schoenoplectiella mucronata*, *Stenanthium leimanthoides*, and *Tribulus terrestris*). Four reports are rediscoveries to Delaware (*Carex tetanica* var. *canbyi*, *Cyperus compressus*, *Kyllinga pumila*, *Phyllanthus caroliniensis* subsp. *caroliniensis*). Nine reports are rediscoveries to Maryland (*Amelanchier nantucketensis*, *Axonopus furcatus*, *Ludwigia glandulosa* subsp. *glandulosa*, *Muhlenbergia uniflora*, *Puccinellia fasciculata*, *Ranunculus laxicaulis*, *Rhynchospora rariflora*, *Sisyrinchium arenicola*, *Utricularia cornuta*). Ten reports are additions to flora of Maryland's Eastern Shore (*Calepina irregularis*, *Cyperus difformis*, *Houstonia pusilla*, *Juncus articulatus*, *Juncus elliotii* var. *elliotii*, *Melothria pendula* var. *pendula*, *Montia linearis*, *Parapholis incurva*, *Phyllanthus caroliniensis* subsp. *caroliniensis*, *Senna obtusifolia*). One report is an addition to the flora of Virginia's Eastern Shore (*Houstonia pusilla*) and another is a rediscovery (*Quercus virginiana*). Additional reports clarify the nativity of *Ludwigia leptocarpa* in Delaware, the status of *Thlaspi alliaceum* in Maryland, and the range and history of *Gelsemium sempervirens* on the Eastern Shore of Virginia. Of these reports twenty eight represent native taxa and twenty four are non-native.

BRASSICACEAE

Calepina irregularis (Asso) Thell.

This specimen marks an addition to the flora of the Eastern Shore of Maryland. The native range of *Calepina irregularis* is Europe and North Africa. It was first reported from Maryland by Hill (1988). In the United States this species is currently known from Maryland, North Carolina, and Virginia (Al-Shehbaz pers. comm.) and is apparently spreading. It was collected along a sandy roadside and in a recent constructed residential development and seems to grow most often in anthropogenic disturbed areas.

Voucher specimen. **MARYLAND. Dorchester Co.:** Town of East New Market, at int. of Ellwood Road and Pea Hill Rd, 4 Apr 2008, *Longbottom 10895* (MO).

Cardamine impatiens L.

The specimens cited below represent the first voucher for this non-native species in Maryland. *Cardamine impatiens* was first attributed to Maryland, but apparently not vouchered, by Francis in an online checklist of the plants of Fair Hill Nature Center (2005). The discovery of *C. impatiens* from Maryland is of no surprise as it has been attributed to every bordering state (USDA Plants Database 2010). The geographic range of *C. impatiens* is through New England, southern Canada and south into the Carolinas and Kentucky (USDA Plants Database 2010).

Voucher specimens. **MARYLAND. Baltimore Co.:** Gunpowder River floodplain at Monkton, 1 June 1986, *Davis 7236* (BALT). **Cecil Co.:** Funk's Pond Recreation Area, N of Rt. 1 just E of Susquehanna River, abundant along dirt path in mixed hardwood forest, 20 May 2010, *Knapp 3061 & Harrison* (TAWES).

***Planodes virginicum* (L.) Greene**[*Sibara virginica* (L.) Rollins]

The specimen cited below is apparently the first collection of *Planodes virginicum* from Delaware. The previously known range of this mustard is the southeastern U.S.: Maryland to Kansas, south to Florida and Texas (Al-Shehbaz 2010, Brown & Brown 1984; Gleason & Cronquist 1991). Given the proximity of previously known, presumably native occurrences in states near Delaware [e.g., Anne Arundel Co., Maryland (Brown & Brown 1984), and Fairfax Co., northern Virginia (V.B.A. 2010), both at about the same latitude as the Delaware locality], this species may be a native plant in Delaware. However, its ruderal nature makes determining its status as a native plant problematic. The Delaware population of *P. virginica* occurred in the sunny, gravelly, weedy edge of an unpaved road through a periodically mowed, grassy area. Plants were frequent at the site.

Voucher specimen. **DELAWARE. Kent Co.:** ca. 2.5 mi N of center of Dover, 22 Apr 2005, *Naczi 10767 & Thieret* (DOV).

***Thlaspi alliaceum* L.**

This alien mustard, native of Europe, is rapidly spreading and is now found with regularity in Delaware and Maryland. The collections cited below represent the first collections from Delaware, the Eastern Shore of Maryland, and eastern Virginia. Shetler and Oril (2000) attributed the species to Maryland but only as a waif from Howard County. Given the additional counties documented below and the frequency of the species' occurrence in Maryland, we consider this an established component of the flora. All populations of this species are from ruderal habitats, especially sandy soils along corn fields and roadsides.

Voucher specimens. **DELAWARE. New Castle Co.:** Along Rt. 1 at int. of Rt. 299, along road side embankment, 23 Mar 2009, *Longbottom 12440* (DOV). **Kent Co.:** S the town of Dover, Rt. one about 1/3 mi S of DE Rt. 9, 1 Apr 2009, *Longbottom 12545* (DOV). **Sussex Co.:** E the town of Greenwood along Rt. 16, 13 Apr 2007, *Longbottom 8434* (DOV). **MARYLAND. Anne Arundel Co.:** Town of Jessup, along MD Rt 295 and Rt 175, 8 Apr 1991, *Longbottom 1482* (NY). **Baltimore Co.:** weed in cultivated field W of Owings Mills Boulevard and N of Gwynbrook Ave, Apr 2010 *Davis 309* (BALT). **Caroline Co.:** NE of Federalsburg along Noble Road at Marshyhope Creek at Idylwild Wildlife Management Area, 8 May 2005, *Longbottom 5769* (DOV). **Dorchester Co.:** Town of Secretary along Rt. 14 ca. 0.4 km N of Rt 16, 20 Apr 2007, *Longbottom 8456* (DOV). **Harford Co.:** Swan Park, Sandbar in Gashey's Run, 21 Apr 2002 *Davis 7265 & Davis* (BALT). **Howard Co.:** Town of Columbia along MD Rt. 108, Clarksville Pike, 16 Apr 2009, *Longbottom 12498* (DOV). **Queen Annes Co.:** Town of Queenstown along Rt. 50, E of St. Peters Church, 19 Apr 2009, *Longbottom 12512* (DOV). **Somerset Co.:** NW of Pocomoke City along Dublin Road at Follow Ditch Rd, 29 Apr 2007, *Longbottom 8558* (DOV). **Washington Co.:** Pearre Rd, along edges of road at the school bus turn around, 28 May 2006, *Longbottom 7354 et al.* (MU). **Wicomico Co.:** Town of Fruitland along roadside at int. of Rt. 13 and Rt. 513, 7 Apr 2008, *Longbottom 10915* (DOV), **Worcester Co.:** NW the town of Snow Hill, along Rt. 12 at int with Old Furnace Rd, 2 Apr 2006, *Longbottom 7075* (DOV). **VIRGINIA. Accomack Co.:** Along US Rt. 13 at Bishop Rd along edge of agricultural field, 22 Mar 2009, *Longbottom 12440* (NY).

CUCURBITACEAE***Melothria pendula* L. var. *pendula***

The collections cited below represent an addition to the flora of Delaware and the first report of this species from the Eastern Shore of Maryland (Maryland Natural Heritage Program pers. comm.). Both populations of this species are presumably non-native. The Delaware population is located along the base of a Mill Pond and the Maryland population is located in a heavily urbanized

area of Ocean City growing along a fence. Currently, *M. pendula* is extant to the south in Accomack and Northampton Counties, Virginia (V.B.A. 2010) and it is apparently expanding its range northward. In North America this species is ranges from Washington D.C., Maryland, and Virginia, west to Indiana, south to Florida and Texas (Weakley 2010).

Voucher specimens. **DELAWARE. Sussex Co.:** SW the town of Seaford at Craig's Mill Pond, at int. of Figgs Road and Craig's Mill Pond Road along edge of wooded swamp at base of dam, 30 Aug 2007, *Longbottom 10343* (DOV). **MARYLAND. Worcester Co.:** Town of Ocean City at the W end of 83rd Street, growing along fence, 25 Jul 2007, *Longbottom 9910* (DOV).

CYPERACEAE

Carex fissa Mackenzie var. *fissa*

These specimens appear to be the first of *Carex fissa* for Maryland. The native range of *C. fissa* var. *fissa* is the midwestern USA, Kansas south to Texas (Standley 2002). Evidently, *C. fissa* is a recent arrival in Maryland. A few plants were found growing in a roadside ditch where plastic netting was in place. This suggests that this species may have been included in a seeding mixture to stabilize the ditch bank. Recent literature documents the spread of *C. fissa* to eastern North America (in Virginia: Simmons et al. 2008) as well as to Japan (Katsuyama 2003).

