

CONTRIBUTIONS TO THE FLORA OF GEORGIA, U.S.A.

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Abstract. Additions to the flora of Georgia, U.S.A., and other noteworthy records are reported. Voucher specimen data are cited to document species from Georgia previously not known to occur in the state; additional records of poorly known or infrequently collected native and exogenous naturalized species; and additional populations of rare, threatened, and endangered species or species otherwise listed by the Georgia Department of Natural Resources. Data on the status of protected plants, special concern plants, and watched plants as indicated by the Georgia Department of Natural Resources are provided, and exogenous taxa are denoted. One hundred seventy-seven species are reported, of which 59 are putative state records and 68 are exogenous.

Keywords: flora, floristics, Georgia, range extensions, vascular plants, noteworthy plants, rare plants, invasive weeds.

Venard (1969) compiled a comprehensive list of published botanical work pertaining to Georgia. While it is beyond the scope of this paper to update that work, below we review some of the highlights of Georgia's floristic botany, with particular emphasis on published research since Venard's 1969 compilation. Other than Stephen Elliott's *Sketch* (1816–1821, 1821–1824) no comprehensive flora of the state has been published. However, Roland Harper's remarkable contributions to the knowledge of Georgia's flora in the first decade of the 20th Century aside (Harper 1900a, 1900b, 1901, 1903a, 1903b, 1904, 1905a, 1905b, 1906a, 1906b, 1909, 1910), there have been a number of important works dealing with various taxonomic groups, i.e., McVaugh and Pyron (1951), Russell and Duncan (1972), Muir (1979), Bruce et al. (1980), and Snyder and Bruce (1986), or with specific geographical regions of the state, i.e., Thorne (1949a,

1949b, 1951), Faircloth (1971), and Lane (1976). Other works with broader geographical coverage also bear substantially on the flora of Georgia, i.e., Chapman (1860, 1889, 1897), Small (1903, 1913, 1933), Radford et al. (1968), Duncan (1975), Godfrey and Wooten (1979, 1981), and Godfrey (1988). Notable too are Robert Kral's (1983) comprehensive treatment of rare flora of the southeastern United States and compilations on Georgia's rare plants by Patrick et al. (1995) and Chafin (2007). Moreover, numerous florulas of smaller areas such as counties or state parks have been published since Venard (1969), i.e., Lipps and De Selm (1969), Bostick (1971), Jones (1974), Leslie and Burbanck (1979), Coile (1981), Duncan (1982), Houle (1987), Coile and Jones (1988), Howel (1991), Drew et al. (1998), Stiles and Howel (1996, 1998), Zomlefer et al. (2008), Echols and Zomlefer (in press). Also, during this period nu-

Colleagues kindly confirmed the identities of duplicate specimens as follows: Dr. Robert Kral (VDB), *Asimina pygmaea* and *A. × nashii*; Dr. Charles Bryson (SWSL) and Dr. Rob Naczi (DOV), *Carex annectens*, *C. chapmanii*, *C. floridana*, and *C. godfreyi*; Dr. Kelly Allred (NMCR), *Bothriochloa* spp.; Dr. Richard Spellenberg (NMC), *Boerhaavia diffusa* and its status as new state record; and Dr. John Nelson (USCH), *Pycnanthemum floridanum*. Dr. Rob Naczi determined duplicate specimens of *Carex gholsonii* Mr. John B. Jensen, Senior Wildlife Biologist, Georgia Department of Natural Resources, Nongame Conservation Section, graciously shared site data on his *Rhexia salicifolia* site and granted permission to report our voucher specimens. Mr. Greg Lee and Mr. Paul Schoenfeld secured clearance for us to publish data on records from Moody Air Force Base and Kings Bay Submarine Base, respectively. Support for field research was provided to the first author through grants and contracts from the following agencies and organizations: Georgia Department of Natural Resources, Natural Heritage Program; Georgia Botanical Society; USDA-APHIS through University of Georgia (Tifton); US Department of Defense through the Georgia Department of Natural Resources, Grant No. 1995CCD002; US Fish & Wildlife Service; US Department of Defense, Department of the Air Force, through The Nature Conservancy of Georgia, Contract No. M6700491D0010-5W01; the US Army through the Nature Conservancy of Georgia; and the Faculty Research Fund of Valdosta State University. The Botany Department, University of Florida, provided financial support to M.W. Morris. The constructive reviews of Dr. Loran Anderson (FSU) and Dr. Alan Weakley (NCU) improved this paper.