Voucher specimens. **MARYLAND. Talbot Co.:** Easton, along route 331, 6 June 2006, *Longbottom 7461* (DOV), 13 Jun 2007, *Longbottom 9355* (DOV).

Carex lucorum Link var. *lucorum*

Carex lucorum is native to northeastern U.S.A. and adjacent Canada (Crins & Rettig 2002). Though it is known adjacent to northern Delaware in the Piedmont of Maryland and Pennsylvania (Rhoads & Klein 1993; Frye & Lea 2001), and the adjacent Coastal Plain of Cecil Co., MD (*McAvoy 5832* DOV), the species had not been recorded from Delaware (Tatnall 1946; McAvoy & Bennett 2001; Crins & Rettig 2002). Delaware forms the southeastern limit of the geographic distribution of the species (Crins & Rettig 2002). Obviously, the great age of the vouchers mean the species must be considered historic in the state.

Voucher specimens. **DELAWARE. New Castle Co.:** Point Lookout, June 1863, *Canby s.n.* (NY); [no additional locality data], May 1862, *Canby s.n.* (NY).

Carex oklahomensis Mackenzie

These specimens of *Carex oklahomensis* are new state records for both Delaware and Maryland. The previous report of this species from both states in *Flora of North America* (Ball & Reznicek 2002) resulted from oral communications of our discoveries to volume editor Reznicek while the FNA volume was in press. Here we present the voucher data that support our discoveries of this sedge in these states.

The discoveries of *Carex oklahomensis* in Delaware and Maryland date from May 2002, with independent and nearly simultaneous collections of it in Kent Co., Delaware, and Cecil Co., Maryland. Subsequent discoveries have increased its known range to most counties of Delaware and the Eastern Shore of Maryland.

Though *Carex oklahomensis* is native to North America, it is not native to Delaware and Maryland. Its native range is far to the west, in the Midwest (at least Arkansas, Kansas, Missouri, Oklahoma, and Texas, and possibly also Indiana and Kentucky). These vouchers add to the growing list of states from which *C. oklahomensis* has been discovered recently, mostly from collections made

within the past 20 years. Most of these states are clearly outside of the native range of the species: Indiana in 1935 (R. Dolan, pers. comm.; M. Homoya, pers. comm.), Kentucky in 1970 (Naczi et al. 2002); North Carolina in 1984 (Jones & Reznicek 1995), Mississippi in 1992 (Bryson et al. 1992), Virginia in 1995 (Wieboldt et al. 1998), Tennessee in 1996 (Bryson et al. 1996), Louisiana in 1997 (Bryson & Rothrock, 2010), Illinois in 2002 (S. R. Hill, pers. comm.), Maine in 2003 (Angelo and Boufford 2007; A.V. Gilman, pers. comm.), Alabama in 2006 (Bryson & Rothrock 2010), and Georgia in 2009 (Bryson & Rothrock 2010). Obviously, *C. oklahomensis* is rapidly expanding its geographic range, with the pace of expansion apparently accelerating.

All of the known Delaware and Maryland populations of *Carex oklahomensis* are on regularly mowed roadsides. The specific habitats are sunny, wet sites, usually ditches, but one site was at the edge of a sediment control pond (Davis 6169). Bryson et al. (1992, 1996) reported *C. oklahomensis* from roadsides in Mississippi and suggested that the spread of the species was likely aided by human activities.

Most of these populations of *Carex oklahomensis* are large, dense, and weedy. For example, in Caroline Co., Maryland (Longbottom 6179), the population stretched at least 154 meters (504 feet) along a road, and covered ca. 165 m². In Wicomico Co. (Longbottom 6245), the population stretched at least 485 meters (1590 feet, 0.3 mile) along a road. Though the Kent Co., Delaware, population (Naczi 9373) was small, it is typical in its density: 177 fruiting culms in a total area of 0.9 m².

Though it is weedy and not native to Delaware or Maryland, *Carex oklahomensis* is not an invasive species in these states. In this region, populations of this sedge are known only from actively managed roadsides. The species has not been discovered in natural habitats.

Voucher specimens. **DELAWARE.** **Kent Co.:** 1.6 mi NW of Hartly, 23 May 2002, Naczi 9311 et al. (DOV), 13 Jun 2002, Naczi 9373 (DOV, US), 23 May 2006, Longbottom 7346 (DOV). **Sussex Co.:** Along route 9, 0.5 mi W of route 30, 7 Jun 2008, Longbottom 11555 (NY). **MARYLAND.** **Caroline Co.:** Federalsburg, 26 Jun 2005, Longbottom 6179 (DOV), 2 Jul 2005, Longbottom 6222 (DOV), 2 Jul 2005, Longbottom 6224 (DOV), 15 Jun 2006, Longbottom 7544 (NY), 9 Jun 2008, Longbottom 11579 (NY). **Cecil Co.:** N of route I-95, W of route 275, 29 May 2002, Davis 6169 (DOV). **Dorchester Co.:** NW of Linkwood, 3 Jun 2009, Longbottom 12903 (NY). **St. Mary's Co.:** Webster Field, 2.2 mi from St Inigoes, MD, US Navy, wet mowed roadside, 6 Jun 2008, C. Davis 7248 (NY). **Wicomico Co.:** Pittsville, 5 Jul 2005, Longbottom 6245 (DOV), 7 Jun 2008, Longbottom 11556 (NY). **Worcester Co.:** along route 376, between Ayers Creek and route 611, 2 Jul 2008, Longbottom 11694 (DOV, NY).

Carex tetanica Schkuhr var. *canbyi* Porter

[included within *Carex tetanica* Schkuhr]

Though it is morphologically and geographically distinctive, recent authors of floristic accounts have not mentioned this taxon, perhaps because of the incompletely resolved problem of distinguishing *Carex tetanica* and *C. meadii* Dewey (Rothrock & Reznicek 2002; Rothrock 2007). The taxonomic status of this sedge warrants study. *Carex tetanica* var. *canbyi* is known to be extant at fewer than ten sites and appears to be native to only a small region: northernmost Delaware, northeastern most Maryland, and southeastern Pennsylvania (Naczi, unpubl. data).

Both Tatnall (1946) and McAvoy and Bennett (2001) treated the sole Delaware occurrence of this taxon as *Carex meadii*. The historic collection is from "N of Rockland" in 1893 (Tatnall 1946). After years of searching, Naczi rediscovered the taxon at the edge of a marsh on the floodplain of the Brandywine Creek and also from north of Rockland. Thus, this recently discovered population may be the same as the historic population, though the vagueness of the label data makes the exact

location of the historic site uncertain. The vouchers cited below represent the rediscoveries in 1999 and 2010 to document the continue presence of the sedge at the site. Only one patch that is 2–3 meters long is known in Delaware. Upon the return visit in 2010, Naczi noticed a dramatic increase in the frequency and density of the invasive grass *Phalaris arundinacea* L. at the site. If unchecked, the spread of *P. arundinacea* likely will eliminate this rare sedge from Delaware.

Voucher specimens. **DELAWARE. New Castle Co.:** ca. 0.5 mi NE of Granogue, 30 May 1999, *Naczi 8075* (MICH); same site, 2 Jun 2010, *Naczi 13091* (NY).

***Cyperus acuminatus* Torrey & Hooker**

This is the first vouchered report of this species to the State of Maryland. Brown and Brown (1984) reported the species to be present yet no specimen can be found confirming the report. The Flora of North America doesn't attribute this species to Maryland (Tucker et al. 2002). *Cyperus acuminatus* is currently known from the adjacent and surrounding states of Pennsylvania and Virginia (Tucker et al. 2002).

Voucher specimens. **MARYLAND. Co.: St. Mary's Co.:** Patuxent River Naval Air Station, West Campground, N 38.2919, W 76.45509, 25 Sep 2003, *Davis 7227b* (Herb. Patuxent River Naval Air Station); Southeast corner of Naval Air Station, N 38.2642, W 76.4163, 24 Jul 2003, *Davis 7228* (Herb. Patuxent River Naval Air Station).

***Cyperus compressus* L.**

Cyperus compressus is a pantropical weed that usually grows in sunny, recently disturbed ground (Gleason & Cronquist 1991; Tucker et al. 2002; Bryson & Carter 2008). Though regarded as native to North America by some authors (Tucker et al. 2002), others consider it of probable Asian origin (Bryson & Carter 2008).

McAvoy & Bennett (2001) listed *Cyperus compressus* as historical and of conservation concern in Delaware. The collection cited below is apparently the only recent record of the species for the state. Given that it was growing in a lawn and an abundant weed there, we suggest it be removed from the list of plant species of conservation concern for Delaware.

Voucher specimen. **DELAWARE. Sussex Co.:** Laurel, 10 Oct 2006, *T. Davis s.n.* (NY).