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merous reports of new state records or significant range extensions have appeared, i.e., Norsworthy (1966), Faircloth (1970, 1975, 1981), Duncan (1971, 1985), Duncan and Funderburk (1972), Bostick (1977), Duncan and Duncan (1978), Dennis (1980), Kral (1981), Carter and Faircloth (1986), Hunt (1986), Whetstone et al. (1987), Broyles and Wyatt (1988), Coile (1988), Bridges and Orzell (1989), Carter (1990), Matthews et al. (1991), Stiles and Howel (1994), Ruter et al. (1995), Bryson et al. (1996), Sorrie (1998), Carter et al. (1999), Carter and Bryson (2000), Holmes (2000), Townsend et al. (2000), McMillan et al. (2002), and Jenkins and McMillan (2005). Since 1980, several checklists and atlases based upon voucher specimens housed primarily at the University of Georgia Herbarium (GA) have been published: Duncan and Kartesz (1981), Coile and Jones (1985), Jones and Coile (1988), and most recently Sweeney and Giannasi (2000).

Our purpose herein is to provide data from voucher specimens documenting for Georgia (1) species previously not known to occur in the state, (2) additional records of poorly known or infrequently collected native and exogenous naturalized species, and (3) additional populations of rare, threatened, or endangered species. Recent lists of

protected plants, special concern plants, and watched plants compiled by the Georgia Department of Natural Resources Natural Heritage Program (Patrick et al. 1995; Anonymous 2007) were used to determine the status of species reported on herein, and it is anticipated that data reported herein will be useful in revising those lists.

Following is an alphabetical annotated list of noteworthy contributions to the flora of Georgia. Tropicos (Missouri Botanical Garden 2008) was used to confirm authority citations and synonymy. Based upon voucher specimens, the atlases of Jones and Coile (1988) for dicots and Sweeney and Giannasi (2000) for pteridophytes and monocots have been our primary means for determining which taxa have previously been documented for the state. Names for physiographic provinces mostly follow Bruce et al. (1980). As indicated, voucher specimens for the records reported herein are housed primarily at Valdosta State University Herbarium (VSC), with duplicates distributed elsewhere. Duplicates yet to be distributed are indicated "others tbd." Herbarium acronyms follow Holmgren and Holmgren (1998). Author abbreviations follow Brummitt and Powell (1992). Other abbreviations and symbols are keyed in Table 1.

TABLE 1. Key to symbols denoting species status and rank.

State status according to Georgia Department of Natural Resources (Anonymous 2007)

E	Listed as endangered; species in danger of extinction throughout all or part of its range
T	Listed as threatened; species likely to become an endangered species in the foreseeable future throughout all or parts of its range
R	Listed as rare; species may not be endangered or threatened but should be protected because of scarcity
U	Listed as unusual (and thus deserving of special consideration); plants subject to commercial exploitation

State rank according to Georgia Department of Natural Resources (Anonymous 2007)

S	Listed among plant species of special concern
W	Listed among watched plant species
S1	Critically imperiled in state because of extreme rarity (5 or fewer occurrences)
S2	Imperiled in state because of rarity (6 to 20 occurrences)
S3	Rare or uncommon in state (21 to 100 occurrences)
SN	Regularly occurring, usually migratory and typically nonbreeding species
SR	Reported from state, but without persuasive documentation (precise site records or verification of taxonomy lacking)
SU	Possibly in peril in state but status uncertain; need more information on threats or distribution
SH	Of historical occurrence in state, perhaps not verified in past 20 years, but suspected to be extant
SNR	State not ranked
?	Denotes questionable rank; best guess given whenever possible (e.g. S3?)

Miscellaneous symbols and abbreviations

*	Putative first record for Georgia
†	Exogenous taxon
EPPC	Listed among invasive exotic plants in Florida (FLEPPC 2007)
FNW	Federal Noxious Weed (Anonymous 2006)

†***Acmella pusilla*** (Hook. & Arn.) R.K. Jansen
(Asteraceae)

U.S.A. GEORGIA. **Chatham Co.:** Garden City, 0.2 mi W jct Hwy GA 307 and Hwy GA 21, between Export Blvd and Hwy GA 21, mowed lawn of business along E side Hwy GA 307, 32° 07.583'N 81°10.4233'W, plants stoloniferous, forming mats, locally common, 13 Jul 2006, *R. Carter 16944* (VSC, others tbd).—This South American native has long been known from Florida (Wunderlin & Hansen 2003; Wunderlin & Hansen 2008). Although Jones and Coile (1988) did not record it from Georgia, more recently Strother (2006d) mapped it in the southeastern states from Florida to North Carolina. Weedy associates at the Chatham County site were *Axonopus affinis* Chase, *Cynodon dactylon* (L.) Pers., *Dichondra carolinensis* Michx., *Diodia virginiana* L., *Eragrostis minor* Host, *Gamochaeta chionesthes* G.L. Nesom, *Oxalis corniculata* L., *Paspalum notatum* Flügge, *Phyllanthus urinaria* L., *Scutellaria racemosa* Pers., and *Trifolium repens* L. Herein, we report voucher specimen data confirming the naturalization of *A. pusilla* in Georgia.