***Cyperus difformis* L.**

These collections appear to be the first of *Cyperus difformis* for Delaware and the first for Maryland's Eastern Shore. The first collection from Maryland was on the Western Shore in 2000 (Strong & Simmons 2002). This annual sedge is introduced in North America but transcontinental in the southern portion of the U.S.A.. (Tucker 2002). As reviewed by Strong and Simmons (2002), this species has spread rapidly in the USA. The Sussex Co. population was in a ditch, but all others grew in small, artificial water retention basins at the edges of roads. *Cyperus difformis* is a major weed (Bryson & Carter 2008).

Voucher specimens. **DELAWARE. Kent Co.:** Dover, 14 October 2005, *Naczi 11169* (DOV); Smyrna, 2 Sep 2007, *Longbottom 10414* (DOV, NY), same site, 9 Nov 2008, *Longbottom 12383 & Treher* (NY). **New Castle Co.:** Bear, 31 Aug 2008, *Longbottom 12105 & Treher* (NY). **Sussex Co.:** Fenwick Island, 10 Sep 2008, *Longbottom 12169* (DOV, NY). **MARYLAND. Queen Anne's Co.:** Stevensville, 30 Aug 2008, *Longbottom 12091* (NY). **Wicomico Co.:** Salisbury, 14 Aug 2008, *Longbottom 12008* (NY), 17 Aug 2008, *Longbottom 12016 & Van Velsir* (NY), 20 Sep 2008, *Longbottom 12225* (NY).

***Cyperus flavicomus* Michaux**

These collections mark the first reports of *Cyperus flavicomus* for both Delaware and Maryland. This annual sedge is introduced in North America but widespread in the southern USA. (Tucker 2002). The Sussex Co. population was in the bottom of a pond that had drained a few months previously because of a burst dam. All the Maryland populations were in small, artificial water retention basins at the edges of roads or parking lots. *Cyperus flavicomus* is a minor weed (Bryson & Carter 2008).

Voucher specimens. **DELAWARE. Kent Co.:** Hickory Hill, 14 Sep 2001, *Rash s.n.* (DOV). **Sussex Co.:** 2.7 mi NNE of Seaford, Hearn Pond, 29 Sep 2001, *Naczi 8908* (DOV). **MARYLAND. Dorchester Co.:** Cambridge, along route 343, 6 Sep 2007, *Longbottom 10451* (NY). **Wicomico Co.:** Salisbury, 19 Aug 2007, *Longbottom 10138* (NY); Fruitland, 29 Aug 2007, *Longbottom 10324* (NY). **Worcester Co.:** Ocean Pines, 3 Sep 2008, *Longbottom 12155* (NY).

Eriophorum gracile* L. var. *gracile

An addition to the flora of Maryland, *E. gracile* is a circumboreal species with the previously known southernmost location in Franklin County, Pennsylvania (Rhoads and Klein 1993). The discovery of this sedge in Garrett County, Maryland, is a significant southern extension onto the Allegheny Plateau Physiographic Province.

Voucher specimen. **MARYLAND. Garrett Co.:** wet meadow/glade in the vicinity of McHenry, Maryland, growing with *Alnus rugosa*, *Carex lasiocarpa*, *C. echinata* and *C. atlantica* subsp. *atlantica*, 23 Jun 1998, *Frye 1088 & Berdine* (TAWES).

***Kyllinga pumila* Michaux**

Tatnall (1946) recorded *Kyllinga pumila* [as *Cyperus tenuifolius* (Steudel) Dandy] from one collection from Sussex County in 1875. The specimens cited below represent the rediscovery of *K. pumila* in Delaware, after a hiatus of 126 years. This annual sedge grows spontaneously on the former residential property of Naczi. He noticed it there within a few months of moving to the property in 2001, and plants of this species appeared every year since that time. Plants of *K. pumila* are abundant and grow in ground recently made available for plant colonization by removal of a swimming pool (8734), recently tilled ground in a vegetable garden (10074, 12608), and in localized areas of a lawn (12607). Common elements of these habitats are the sunny, moist, sandy, frequently disturbed substrates.

Kyllinga pumila may be native to Delaware, or it may be adventive. The species ranges widely in early successional habitats in warm temperate and tropical regions and is often weedy (Bryson & Carter 2008). Determining the native range of such species is problematic, especially because human activities tend to allow these species to expand their ranges. The occurrences of *K. pumila* in New York (Weldy & Werier 2010) and Pennsylvania (True 1931) are clearly adventive, whereas it is almost certainly native in Virginia (Bryson et al. 1997; V.B.A. 2010).

In Delaware, McAvoy and Bennett (2001) considered *K. pumila* to be a species of conservation concern. Given the surprising abundance of the species in anthropogenic habitats in Delaware, we recommend it no longer be considered of conservation concern in the state.

Voucher specimens. **DELAWARE. Kent Co.:** 0.5 mi NNW of Dinahs Corner, 25 Aug 2001, *Naczi 8734 et al.* (DOV), 24 September 2003, *Naczi 10074* (DOV); 27 Aug 2009, *Naczi 12607* (NY), 29 Aug 2009, *Naczi 12608* (NY).

***Rhynchospora inexpansa* (Michaux) Vahl.**

This is the first report of this species from Maryland. *Rhynchospora inexpansa* is a Coastal Plain species ranging from southeast Virginia to northern Florida, Texas, Arkansas, Cuba, and Hispaniola (Godfrey & Wooten 1979). The nativity of *R. inexpansa* in Maryland is currently in question due to an apparent expansion of the species range northward in recent years. The first Eastern Shore of Virginia collections of *R. inexpansa* were in 1935 by Fernald, Long, and Fogg (5246 PH) in Northampton Co., Virginia., and then by R. Tatnall from the same location in 1936 (3216 DOV). Though this population is thought to be destroyed (McAvoy pers. comm.), McAvoy located *R. inexpansa* in the general vicinity in 1996 (McAvoy 2000). That same year, McAvoy discovered *R. inexpansa* in Sussex Co., Delaware (McAvoy 2000). McAvoy's Sussex Co. collection is the northernmost range-wide population and was an addition to Delaware's flora. The population reported here from Worcester Co. lies between the Northampton Co. population and the Sussex Co. population.

The Sussex County, Delaware population reported by McAvoy (2000) is almost certainly a recent introduction. McAvoy discovered this population in a powerline right-of-way in 1996. In the early 1980s, Naczi extensively explored the same right-of-way (confirmed through recent discussions between Naczi and McAvoy) but never observed *R. inexpansa* there. *Rhynchospora inexpansa* is both common and weedy throughout the southeastern USA (Godfrey & Wooten 1979; Bryson & Carter 2008), making its eventual range expansion to Delaware and Maryland likely.

Voucher specimen. **MARYLAND. Worcester Co.:** South side of Forest Lane Road ca. 1700 feet east from the int. of Voting House Road, 14 Jul 2004, *Knapp 641 & Frye* (TAWES).

***Rhynchospora rariflora* (Michaux) Elliott**

These collections document a rediscovery of the species in Maryland and a new addition to the flora of Delaware. Prior to the Maryland collection listed below, *Rhynchospora rariflora* was historical in Maryland known from only a single collection made in 1940 from Wicomico Co., Maryland ("sphagnum bog, 7 miles E.S.E. of Salisbury and 4 miles SW of Parsonsburg in Wicomico Co.," 4 August 1940, *Norton, s.n.*, MARY). The overall geographic distribution of the species is primarily Coastal Plain, from southern New Jersey to Florida, west to Texas and southward into the tropics (Gleason & Cronquist 1991; Thomas 1994). Habitat for the species at the Sussex Co. location is a forested wetland within the inner-dunes along Delaware's Atlantic coast. *Rhynchospora rariflora* is rare here (only 4 plants) and occurs within canopy gaps with partial sun.

Habitat at the Prince Georges Co. location is a well botanized "Magnolia Bog." Magnolia Bogs are globally rare, terraced seepage wetland communities located along the fall-line and composed of nutrient-poor sand and gravel substrates (McAtee 1918). *Rhynchospora rariflora* is rare here with a population of 12 plants. Though there are many known introductions of showy plants at Suitland Bog (e.g. *Sarracenia purpurea* L. and *Drosera filiformis* Raf.), *R. rariflora* may be native to the site and not an accidental introduction. The known introductions at Suitland are believed to be from northern states, most probably New Jersey (M. Strong pers. com.). In New Jersey, *R. rariflora* is known from a sole location, Bennett Bog. Bennett Bog is a Coastal Plain seasonal pond that doesn't contain any of the supposed introductions at Suitland Bog. Thus, *R. rariflora* could not have been an accidental introduction from an intentional planting originating from New Jersey. It is entirely possible that unknown and intentional plantings from southeast Virginia could have accidentally introduced this species at Suitland Bog.