Aeschynomene viscidula Michx.
(Fabaceae) – S(S1?)

U.S.A. GEORGIA. **Camden Co.:** Kings Bay Submarine Base, Etowah Park, vic. dock and boat ramp, 30°49'18"N 81°32'40"W, edge of open mowed area along bluff, plants prostrate, local, flowers yellow, 1 Jul 1996, *R. Carter 12976* (VSC, others tbd).—Jones and Coile (1988) map *A. viscidula* only in McIntosh County. Herein, we report voucher specimen data for an additional county in Georgia.

Agalinis georgiana (C.L. Boynton) Pennell
(Scrophulariaceae)

U.S.A. GEORGIA. **Lowndes Co.:** 2.48 air mi WSW of Kinderlou, 30°46.543'N 83°24.057'W, ridge flat, locally common, 6 Sep 2007, *R. Carter 18008* and *W.W. Baker* (VSC, others tbd). **Thomas Co.:** Thomasville, Greenwood Plantation, Big Woods, well-drained upland, annually burned pineland, mostly longleaf, amongst wiregrass, 15 Sep 1980, *R. Komarek s.n.* (TTRS); Thomasville, between Pinetree Blvd and Hwy US 319 west bypass, Leabo property, conservation easement, 30° 49.426'N 84°00.558'W, longleaf pine-wiregrass savanna, local, 15 Sep 2006, *W.W. Baker s.n.* (FSU,

VSC), 17 Sep 2006, *R. Carter 17215*, *W.W. Baker* and *G. Nelson* (VSC); Wade Tract, 30.76072°N 84.002854°W, locally abundant, 22 Sep 2008, *W.W. Baker s.n.* (FSU, TTRS, VSC). **Worth Co.:** 4.35 air mi NNW Anderson City, W of Old Hwy 33, Jeffords Tract, 31.43393°N 83.86999°W, lower slope along drain just upslope from bog, *Pinus palustris-Aristida stricta* community, 11 Sep 2008, *R. Carter 18529* and *W.W. Baker* (VSC).—Pennell (1935) described the range of this species as southern Georgia, southern Alabama, and northern Florida, indicating the type locality in Dooly County, Georgia. Jones and Coile (1988) do not include it for Georgia. Herein, we report recent collections of this poorly known and rare taxon from three counties in southcentral Georgia. *W.W. Baker* initially found the Leabo population in Thomas County in September 2006 but saw no plants there during 2007. The Lowndes County population was a component of a frequently burned (but 1–2 year rough) community with *Aristida stricta* Michx., *Diospyros virginiana* L., *Eupatorium compositifolium* Walter, *Pinus palustris* Mill., *Pteridium aquilinum* (L.) Kuhn, *Quercus falcata* Michx., *Q. nigra* L., *Q. pumila* Walter, *Q. stellata* Wangenh., *Rhus copallinum* L., *Toxicodendron pubescens* Mill., and *Vernonia angustifolia* Michx. Although *A. georgiana* has no official status or listing in Georgia (cf. Patrick et al. 1995; Anonymous 2007), we are in agreement with Hays (2002) that it should be accorded such.

†****Alternanthera pungens*** Kunth
(Amaranthaceae)

U.S.A. GEORGIA. **Sumter Co.:** N side of Americus, E of Hwy US 19 at jct Rucker St, 32.08967°N 84.23963°W, gravelly parking area in vacant lot, 1 Sep 2008, *R. Carter 18519* (VSC, others tbd). **Tift Co.:** field border, 15 Aug 2005, *B. Tankensley s.n.* (VSC).—These voucher specimen data comprise the first report of this tropical American, prostrate “sticker weed” from Georgia (cf. Jones & Coile 1988; Clemants 2003).

†***Ambrosia psilostachya*** DC.
(Asteraceae)

U.S.A. GEORGIA. **Camden Co.:** Coleraine, ca. 100 m S jct Hwy GA 40 and Coleraine main entrance road, 30°50.298'N 81°53.967'W, flatwoods, locally common in clearing and along road, 27 Oct 2006, *R. Carter 17366* and *W.W. Baker* (VSC,

others tbd).—This perennial ragweed is native to the Great Plains Region of the central United States and is sporadically introduced into the eastern states (Cronquist 1980). Although Jones and Coile (1988) did not record the species from Georgia, more recently Strother (2006a) maps it widely throughout much of the United States, including Georgia. Thus, it would appear *A. psilostachya* has rapidly dispersed throughout the eastern United States in the past few decades. Herein, we report voucher specimen data confirming the occurrence of this species in Georgia.