Voucher specimens. **DELAWARE. Sussex Co.:** Forested wetland in the inner-dunes, growing in partial sun on poorly drained ground, east of Rt. 1, north of Bethany Beach, 23 Jul 2002, *McAvoy 5600* (DOV). **MARYLAND. Prince Georges Co.:** Suitland Bog, small open headwater

seepage area, on sole isolated tussock, 1200 ft. N the int. of Suitland Rd. and Suitland Parkway, 18 Jul 2007, *Knapp 2324 et al.* (US).

***Schoenoplectiella mucronata* (L.) J. Jung & H.K. Choi**

[*Schoenoplectus mucronatus* (L.) Palla]

Schoenoplectiella mucronata is a serious weed of warm-temperate and tropical regions (Bryson & Carter 2008). Its native range appears to be eastern Asia. This species was introduced to eastern North America prior to 1900, but the early introductions did not persist (Smith 2002). Much more recent discoveries in the East are represented by published reports from Illinois (Schwegman 1984), then Iowa (Wilson 1992), Tennessee (Churchill 1992), Missouri (Smith & Yatskievych 1996), Kentucky (Libby et al. 1997), Pennsylvania (Rhoads & Block 2007), Indiana (Rothrock 2009), New York (New York Flora Association 2010), Virginia (DeBerry et al. 2010), and Ohio (Vincent et al. 2011).

Here we cite the first records known for *Schoenoplectiella mucronata* from Delaware and Maryland. Our collections document 25 sites from 8 counties in Delaware and Maryland. Thus, the species appears to be firmly established in the region.

As with most, if not all, of the other populations known in eastern USA, the Delaware and Maryland populations are from anthropogenic habitats — constructed water retention basins, wetlands subjected to ecological restoration activities, and margins of ponds with frequent human visitation. Apparently, all the Delaware and Maryland habitats were recently created or extensively disturbed. This fact suggests that *S. mucronata* is a pioneer, growing in early-successional habitats. Furthermore, we have never observed *S. mucronata* in undisturbed, natural habitats. Thus, at least in Delaware and Maryland at this time, *S. mucronata* is not invasive.

Most recent authors have referred to this species as *Schoenoplectus mucronatus*. Very recent taxonomic revision, based on molecular and morphologic data, supports changing the name to *Schoenoplectiella mucronata* (Lye 2003; Jung & Choi 2010).

Voucher specimens. **DELAWARE. Kent Co.:** NW of Kenton, 12 Aug 1994, *McAvoy 701* (DOV); E of Smyrna, 23 Sep 2003, *McAvoy 5944* (DOV, NY); Smyrna, 22 Aug 2004, *Alsfeld s.n.* (DOV); Clayton, 23 Aug 2004, *Alsfeld s.n.* (DOV); Sandtown, 26 Aug 2004, *Alsfeld s.n.* (DOV); Hartly, 31 Aug 2004, *Alsfeld s.n.* (DOV); Kenton, 3 Sep 2004, *Alsfeld s.n.* (DOV); Willow Grove, 8 Sep 2004, *Alsfeld s.n.* (DOV); Smyrna, 2 Sep 2007, *Longbottom 10404* (BRIT, DOV, MICH, MO, MU, NY, PH), 2 Sep 2007, *Longbottom 10411* (DOV, MO, NY), 9 Nov 2008, *Longbottom 12382 & Treher* (NY); Dover, ca. 0.3 mi S of Forrest Avenue, 25 Aug 2007, *Naczi 12002* (DOV, NY), nearby site, *Naczi 12004* (NY); Dover, SE of junction of route 8 and Mifflin Road, 25 Aug 2007, *Naczi 12006* (DOV, NY); Dover, campus of Delaware State University, 15 Sep 2007, *Naczi 12055* (NY); Dover, route 15, 16 Oct 2007, *Longbottom 10725* (BRIT, DOV, MICH, MO, MU, NY, PH). **New Castle Co.:** W of Summit Bridge, 18 Jul 2002, *McAvoy 5597* (DOV). **Sussex Co.:** University of Delaware Experimental Station, 8 Sep 2003, *Jacobs & Rokosch s.n.* (DOV); Lewes, 14 Aug 2007, *Longbottom 10050* (DOV, MO, MU, NY), 19 Sep 2008, *Longbottom 12222* (NY); town of Rehoboth Beach, 23 Aug 2008, *Longbottom 12060* (NY). **MARYLAND. Caroline Co.:** 2.2 mi NE of Goldsboro, 23 Aug 2007, *Knapp 2273* (DOV), same site 16 Nov 2008, *Groller 0081116* (NY). **Dorchester Co.:** 0.2 mi NE of Galestown, 17 Jun 2007, *Knapp 2273* (DOV). **Kent Co.:** Millington WMA, Sep 1996, *Tyndall s.n.* (DOV); W of Betterton, 31 Aug 2001, *McAvoy 5258* (DOV); 2.5 mi SSE of Golts, 13 Oct. 2001, *Naczi 8991* (BRIT, DOV, MICH, MO, MU, NY, PH); W of Millington, 26 Aug 2007, *Longbottom 10283* (BRIT, DOV, MICH, MO, MU, NY, PH). **Queen Anne's Co.:** Kent Island, adjacent to Kirwan Creek, off Prospect Bay, 10 Sep 1999, *Sipple 2029* (DOV). **Wicomico Co.:** Delmar, 19 Aug 2007, *Longbottom 10145* (BRIT, DOV, MICH, MO, MU, NY, PH).

***Schoenoplectus purshianus* (Fernald) M.T. Strong var. *williamsii* (Fernald) S.G. Smith**

[included within *Schoenoplectus purshianus* (Fernald) M.T. Strong]

This sedge is known from the sandy margins of ponds and lakes with dramatically fluctuating water levels (Schuyler 1972; Smith 2002). It is known from only a few counties in Indiana, Massachusetts, Michigan, and Wisconsin (Smith 2002). The discovery of the Delaware populations represents a new state record and a substantial range extension.

At the first Delaware site, a few (about five in 2001 and only one in 2003) plants of *Schoenoplectus purshianus* var. *williamsii* grew on the moist, sandy shore of a small pond with greatly fluctuating water levels. Vascular plant associates on the pond shore included a moderately diverse group of native herbs: *Cyperus strigosus*, *Eleocharis engelmannii*, *Fimbristylis autumnalis*, *Juncus effusus*, *J. scirpoides*, *Ludwigia palustris*, *Rotala ramosior*, *Scirpus cyperinus*, *Typha angustifolia*, and *T. latifolia* L. The pond is presently a water retention basin, but study of the 1997 aerial photograph of the site and its vicinity (Delaware Geological Survey 2010) reveals natural ponds present in the immediate area. Sometime after the 1997 photograph, the area was affected by road construction to connect Scarborough Road with McKee Road. It is likely the sedge was native to at least one of the original ponds and either persisted after its modification or served as a nearby seed source for the retention basin. An alternative scenario is possible, though seemingly less likely — that the sedge was introduced at the time of modification.

Repeat visits to the pond during most years since the discovery of this sedge have not yielded it since 2003. Possibly, the recent substantial increase in number of plants of *Typha angustifolia* at the site has been deleterious to the sedge.

At the second site, five plants of *Schoenoplectus purshianus* var. *williamsii* grew in shallow water with *Pontederia cordata*, *Scirpus cyperinus*, *Typha angustifolia*, and *T. latifolia*. As well, five plants of *Schoenoplectiella mucronata* grew within a few meters of *S. purshianus* var. *williamsii*. This site is a water retention basin surrounded by commercial development. The presence of the rare *S. purshianus* var. *williamsii* at this site is mysterious, though the first site is only 2.2 mi (3.6 km) NNW of this site. Perhaps the two known populations are vestiges of a predevelopment, formerly extensive population in the area.

For this taxon, we use the nomenclature of Smith (2002), because the appropriate combination for the variety in *Schoenoplectiella* has not been published. Lye (2003) described *Schoenoplectiella* as a new genus, segregated it from *Schoenoplectus*, and transferred several species (but not infraspecific taxa) to the new genus, including *Schoenoplectiella purshianus*.

Voucher specimens. **DELAWARE. Kent Co.:** ca. 3 mi NW of center of Dover, along W side of Scarborough Road, just N of its junction with McKee Road, 20 Oct. 2001, *Naczi 8995* (DOV), same site, 5 Nov. 2003, *Naczi 10097* (DOV, MO, MU, NY); Dover, ca. 0.3 mi S of Forrest Avenue, 25 Aug 2007, *Naczi 12005* (NY).

ERICACEAE***Arctostaphylos uva-ursi* (L.) Sprengel**

An addition to the Flora of Maryland, *Arctostaphylos uva-ursi* is the most widely distributed species of *Arctostaphylos* in North America, occurring in a wide variety of open, acidic habitats often in sandy or rocky soils. However, in the southeastern USA the species is very rare, occurring at a single station in Delaware where it is now believed to be extirpated (McAvoy pers. observ.) and one site in Virginia (V.B.A. 2010).