Amphicarpum muhlenbergianum (Schult.) Hitchc. (Poaceae) – W(S3?)

U.S.A. GEORGIA. **Camden Co.:** Kings Bay Submarine Base, Etowah Park, 30°49'00"N 81°32'45"W, mechanically disturbed reddish brown loam along west bank of Etowah Pond, locally common, 28 Aug 1996, *R. Carter 13601* (VSC); Kings Bay Submarine Base, ca. 300 m SE Franklin Gate, 30°46'48"N 81°34'25"W, low flatwoods, locally common in clearing and along roadside, 11 Oct 1996, *R. Carter 13884* (VSC). **Charlton Co.:** Coleraine, 1.23 air mi NW Coleraine historical site (Old Town of Coleraine), 30°50.585'N 81°55.083'W, locally abundant in ditch along edge of recently clearcut flatwoods, 27 Oct 2006, *R. Carter 17364 and W.W. Baker* (VSC). **Cook Co.:** ca. 1 mi NW of Cecil, vic. Cecil Bay, locally common, 4 Jun 2001, *R. Carter 14505* (VSC). **Lanier Co.:** Moody Air Force Base, Winnersville Bombing Range, ca. 100 m NE jct Moore Loop and crash trail 13, 30°58'26"N, 83°08'34"W, margin of isolated pond, 17 Sep 1994, *R. Carter 12256* (VSC, others tbd); Moody Air Force Base, Winnersville Bombing Range, ca. 0.5 mi SE observation tower at W end Moore Loop, 30°58'35"N, 83°08'51"W, margin of crescent shaped depression, 30 Sep 1994, *R. Carter 12279* (VSC).—The distribution of this species has been poorly documented in Georgia, and its congener, *A. amphicarpon* (Pursh) Nash, although known from the Carolinas and Florida, has not been recorded for Georgia (Sweeney & Giannasi 2000; Wipff 2003a). Sweeney and Giannasi (2000) map *A. muhlenbergianum* from only two Georgia counties, Baker and Jenkins. Its distribution in Georgia is apparently limited to the coastal plain where it occurs in moist sandy soils along the margins of ponds and shallow depressions in the

ecotone transitional to the adjacent pine flatwoods. Flowering and fruiting appear to be stimulated by mechanical soil disturbance associated with modern silvicultural practices, suggesting fire dependence. In Camden County the following woody associates were noted: *Bejaria racemosa* Vent., *Ilex glabra* (L.) A. Gray, *Lyonia lucida* (Lam.) K. Koch, *Morella cerifera* (L.) Small, *Persea palustris* (Raf.) Sarg., *Pinus elliotii* Engelm., *Quercus nigra*, and *Serenoa repens* (W. Bartram) Small.

Angelica dentata (Chapm. ex Torr. & A. Gray) J.M.Coult. & Rose (Apiaceae) – S(S2?)

U.S.A. GEORGIA. **Berrien Co.:** sandridge by Hwy US 129, 0.8 mi N Alapaha jct Hwy US 129N and Hwy US 82, 1 Oct 1994, *R. Carter 12287* (VSC). **Brooks Co.:** 4.1 mi W of Barney, dry, upland pine woods and mixed hardwoods, 1 Sep 1969, *W.R. Faircloth 6075* (VSC); N of Nankin, Knights Ferry Rd, 1.2 mi E jct with Madison Hwy (GA 333), 30°50.841'N 83°18.202'W, mesic flatwoods with *Pinus palustris* and *Aristida stricta*, infrequent and local, 3 Nov 2004, *R. Carter 15838* (VSC). **Lanier Co.:** 2.5 mi WSW of Lakeland, open pine woodland alongside US-221, 12 Oct 1967, *W.R. Faircloth 4946, G. Loyd and J. Golden* (VSC); 0.7 mi S Lanier-Berrien county line on unpaved section of Hwy GA 64, 15 Oct 1976, *R. Kerby 52* (VSC). **Lowndes Co.:** 1.8 mi NW of N Valdosta Exit on I-75, open pinewoods, 9 Oct 1970, *R. Volosen 11* (VSC); ca. 7.25 air mi SSE Valdosta city center, 30°45.733'N 83°22.559'W, ca. 2.2 mi S jct Rocky Ford Rd and Hwy US 84, sandy flatwoods, locally common, 22 Nov 2003, *R. Carter 15301* (VSC).—Jones and Coile (1988) map this species from only three counties in southern Georgia: Cook, Grady and Worth. These voucher specimen data add four more Georgia counties to the distribution of *A. dentata*, an inhabitant of periodically burned longleaf pine-wiregrass savannas, habitat that has been severely reduced and continues to be imperiled by conversion to silviculture, agriculture and real estate development.

†* ***Anthriscus caucalis*** M. Bieb.

A. scandicina Mansf.

U.S.A. GEORGIA. **Lumpkin Co.:** fescue pasture, 4 Jun 2009, *Scott Sheppard s.n.* (VSC).—Occurring sporadically in the northeastern U.S. (Gleason & Cronquist 1991) and also known from

California (Constance 1993), this Eurasian native has been reported in the southeastern U.S. from Virginia (Fernald 1950), Tennessee (Rogers & Bowers 1973), and South Carolina (Hill & Horn 1997). Neither Jones and Coile (1988) nor Weakley (2008) record bur-chervil from Georgia.

Apteria aphylla (Nutt.) Barnhart ex Small
(Burmanniaceae) – W(S3)

U.S.A. GEORGIA. **Camden Co.:** ca. 11.75 air mi NNE of St. Marys waterfront, 30°53'23"N 81°32'28"W, ecotone of hammock and bayswamp adjacent to salt marsh, 5 Oct 1995, *R. Carter 12854* (VSC); 4.38 air mi ESE Woodbine jct Hwys US 17 and GA 110, 30°57.330'N 81°39.067'W, locally common in mesic maritime forest, 1 Sep 2006, *R. Carter 17187* and *W.W. Baker* (VSC). **Grady Co.:** 5.7 mi SSE of Whigham, west-facing slope of unnamed tributary of Farmer's Spring Branch, 17 Dec 1994, *W.R. Faircloth 8935* (VSC). **Lowndes Co.:** Valdosta, "South Forty" ESE Joree Mill Pond, locally common, 13 Aug 1993, *R. Carter 11170* (VSC); 1.3 air mi SW jct I-75 and Hwy GA 94, 1.7 air mi NW jct I-75 and Hwy US 84, S of Troupville and W of Valdosta, 30°49'45"N 83°20'35"W, Valdosta USGS quadr., 10 Aug 1996, *R. Carter 13455* and *S. Jones* (VSC).—Sweeney and Giannasi (2000) report *A. aphylla* from only four Georgia counties: Echols, Glynn, Early and Randolph. Herein, we provide additional county records of this easily overlooked species, which is probably more common than herbarium vouchers would indicate. At the Lowndes County site, *A. aphylla* was found near the base of a mesic slope with *Fagus grandifolia* Ehrh., *Magnolia grandiflora* L., *Morella cerifera*, *Symplocos tinctoria* (L.) L'Hér., and *Styrax grandifolius* Aiton. In Camden County, it was a component of the mesic maritime hammock and an ecotone between hammock and bayswamp adjacent to salt marsh, where it was associated with *Arundinaria gigantea* (Walter) Muhl., *Ilex cassine* L., *I. opaca* Aiton, *Liquidambar styraciflua* L., *Mitchella repens* L., *Quercus hemisphaerica* W. Bartr. ex Willd., *Q. nigra*, and *Q. virginiana* Miller.

†****Arachis prostrata*** Benth. (Fabaceae)

U.S.A. GEORGIA. **Charlton Co.:** SSE of Moniac, 0.1 mi N jct Hwy GA 121 and GA 185, along Hwy GA 121, UTM 17 390585E 3360050N (NAD27), dense colony along roadside, 8 Jun 2006, *R. Carter 16750* and *W.W. Baker* (VSC,

others tbd).—Native to Brazil, *A. prostrata* was introduced as a ground cover in warmer parts of the southeastern United States and is occasionally naturalized in Florida (Wunderlin & Hansen 2003; Wunderlin & Hansen 2008). This species has not been previously reported to be naturalized in Georgia.

†****Ardisia crenata*** Sims (Myrsinaceae)