Voucher specimen. **MARYLAND. Allegany Co.** exposed shale along ridgeline above Sideling Hill Creek, 4 Apr 1998, *Frye, with Thompson and Berdine photo voucher* (TAWES).

FABACEAE

Lotus tenuis Waldst. & Kit ex Willd.

[*Lotus glaber* Mill.]

This non-native and weedy legume is generally rare and sporadic in eastern North America but more frequent in the West (Barneby 1989; Gleason & Cronquist 1991; Weakley 2010). This collection is apparently the first for Delaware. It was abundant on the sides of a little-used road and in an adjacent field, both at the edge of a salt marsh.

Voucher specimen. **DELAWARE. Kent Co.:** 2.0 mi W of town of Woodland Beach, 10 Aug 2010, *Naczi 13269* (NY).

Senna obtusifolia (L.) Irwin & Barneby

This is an addition to the flora of the Eastern Shore of Maryland. This species was reported in Brown & Brown (1984) as *Cassia torta* L. but no locality information was given other than “rich moist soil and waste areas”. This species was discovered growing in a sediment control pond along a major highway in Maryland. Currently, *S. obtusifolia* is known from New York and Massachusetts, south throughout the southeastern and central USA, west to Texas and disjunct in California (USDA Plants Database 2010).

Voucher specimen. **MARYLAND. Wicomico Co.:** Town of Fruitland at the Southtowne Commons Shopping Center, at int of Rt. 13 and 513, 29 Aug 2007, *Longbottom 10326* (DOV).

FAGACEAE

Quercus virginiana P. Miller

Quercus virginiana, live oak, is a southeastern Coastal Plain endemic near its northern limit in Northampton Co., Virginia. This report is a rediscovery to the Eastern Shore of Virginia. It was first documented on Virginia’s Eastern Shore from Northampton Co., Virginia in 1935 (“only one clump seen, peaty clearing south of Townsend,” 14 October 1935, *Fernald, Long & Fogg 5292*, PH). Robert Tatnall collected it from the same location in 1937 (“thicket, just south of Townsend on the east side of highway, 1 June 1937, *Tatnall 3369*, PH) and pointed out in his *Flora of Delaware and the Eastern Shore* (1946) that *Q. virginiana* is “known on this Peninsula from a single shrubby specimen” (Tatnall 1946). It is believed that this location has been destroyed. Live oak was reported as being observed but not vouchered in 1970 from Smith Island, a barrier island in Northampton Co., Virginia (Barry Truitt, pers. comm.). Only one individual was reported and it has not been found since, despite repeated surveys (Barry Truitt, pers. comm.). In addition, Clovis in his study on the vegetation of Smith Island (1968) did not list *Q. virginiana* as being observed. In 2008, a population of live oak was discovered in southern Northampton Co., Virginia, on the Chesapeake Bay side of the Peninsula. Sixty-two individuals were counted, scattered along a 0.5 mile (0.8 km.) stretch of beach. Plants were growing behind the primary dune at the face of a maritime forest dominated by *Pinus taeda*. Individuals ranged in size from one foot (0.3 m.), to 8 feet (2.4 m.) in height and were clearly affected by salt spray and wind. The overall geographic distribution of *Q. virginiana* is from southeast Virginia to southern Florida and west to Texas (Weakley 2010). The northernmost occurrence of live oak in the eastern USA appears to be in Mathews Co., Virginia (V.B.A. 2010), which is west of Northampton Co. and north of Kiptopeke.

Voucher specimen. **VIRGINIA. Northampton Co.:** South of Kiptopeke and Sunset Beach, Eastern Shore of Virginia NWR, west of Rt. 13, north of Bay Bridge toll, 30 Aug 2008, *McAvoy 6435* (DOV).

GELSEMIACEAE

Gelsemium sempervirens (L.) St. Hilaire

Gelsemium sempervirens was thought to have been documented first on the Eastern Shore of Virginia by Fernald in 1935 from Northampton Co., Virginia [“moist sandy woods back of dunes, Savage Neck,” 15 October 1935, *Fernald, Long & Fogg 5411*, PH; (R. Tatnall 1946)], but this specimen was determined to be *Trachelospermum difforme* (Walt.) A. Gray by W.A. McAvoy (23 January 1999). The first documentation of *G. sempervirens* from the Eastern Shore of Virginia was made by McAvoy (4257 DOV) in 1998 and again in 1999 (4534 DOV). However, McAvoy made the same mistake that Fernald did and labeled both of these collections as *T. difforme*. The impetus for McAvoy to reexamine his collections that were thought to be *T. difforme* was from the discovery of a population of *G. sempervirens* in Kiptopeke State Park in Northampton Co. by Wes Knapp and Chris Frye in 2005 (1144 DOV). McAvoy and Knapp later confirmed the identity of this population in 2006 as *G. sempervirens* (6208 DOV). On the same day, the pair then revisited the site where McAvoy collected *T. difforme* in 1999 (4534 DOV); this visit determined the population to be *G. sempervirens*. The overall geographic distribution of *G. sempervirens* is from southeast Virginia to Tennessee and Arkansas, south to Florida and Mexico (Gleason & Cronquist 1991). The northernmost occurrence of *G. sempervirens* in the eastern USA appears to be in Lancaster Co., Virginia (V. B. A. 2010).

Voucher specimens. **VIRGINIA. Northampton Co.:** In young pine woods around abandoned sandpit, east of Rd. 600 and east of Kendall Grove, 25 Jul 1998, *McAvoy 4257* (DOV); Abundant in canopy gaps, woods on north side of Rd. 646, south of Cheapside, 26 Aug 1999, *McAvoy 4534* (DOV); Kiptopeke St. Park, many immature plants on ground around trees and twining high in trees, 21 Apr 2005, *Knapp 1144 & Frye* (DOV); Several robust plants climbing high to the top of trees with thick twining stems, many immature plants on ground around trees, Kiptopeke St. Park, south side of entrance road in moist sandy oak/pine woods, 4 Dec 2006, *McAvoy 6208 & Knapp* (DOV).

IRIDACEAE

Sisyrinchium arenicola Bickn.

[*Sisyrinchium fuscatum* E.P. Bicknell]

This report is a putative rediscovery of the species in Maryland. Moldenke (1945) reported this plant from Worcester County, Maryland, but the report has never been substantiated with a specimen. Sorrie and Weakley (2001) included *S. arenicola* E.P. Bickn. (sensu stricto) as a northeastern endemic occurring from southeastern Massachusetts to southern New Jersey and adjacent Delmarva Peninsula. *Sisyrinchium arenicola* occurs as a widely dispersed, rare forb of sandy openings in a dry pine-oak-heath natural community at a single location in Maryland.

Voucher specimen. **MARYLAND. Caroline Co.:** in open dry sands north of Houston Branch, 30 May 2007, *Frye 5530* (TAWES, DOV).

JUNCACEAE

Juncus articulatus L.

This is the first documentation of this species from the Coastal Plain physiographic province of Maryland. This is only the second extant population known to occur in the state of Maryland with the other being on the Alleghany Plateau physiographic province in Garret County. Predominantly a northern species, *J. articulatus* is known from the Coastal Plain in the southern portion of its range. The species was first reported from the New Jersey Coastal Plain by Stone (1911) from “along the edge of the salt marsh on the costal islands and the mainland” but is now considered historic. The habitat on Assateague Island where this species was discovered is similar to Stone’s description from New Jersey and should be sought there.

Voucher specimen. **MARYLAND. Worcester Co.:** Assateague Island., Inner-dunal swale at North Beach Campground, S. of camp shower, 14 Oct 2008, *Knapp 2638* (Assateague Island National Seashore Herbarium).

Juncus elliotii Chapman var. *elliotii*

This report represents a new record for the Eastern Shore of Maryland. *Juncus elliotii* is considered historic in Delaware where it was collected by Bayard Long in 1908 (*s.n.* PH). This is a southern species near the northern limit of its range. *Juncus elliotii* is found from New Jersey, south to Florida and west to Louisiana (Brooks & Clements 2000) though not including Maryland. This species occurs in disturbed and acidic sandy seeps in very small numbers and is associated with an abundance of other regionally and state species of concern. It could overlooked due its similarity to *J. acuminatus*.

Voucher specimen. **MARYLAND. Wicomico Co.:** Ca. 12 km SE of Salisbury and ca. 4 km SE the int. of Fooks Road with Airport Road, 26 Jun 2009, *Knapp 2867* (TAWES).

Juncus megacephalus M.A. Curtis

Though this species is attributed to Maryland by Redmond in his “Flora of Worcester County” (1932), no other treatment includes this species to Maryland (i.e. Brooks & Clements 2000; Gleason & Cronquist 1991). Various herbaria have been searched in hopes of locating a specimen validating this report (BALT, DOV, MARY, NA, NY, PENN, PH, US) yet no specimen can be found. Fernald (1950) presumably suspected this identification was incorrect and stated “doubtfully to se. Maryland”. This report marks the northern limit of the species range. Given the habitat in which the species was discovered (wet sands in State Park of Assateague Island State Park), it is doubtful that this conspicuous rush was overlooked by previous researchers but instead may be expanding its range to the north.

Voucher specimen. **MARYLAND. Worcester Co.:** Assateague Island., Inner-dunal swale at North Beach Campground, S. of camp shower, 14 Oct 2008, *Knapp 2637* (Assateague Island National Seashore Herbarium).

Juncus validus Coville var. *validus*

These collections mark the first reports of this species from Delaware and the Eastern Shore of Maryland and document what appears to be a relatively rapid expansion of the species northward. *Juncus validus* was first collected in Harford Co., Maryland, by E. Baltars in 1965 (Strong & Simmons 2000) but has since been documented from Anne Arundel (*Smith s.n.* TAWES), Cecil (*Davis s.n.* TAWES) and Prince George counties (*Strong & Simmons 1970* US). In 2005 and 2006, three populations of this were discovered in Delaware and on Maryland’s Eastern Shore, all located in or along heavily disturbed roads. The putative native range of *J. validus* is North Carolina south to

Florida west to Texas, southwest Missouri and Oklahoma (Brooks & Clements 2000). *Juncus validus* is considered non-native in the northern extreme of its range in Virginia, Maryland, and Delaware.

Voucher specimens. **DELAWARE. Sussex Co.:** Bethany Beach along DE Rt. 1 about 0.5 mi. N of Fred Hudson Rd. (360), on the W side of the road, 2 Jul 2006, *Longbottom 7586* (DOV) **MARYLAND. Dorchester Co.:** East of North Tara Road, growing in abandoned logging road, seasonally inundated, 26 Aug 2006, *Knapp 2002 & Longbottom* (DOV). **Wicomico Co.:** North and South of Rt. 313, 1.1 km west the town of Mardela Springs, 27 Jul 2005, *Knapp 1550* (DOV, TAWES).

LENTIBULARIACEAE

Utricularia cornuta Michaux

Utricularia cornuta was last collected in Maryland by Hotchkiss & Leonard (21298 US) in 1960 from the Coastal Plain of Maryland in Anne Arundel County. Community classification surveys in Alleghany Plateau wetlands in Garrett County resulted in the rediscovery of this species in Maryland. *Utricularia cornuta* is found from Newfoundland and Quebec west to N. Ontario, Alberta, and Minnesota, south to southern Florida, and eastern Texas (Weakley 2010)

Voucher specimen. **MARYLAND. Garrett Co.:** Town of McHenry, Rock Lodge Trust, 0.5 mi S of Rock Lodge Ln. and Rock Lodge Rd int., growing in an open acidic seepage peaty fen throughout shallow muck hollows, and low peat hummocks frequent, 21 Jul 2010, *Stango 2010132-1 et al.* (TAWES).

MALVACEAE

Modiola caroliniana (L.) G. Don

This collection marks the first documentation of this species in Maryland. Known from Virginia, Delaware, and Pennsylvania (USDA Plants Database 2010), this species was conspicuously absent from the Maryland flora. It is believed not to be native in the northern portion of its range in Delaware. Nor is the Maryland population likely native, because it was found growing in a mowed lawn on sandy soil.

Voucher specimen. **MARYLAND. Montgomery Co.:** Naval Surface Warfare Center, Carderock Division Center, mowed lawn on sandy soil near woodland edge, 13 Jun 1996, *Davis 7241* (Herb. Patuxent Naval Air Station).

MELIANTHIACEAE

Stenanthium leimanthoides (Gray) Zomlefer & Judd

[*Zigadenus leimanthoides* A. Gray]

The discovery of this species marks an addition to the flora of Maryland. In the northeast, this species is distributed along the Coastal Plain and is historically known in New York and Delaware and is known from fewer than 5 populations in New Jersey. The species then ranges from the mountains of West Virginia and Virginia before becoming widespread in the southeastern USA. This Maryland occurrence is located along the fall-line just 6.8 km from Pennsylvania and 11 km from Delaware. Brown and Brown (1984) reported this species as “infrequent,” being “a coastal species, found in the mountains of Maryland”. Brown and Brown’s report is erroneous — no other literature source includes this species as a component of the Maryland flora and no herbarium is known to contain a specimen of this species from Maryland.

Voucher specimens. **MARYLAND. Cecil Co.:** Northeast the town of Belvedere 0.8 km and located between I-95 and Route 40, Plants growing in huge fresh water seepage underlain by terraced gravel deposits, 4 Aug 2009, *Knapp 2968 et al.* (US & FLAS).

ONAGRACEAE

Ludwigia glandulosa Walter subsp. *glandulosa*

These collections represent a rediscovery for this species in Maryland since its initial collection by Holmes from Somerset Co. in 1890 (Peng 1989). This species was reported by Rome in 1987 (Maryland Natural Heritage Program Database), but a voucher specimen was not made and the report was never confirmed. Though attempts by area botanists were made in subsequent years to document and confirm this species, the population was never located and is believed extirpated due to roadside ditch maintenance (F. Hirst, pers. comm.). This collection verifies Rome's report and documents the northern limit of the species range. The overall geographic distribution is southeastern Virginia, south to Florida and Texas, and north in the interior to southern Indiana and Kansas (Gleason & Cronquist 1991).

Voucher specimens. **MARYLAND. Somerset Co.:** Northwest side of Route 413 ca. 0.4 km west the int. of Lovers Lane, 22 Jul 2003, *Knapp 58-03* (DOV); Roadside ditch north side of Fairmont Rd (Rt. 361), at int. of Hood Rd., 23 Aug 2006, *Knapp 2029* (DOV).

Ludwigia leptocarpa (Nutt.) Hara.

Ludwigia leptocarpa was first collected in Wicomico Co., Maryland, by John Dennis in 1996 (McAvoy 2000), from a small population along a power-line through an emergent tidal marsh. At that time, the species was considered native (McAvoy 2000), but a new discovery of the species from Sussex Co., Delaware, has resulted in a reevaluation of its status. In 2005, this species was discovered growing in a freshwater impoundment at Prime Hook National Wildlife Refuge (NWR) and was a new addition to the flora of Delaware. Since its discovery here, surveys have found this species to be dominating perhaps over 500 acres of impounded marshland. This species is clearly invasive at this site and was likely established by waterfowl as they migrate along the eastern flyway. Land managers working along the East Coast should be alert to this species. Control efforts have begun at Prime Hook NWR by refuge staff with the hopes of eventually eradicating it. The overall geographic distribution of *L. leptocarpa* is from Virginia, south to Florida and west to Texas, and in the interior to southeast Missouri and southern Illinois (Gleason & Cronquist 1991). *Ludwigia leptocarpa* is now considered to be adventive in Delaware.

Voucher specimen. **DELAWARE. Sussex Co.:** Forming a monoculture over many acres, fresh water impoundment marsh, south side of Broadkill Rd., just west of Broadkill Beach, Prime Hook NWR, 9 Sep 2005, *McAvoy 6135* (DOV).

ORCHIDACEAE

Platanthera peramoena (Gray) Gray

The collection cited below documents a new and rare Coastal Plain occurrence for the species. *Platanthera peramoena* is primarily a plant of the Mountain and Piedmont provinces of the eastern USA [central Pennsylvania and Ohio, south to Alabama, west to eastern Arkansas and eastern Missouri (Luer 1975, Weakley 2010)]. On the Coastal Plain this species is quite rare and is extant in only one county in southern New Jersey [Monmouth Co. (pers. comm. David Snyder)] and in three counties in southeast Virginia [Greensville, Lancaster, and Northumberland (V.B.A. 2010)]. Four flowering, robust individuals were discovered in an isolated, forested wetland of high ecological quality, which also included *Ranunculus septentrionalis* Poir. as an associate (see discussion below).

This population occurs about five miles south of the fall-line in south-central New Castle Co., Delaware.

Voucher specimen. **DELAWARE. New Castle Co.:** South of Glasgow, seasonally flooded forested wetland with a thin canopy of: *Acer rubrum*, *Fraxinus pensylvanica* and *Quercus bicolor*, 21 Jul 2010, *McAvoy 6819* (DOV).

***Platanthera shriveri* P.M. Brown**

[not in PLANTS DATABASE]

This southern Appalachian endemic was newly described by Brown et al. (2008). In Brown's publication, populations were noted from states adjacent to Maryland (West Virginia, Virginia, and Pennsylvania) but not from Maryland itself. Photographs of the plants were sent to P.M. Brown, who confirmed their identity.