U.S.A. GEORGIA. **Lowndes Co.:** NE Valdosta, SE quadrant jct Oak St Ext. and Lake Laurie Dr, vic. Mt. Zion A.M.E. Church, disturbed mesic woods along W side of wetland, USGS Hahira East quadr., UTM 17 281928E 3419384N (NAD83/WGS84), locally common, 26 Jul 2006, *R. Carter 17094* (VSC, others tbd); Valdosta, Valdosta State University, vic. city bike trail along S bank One Mile Branch, between Sustella Ave and Wainwright St, UTM 17 280214E 3414480N (NAD83/WGS84), degraded slope forest, urban woodlot, 4 Mar 2007, *R. Carter 17423* (VSC). **Thomas Co.:** Thomasville, ca. 100 m S jct Pinetree Blvd and Millpond Rd, on Millpond Rd, 30.81291°N 83.96429°W, mixed pine-hardwoods, local, 12 Jun 2008, *R. Carter 18401* and *W.W. Baker* (VSC).—In Florida, coral berry is listed as a Category I invasive exotic weed (FLEPPC 2007). This shrub was introduced from Asia as an ornamental in part because of bright red fruits, which unfortunately are dispersed by birds (Bailey 1949; Langeland & Burks 1998). Singhurst et al. (1997) reported it as well established and having "completely dominated the shrub-undershrub layers" in beech-magnolia communities of eastern Texas. It is also established in Louisiana (Reese 1992), and Judd (2003) reported it naturalized in Alachua County, Florida. In southern Georgia, *A. crenata* is naturalized in mesic flatwoods and on slopes and in floodplains in urban areas, where it appears to have substantial invasive potential.

Asimina × nashii Kral (Annonaceae)

U.S.A. GEORGIA. **Ware Co.:** 5.9 mi N of Waycross, just N of Jamestown, sandridge N of Satilla River and W of Jamestown Road, flowering specimen, 26 Apr 1987, *R. Carter and W.K. George 5400* (GA, IBE, MO, NY, US, VDB, VSC); fruiting specimen, 18 Aug 1988, *R. Carter 7333* (GA, VDB, VSC, others tbd).—This hybrid (*A. incana* × *A. longifolia* var. *longifolia*) is infrequent in the outer coastal plain of Georgia (Kral 1997). The plant

reported above was about 2 m tall, and its flowers were indeed spectacular and pleasantly fragrant, as described by Kral (1960, 1997).

Asimina pygmaea (W. Bartram) Dunal – S S1?)

U.S.A. GEORGIA. **Camden Co.:** Kings Bay Submarine Base, Etowah Park, along western boundary, ca. 100 m W of western fringe of Etowah Pond, ca. 600 m SW Etowah Park dock and launch, 30°49'00"N 81°32'49"W, USGS Harrietts Bluff 7.5' quadr., elev. 15–20 m, locally common, 2 Jul 1996, *R. Carter 13007* (VDB, VSC); Kings Bay Submarine Base, ca. 300 m S of perimeter road along northern boundary of base, W of golf course, ca. 0.75 air mi N of golf course club house, 30°50'03"N 81°33'27"W, USGS Harrietts Bluff 7.5' quadr., elev. 20–25 ft, local, 9 Jul 1996, *R. Carter 13196* (VSC); Clarks Bluff, 30°46.349'N 81°46.515'W, narrow sandy ridge with *Pinus palustris* and *Aristida stricta*, local, rare, 14 Sep 2007, *R. Carter 18107* and *W.W. Baker* (VSC). **Charlton Co.:** Okefenokee National Wildlife Refuge, Billys Island, common, 24 Sep 1988, *R. Carter and M.W. Morris 7722* (VSC); 9.1 mi W of St. George jct Hwys GA 94 and 23, pond cypress depression along N side of Hwy GA 94, plants local, 27 May 1989, *R. Carter 7869* and *M.W. Morris* (VSC, others tbd).—These data provide additional documentation for *A. pygmaea*, a low shrub that reaches the northern limit of its distribution in southeastern Georgia (Kral 1960, 1997), where it occurs in slash or longleaf pine dominated flatwoods. Common associates include *Asimina* sp., *Bejaria racemosa*, *Ilex glabra*, *Lyonia ferruginea* (Walter) Nutt., *L. fruticosa* (Michx.) G.S. Torr., *L. lucida*, *Morella cerifera*, *Persea palustris*, *Pinus elliotii*, *P. palustris* Mill., *Pteridium aquilinum*, *Quercus chapmanii* Sarg., *Q. geminata* Small, *Q. hemisphaerica*, *Q. incana* W. Bartr., *Q. minima* (Sarg.) Small, *Q. myrtifolia* Willd., *Q. nigra*, *Q. virginiana*, *Rhus copallinum*, *Serenoa repens*, *Vaccinium arboreum* Marshall, *V. corymbosum* L., and *V. myrsinites* Lam.

†****Asparagus setaceus*** (Kunth) Jessop (Asparagaceae)

U.S.A. GEORGIA. **Camden Co.:** St. Marys, vic. public boat ramp at E end of Meeting St, 30°43.937'N 81°32.394'W, infrequent, 18 Aug 2006, *R. Carter 17152* and *W.W. Baker* (VSC). **Lowndes Co.:** Valdosta, 2418 Winding Way, 30°51'59.11"N 83°18'49.45"W, epiphytic on pindo palm, 10 Nov

2008, *R. Carter 18732* (VSC, others tbd).—This species was introduced from Africa as an ornamental and has previously been reported as naturalized in California and Florida in the United States (Straley & Utech 2002) and is listed for Cumberland Island, Georgia (Hunt & Langeland 2008). Although in Camden County, we observed *A. setaceus* only in open disturbed areas, it appeared to be naturalized and spreading locally. In Lowndes County, the plants are epiphytic on pindo palm and were apparently established from seeds dispersed there by birds after they consumed the bright red fruits. Herein, we report voucher specimen data to substantiate the naturalization of this species in Georgia.

Aster elliotii Torr. & A. Gray (Asteraceae)

Symphotrichum elliotii (Torr. & A. Gray) G.L. Nesom

U.S.A. GEORGIA. **Camden Co.:** Kings Bay Submarine Base, 0.125 mi N jct U.S.S. James Madison Rd and U.S.S. Benjamin Franklin Rd, along E side U.S.S. James Madison Rd, with *Taxodium ascendens*, *Salix* sp., *Nyssa biflora*, *Persea palustris*, *Morella cerifera*, *Baccharis halimifolia*, 25 Oct 1996, *R. Carter 13957* (VSC, others tbd). **Charlton Co.:** 2.86 mi W of St. George, 30°31.271'N 82°05.141'W, ditch and backslope along Hwy GA 94, local in sticky clay, 10 Nov 2003, *R. Carter 15294* and *R. Kral* (VSC, others tbd). **Echols Co.:** sandy bank of Tom's Creek at Hwy GA 94 bridge, about 4.5 mi E of Tarver, flatwoods, 27 Oct 1984, *R. Carter and W.R. Faircloth s.n.* (VSC).—Although this species is widely distributed in southeastern United States (Cronquist 1980), it is apparently infrequent to rare in the Georgia coastal plain, previously mapped in only Chatham and Pickens counties by Jones and Coile (1988).

Balduina atropurpurea R.M. Harper – R

U.S.A. GEORGIA. **Worth Co.:** 1.6 mi W Sylvester jct Hwy US 82 and Hwy GA 33, 31°32.157'N 83°51.690'W, powerline right-of-way N of Hwy US 82, open boggy slope, local, 26 Sep 2007, *R. Carter 18140* and *W.W. Baker* (VSC); Arrowhead Farm, long narrow seepage slope along SW margin of pond head, 31°21.917'N 83°47.865'W, locally common, 27 Sep 2007, *R. Carter 18157* and *W.W. Baker* (VSC); 4.35 air mi NNW Anderson City, W of Old Hwy 33, Jeffords Tract, 31.430329°N 83.869458°W, bog along edge of drain within re-

cently burned *Pinus palustris*-*Aristida stricta* community, plants locally common, 11 Sep 2008, *R. Carter 18532 and W.W. Baker* (VSC).—These voucher data provide additional localities for this rare composite.

†**Boerhavia diffusa* L. (Nyctaginaceae)

U.S.A. GEORGIA. **Camden Co.:** Kings Bay Submarine Base, mowed shoulder along N side U.S.S. Henry L. Stimson Dr, ca. 50 m W jct U.S.S. Kamehameha Ave, 30°47'58"N 81°31'44"W, plants local, fruits viscid, clinging to clothing, 8 Jul 1996, *R. Carter 13145* (NMC, VDB, VSC). **Charlton Co.:** Folkston, ruderal strip along W side Hwy US 1, between Hwy and parking lot, 30°49.714'N 82°00.319'W, locally common, 31 Aug 2006, *R. Carter 17174 and W. Baker* (VSC, others tbd). **Decatur Co.:** Bainbridge, W side of city, near jct W Dothan Rd and N Thomas St, 30°55.059'N 84°35.737'W, locally abundant, 16 Aug 2007, *R. Carter 17984 and R. Kral* (VSC, others tbd). **Early Co.:** Blakely, 25 m S jct Columbia St and Church St, commercial lot along Church St, 31.37517°N 84.93611°W, locally abundant, 16 Oct 2008, *R. Carter 18687* (VSC, others tbd).—These voucher specimen data include documentation for the first record (*Carter 13145*) of this species in Georgia (*R. Spellenberg*, personal communication). Plant habit (stems decumbent) and habitat in Georgia are similar to that reported for coastal South Carolina by Porcher (1978).