Voucher specimen. **MARYLAND. Frederick Co.:** Northwest the town of Frederick in the City of Frederick Municipal Forest, along stream, 14 Jul 2009, *Knapp 2891 & Wiegand* (TAWES).

PHRYMACEAE

***Glossostigma cleistanthum* W.R. Barker**

[*Glossostigma diandrum* (L.) Kunze]

The specimens cited below are the first collections from Maryland and Delaware, where they were collected from deep storm-water retention ponds. This species is native to Australia and was first reported in North America by Les et al. (2006). The known distribution of this species before these collections was Connecticut, New Jersey, Pennsylvania, and Rhode Island.

Voucher specimens. **DELAWARE. Sussex Co.:** Rehoboth Beach along Postal Road 0.25 mi west of DR Rt. 1, sediment control pond, 23 Aug 2008, *Longbottom 12,508* (DOV). **MARYLAND. Wicomico Co.:** Town of Salisbury. NE the int of Northwood Drive and Kiley Drive in draw-down zone of sediment control pond, 13 Aug 2008, *Longbottom 12,000* (DOV).

PHYLLANTHACEAE

Phyllanthus caroliniensis* Walt. subsp. *caroliniensis

Tatnall (1946) stated that *Phyllanthus caroliniensis* was infrequent on the Coastal Plain and was first collected near Snow Hill, Maryland, in 1863 (*W.M. Canby s.n.* PH). The Maryland collection cited below is an apparent rediscovery to the Eastern Shore of Maryland. While doing herbarium research related to this paper, specimens from Sussex Co., Delaware, were discovered representing a previously undocumented component of the Delaware Flora. This species was believed historic in Delaware until it was rediscovered in 2011.

Voucher specimens. **DELAWARE. Sussex Co.:** Laurel, 4 Aug 1874, *Commons s.n.* (DOV, NA); town of Ellendale, Redden State Forest Barr Tract, along DE Rt 16, near Webbs Road, along dirt road, 4 Sep 2011, *Longbottom 16004 & Pengelly* (NY, MO). **MARYLAND. Wicomico Co.:** south side of Twiley Bridge Road at int. of Fooks Road, under power line Right-of-way, growing in disturbed seasonally inundated sandy soils, 13 Sep 2005, *Knapp 1685* (DOV)

POACEAE

***Axonopus furcatus* (Fluegge) A. Hitchc.**

The collections cited below represent a northern range extension for the species and the collections from Worcester Co., Maryland, is a rediscovery of a historical species to the Maryland flora. *Axonopus furcatus* is a species endemic to the southeastern United States and ranges from southeastern Virginia to Florida, west to Texas and Arkansas (Barkworth 2003). Before its rediscovery in 2005, this species was considered historic in Maryland and was known from only a single collection made by Rusby in 1889 (*s.n.* NY) from the town of Stockton in Worcester County, Maryland. The 2005 collection was made approximately 17 km north of Stockton where Rusby made his collection in 1889. A collection from Somerset Co., Maryland, calls into question the nativity of the species in Maryland. This collection was made along a roadside supporting a population approximately 7 km in length with too many individuals to accurately assess. This species is also historically known from Northampton Co., Virginia (*Fernald 5207 et al.* PH).

Voucher specimens. **MARYLAND. Somerset Co.:** North and south of Rt. 413 between Princess Anne and Crisfield, commonly distributed along grassy mowed roadsides, 23 Aug 2005 *Knapp 2024* (DOV). **Worcester Co.:** South side of Forest Lane Road ca. 1700 feet east from the int. of Voting House Road, 22 Aug 2004, *McAvoy 6087 et al.* (DOV) & 6 Oct 2004, *Knapp 1106 et al.* (TAWES); East side of Mount Olive Church Road, 0.3 mi. N of int. of Glatfelter Logging Road, 19 Sep 2006, *Knapp 2084 & Naczi* (DOV).

***Elymus macgregorii* R. Brooks & J.J.N. Campbell**

[not in PLANTS DATABASE]

Elymus macgregorii is new to the flora of Delaware. The previously known range is quite wide: Maine to North Dakota, south to Florida and Texas (Campbell 2000; Barkworth et al. 2007). This species is undoubtedly native to Delaware, given its known distribution and ecology and the nature of the particular site in which it occurs in Delaware. The Delaware population of *E. macgregorii* occurred in a moist, shaded understory of a mature, high-quality deciduous forest on the floodplain of the Brandywine Creek. It was infrequent at the site.

This grass is a recently described species (Campbell 2000). In addition to its morphology, the voucher cited below fits Campbell's description of fruiting relatively early (compared to other eastern North American *Elymus* species) and inhabiting nutrient-rich alluvium.

Voucher specimen. **DELAWARE. New Castle Co.:** N of Rockland, 29 Jun 1984, *Naczi 545 & Seyfried* (DOV), determined by Julian J.N. Campbell, Feb 2006.

***Muhlenbergia uniflora* (Muhl.) Fern.**

This collection marks a rediscovery of the species in Maryland. This species was first collected by F.H. Sargent in 1953 (6369 US) from Suitland Bog (Prince Georges Co.), a well botanized Magnolia Bog. It is curious that this species was undocumented from this site for 72 years given the distinctness of the species, the frequency that the area has been botanized, and the size of the population (50+ individuals). *Muhlenbergia uniflora* ranges from Newfoundland, west to Ontario and northern Michigan, and south to New Jersey (Gleason & Cronquist 1991).

Suitland Bog has a history of plant introductions (see discussion under *Rhynchospora rariflora*), such as *Sarracenia purpurea* and *Drosera filiformis* (M. Strong pers. com.). *Muhlenbergia uniflora* is either a rare component of the Maryland flora at the extreme southern limit of its native range, or else it is a rare introduction.

Voucher Specimens. **MARYLAND. Prince George Co.:** Suitland Bog, small open headwater seepage area, on sole isolated tussock, 1200 ft. N the int. of Suitland Rd. and Suitland Parkway, 18 Jul 2007, *Knapp 2319 et al.* (US).

***Parapholis incurva* C.E. Hubbard**

This represents the first published reports of this non-native species from Maryland's Eastern Shore and to the Flora of Delaware. The species was first collected from Sussex Co., Delaware, by Agnes Chase from Sussex Co. in 1916 (2283 US), yet no source attributes the species to Delaware (e.g., McAvoy 2001; Tatnall 1946). *Parapholis incurva* is native to Europe and has been documented along muddy shores and marshes from both the Atlantic and Pacific Coasts of the USA (Gleason & Cronquist 1991).

Voucher specimens. **DELAWARE. Sussex Co.:** Wet sands, Lewes, 12 Jun 1916, *Chase s.n.* (DOV). **MARYLAND. Somerset Co.:** N of Rt. 413 and ca. 2.4 km north of the town of Crisfield at Janes Island State Park. Growing in disturbed marsh edge, 200 feet from softball field. 26 May 2005, *Knapp 1201* (DOV). Deal Island Wildlife Management Area, Southwest the town of Dames Quarter ca. 1.0 km, 31 May 2006, *Knapp 1907* (DOV).

***Puccinellia fasciculata* (Torr.) Bickn**

Before its rediscovery, this species was believed to be historical in Maryland, having last been collected by Terrell and Uhler (4918 MARY) in 1978 from Dorchester County, Maryland. This discovery, also in Dorchester County, was found in a fresh-tidal portion of the Chicamamico River, under a power-line right-of-way. Recent work has determined that the species is not indigenous to North America (Davis & Consaul 2007).

Voucher specimen. **MARYLAND. Dorchester Co.:** North of New Bridge Road, west the town of New Bridge, west the int. of New Bridge Road and the Chicamamico River ca. 50 feet, 26 Mar 2006, *Knapp 1884* (DOV).

PORTULACACEAE***Montia linearis* (Dougl. ex Hook.) Greene**

This species, considered to be adventive in Maryland, was first collected in Prince George's Co., by Hershkovitz (1999). These collections mark the first documentation from Maryland's Eastern Shore. Native to the northwestern USA, *Montia linearis* has shown a rapid expansion of its range over the past 10 or more years, having been documented in many states east of the Mississippi River (Hershkovitz 1999). States where documented include: Mississippi, North Carolina, Tennessee, and Virginia (Chester, et al. 1997; Weakley 2010). This species could be expected to occur in neighboring states but given the phenology of the species (flowering March and fruiting in April) and the habitat (fallow fields and roadsides), it could be overlooked.

Voucher specimens. **MARYLAND. Caroline Co.:** Fallow agricultural field, southeast the town of Henderson, west of Jackson Lane, 3 May 2006, *Knapp 1872 & Wilson* (DOV). **Dorchester Co.:** Open agricultural field at edge of rich woods, ca. 3.5 km WNW of Vienna, 1 May 2009, *Knapp 2672* (DOV).

PRIMULACEAE***Lysimachia japonica* Thunb.**

The specimen cited below marks an addition to the flora of Maryland. This species occurs naturally in China and Japan (Cholewa 2009). The North American range of this species as reported by Cholewa (2009) is only Louisiana and West Virginia. This species was discovered along a roadside adjacent to an abandoned field of young pole-sized trees and it is likely to be discovered in many other locations.

Voucher specimen. **MARYLAND. Montgomery Co.:** E side of Wayfarer Rd., S of bend N or Watkins Meadow Drive, Germantown, 22 Jul 2005, *Davis 7243A* (BALT).

RANUNCULACEAE

Ranunculus laxicaulis (Torr. & Gray) Darby

Before its rediscovery in 2006, this species was last documented in Maryland by R. Tatnall on 2 June 1939 (3391 PH). The location cited below is believed to be identical to Tatnall's collection site. The habitat supporting this species (exposed muddy tidal shores along tributaries of the Pocomoke River, under a canopy of *Taxodium distichum* (L.) Rich.) is widespread in the area and more exhaustive surveys could uncover additional populations.

Voucher specimen. **MARYLAND. Worcester Co.,** Exposed muddy banks of Purnell Branch, 0.5 km northeast from int. of Rt. 113 and Rt. 365, 8 Jun 2006, *Knapp 1939* (TAWES).

Ranunculus septentrionalis Poir.

[*Ranunculus hispidus* Michx. var. *nitidus* (Chapman) Duncan]

This report is a new addition to the flora of Delaware. Tatnall (1946) listed *Ranunculus septentrionalis* for Delaware but misapplied this name to *R. caricetorum* Greene [*R. hispidus* Michx. var. *caricetorum* (Greene) Duncan], a rare species of Delaware's Piedmont province. *Ranunculus septentrionalis* was first collected on the Coastal Plain in Kent Co., Delaware, in 2007 and then again in 2010 from New Castle Co., Delaware, also on the Coastal Plain (see discussion above for *Platanthera peramoena*). *Ranunculus septentrionalis* ranges from New York, west to Ontario, south to east Texas, Louisiana and Florida (Weakley 2010). On the Coastal Plain, it is known from New Jersey (Stone 1911), Virginia, North and South Carolina, Georgia, and Florida (Weakley 2010).

Voucher specimens. **DELAWARE. Kent Co.:** Several plants found growing on nutrient rich bottomland soils on floodplain of stream, with skunk cabbage, tributary of the Leipsic River, south of Smyrna, sepals strongly reflexed, achene margin 1 mm broad, 3 May 2007, *McAvoy 6217* (DOV); same site, 13 Jun, *McAvoy 6232* (DOV). **New Castle Co.:** South of Glasgow, 10 plants in a localized area of a forested wetland with a thin canopy of: *Acer rubrum*, *Fraxinus pensylvanica* and *Quercus bicolor*, site is seasonally flooded, 21 Jul 2010, *McAvoy 6821* (DOV).

RHAMNACEAE

Rhamnus alnifolia L'Héritier

Until 2009, this species was noticeably absent from the flora of Maryland yet known from the neighboring states of West Virginia and Pennsylvania (the neighboring location in Pennsylvania is now historic). This species is found from Newfoundland, west to British Columbia, south to New Jersey, Pennsylvania and West Virginia, Virginia, and Tennessee, Ohio, and throughout the Midwest into California (Weakley 2010).

Voucher specimen. **MARYLAND. Garrett Co.:** The Glades. Approximately 2.7 km west of Cunningham Swamp and 1.3 km S of the Glade Church, 21 Jul 2009, *McPherson s.n.* (TAWES).

ROSACEAE

Amelanchier nantucketensis Bickn.

Ashe (1919) first described this taxon as *A. micropetala* (Robinson) Ashe from the area around Great Falls, Maryland. Dibble & Campbell (1995) later synonymized *A. micropetala* with *A. nantucketensis*. The Maryland record never appeared in regional floristic manuals (e.g. Fernald

1950). Taxonomic uncertainty regarding the occurrence in Maryland remained until surveys for the species were undertaken in 2001. *Amelanchier nantucketensis* occurs frequently along the Potomac River Gorge in Maryland and Fairfax Co., Virginia (V.B.A. 2010) and is a wide disjunct from the core of its range in New England.

Voucher specimens. **MARYLAND. Montgomery Co.:** outcrops and cliff ledges along the Potomac River, 16 Apr 2002 (flowers), 13 Jun 2002 (mature leaves, fruit), *Frye 5027 & Harrison* (TAWES, MAINE).

***Rubus bifrons* Vest ex Tratt.**

Rubus bifrons is native to Europe and has become increasingly widespread in the USA. Though this is the first report of this species from Maryland its discovery is not unexpected. Currently, *R. bifrons* has been documented in neighboring Pennsylvania (Rhodes & Klein 1993) and Virginia (V.B.A. 2010). The overall geographic distribution of this species is Massachusetts and New York, south to Georgia and west to Texas.

Voucher specimen: **MARYLAND. St. Mary's Co.:** Patuxent River Naval Air Station, woods edge N of Building 503, 26 May 2000, *Davis 7251* (Herbarium of the Patuxent River Naval Air Station).

RUBIACEAE

***Houstonia pusilla* Schöpf**

Houstonia pusilla is native to the southeastern and midwestern USA (Terrell 1996). The northeasternmost previously known populations, in the northeastern portion of the Western Shore of Maryland, are probably non-native, evidenced by the recentness of their discoveries and their presence in “weedy places” (Terrell 1996). Otherwise, the northern limit of the species in the eastern USA is central Virginia (Terrell 1996).

The collections cited below are apparently the first from Delaware, the Eastern Shore of Maryland, and the Eastern Shore of Virginia. Local resident James B. McClements discovered the Kent County, Delaware, population a few years before the collection cited below. Subsequent to this discovery it has been documented in all Delaware counties, 6 from the Eastern Shore of Maryland and in Accomack County, Virginia. It is apparently established in the flora.

We suspect that *Houstonia pusilla* is not native to Delaware, the Eastern Shore of Maryland, or the Eastern Shore of Virginia for the same reasons as cited for the Western Shore of Maryland populations. However, given the propensity of this species to grow in disturbed sites, the proximity of native populations to these areas, and the continued discovery of state records of native species, we cannot rule out the possibility that the species is native. In this uncertainty, *H. pusilla* is similar to *Planodes virginicum*.

Voucher specimens. **DELAWARE. Kent Co.:** Dover, along E side of Kenton Road, 7 Apr 2006, *Naczi 11329 et al.* (NY). **New Castle Co.:** 100's of flowering plants scattered throughout mowed lawn, Old Drawyer's Church cemetery, west of Rt. 13, just N of Odessa, 5 Apr 2007, *McAvoy 6210* (DOV). **Sussex Co.:** Town of Harbeson along Rt. 9, 1 Apr 2011, *Longbottom 14680* (NY); **MARYLAND. Caroline Co.:** Town of Federalsburg along MD 318, 28 May 2007, *Longbottom 8359* (NY). **Dorchester Co.:** Town of Cambridge, Aireys Road spur off Rt. 50, 6 Apr 2011, *Longbottom 14717* (NY); **Queen Anne's Co.:** Wye Island Rd W of Carmichael Rd, 12 Apr 2011, *Longbottom 14736* (NY); **Talbot Co.:** N the town of Easton, Woodlawn Memorial Park, 11 Apr 2011, *Longbottom 14734* (NY); **Wicomico Co.:** Town of Hebron, Rt. 50 at Springhill Memorial

Gardens, 8 Apr 2011, *Longbottom 14723* (NY); **Worcester Co.:** Town of Snow Hill along US 113, at the entrance of Pocomoke River State Park, Shad Landing, 1 Apr 2011, *Longbottom 14681* (NY). **VIRGINIA. Accomack Co.:** N of Mappsville, Rt. 13, at State Road 691, 3 Apr 2011, *Longbottom 14696* (NY).

ZYGOPHYLLACEAE

Tribulus terrestris L.

This species was first attributed to Maryland by Reed (1964) from chrome and manganese ore piles and was best treated as a waif. A native of Mediterranean Europe (Weakley 2010), it is found in most states in the eastern USA with the exception of the New England states, Virginia, and West Virginia. These plants were found in ruderal habitats along corn fields and should be sought in similar habitats across the Region. The species is now an established component of the flora.

Voucher specimen. **MARYLAND. Wicomico Co.:** West the town of Quantico at Nutters Neck Wildlife Management Area at end of Nutters Neck Road, 9 Sep 2007, *Longbottom 10468 & Van Velsir* (DOV).

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