†**Boehmeria nivea* (L.) Gaudich. (Urticaceae)

U.S.A. GEORGIA. **Lowndes Co.:** Valdosta, Winding Way, UTM 17 278797E 3416859N (NAD27), weed in residential yard, locally common, 27 Sep 2003, *R. Carter 15099* (VSC).—Known as ramie, *B. nivea* is grown commercially in Asia as a source of bast fibers (Schery 1972). Wunderlin and Hansen (2008) map *B. nivea* in southern and central peninsular Florida. Herein, we provide the first documentation of this species in Georgia.

†**Bothriochloa hybrida* (Gould) Gould (Poaceae)

U.S.A. GEORGIA. **Brooks Co.:** 8.5 mi W Quitman jct Hwys US 84 and US 221, right-of-way along S side Hwy US 84, near mile marker 2, 30°47.576'N 083°42.159'W, elev. ca. 150 ft, plants forming large clumps, locally common, 2 Aug

2007, *R. Carter 17902* (NMCR, VSC, others tbd).

Decatur Co.: 100 m E of Climax city limit, N side Hwy US 84, 30°52.545'N 84°25.299'W, 16 Aug 2007, *R. Carter 17981 and R. Kral* (VSC, others tbd). **Dooly Co.:** S of Unadilla, 2.4 mi S jct Hwy I-75 and Hwy US 41, between milemarker 118 and 119, 32.21432°N 83.74532°W, shoulder of northbound lane Hwy I-75, 1 Sep 2008, *R. Carter 18514* (VSC, others tbd). **Dougherty Co.:** 1.6 mi N of Baker-Dougherty county line, along W side Hwy GA 91, 31°27.237'N 84°15.476'W, locally common, plants forming large clumps, 07 Aug 2007, *R. Carter 17953 and W.W. Baker* (VSC, others tbd). **Muscogee Co.:** I-185, between milemarker 11 and 12, 32.56506°N 84.96180°W, locally abundant and frequent in median and along roadside, 16 Oct 2008, *R. Carter 18696* (VSC, others tbd). **Peach Co.:** vic. Byron, jct Hwy I-75 and Hwy GA 49 (exit 149), 32.65684°N 83.74392°W, shoulder of northbound lane Hwy I-75, 1 Sep 2008, *R. Carter 18513* (VSC, others tbd). **Randolph Co.:** 8.6 mi S Cuthbert jct Hwy US 82 and Hwy US 27, ca. mile-marker 3, 31.66117°N 84.82865°W, locally abundant and common along stretches of mowed roadside, 16 Oct 2008, *R. Carter 18688* (VSC, others tbd). **Thomas Co.:** 5.07 air mi N Ochlocknee, 31°02.729'N 84°04.177'W, 0.2 mi N jct Hwy US 19 and Midway Church Rd, locally abundant in Hwy US 19 median, 7 Aug 2007, *R. Carter 17960 and W.W. Baker* (VSC, others tbd). **Tift Co.:** Tifton, jct Hwy I-75 and S Central Ave, vic. exit 60, disturbed sandy clay along exit ramp from Hwy I-75 southbound, W side Hwy I-75, 31.43062°N 83.51778°W, 1 Sep 2008, *R. Carter 18502* (VSC, others tbd). **Turner Co.:** Hwy I-75, between milemarkers 85 and 86, vic. Wardlow Rd overpass, 31.75588°N 83.66680°W, 1 Sep 2008, *R. Carter 18510* (VSC, others tbd). **Worth Co.:** 0.1 mi E of Poulan, along overpass of Hwy US 82, 31.51200°N 83.77601°W, locally abundant, 2 Sep 2008, *R. Carter 18526* (VSC, others tbd).—This conspicuous grass ranges from central Mexico through Texas into southwestern Louisiana (Allred 2003b). Carter observed this species from his automobile along highways US 84 and US 82 in southern Georgia for several years before stopping to collect it in 2007. The long silky trichomes and long awns characteristic of the propagules make *B. hybrida* well adapted to wind-dispersal along highways and railroads, and it appears to be dispersing thusly in Georgia. Widely

introduced into the middle-south (e.g., Mississippi, Alabama, Florida, Georgia, Tennessee), *B. laguroides* (DC.) Herter has narrower panicles and slenderer culms that are usually geniculate (Allred 2003b). These data comprise the first report *B. hybrida* from east of the Mississippi River and indicate it is widespread and well established along roadsides in Georgia.

†**Bothriochloa ischaemum* (L.) Keng

U.S.A. GEORGIA. **Camden Co.:** 9.6 air mi S Atkinson jct Hwy US 82 and Old GA Hwy 259, 31°05.204'N 81°52.896'W, roadside along Old Hwy GA 259, locally common, 23 Sep 2006, *R. Carter 17281 and W.W. Baker* (NMCR, VSC, others tbd). **Decatur Co.:** 2.15 mi W Climax town center, Hwy US 84, ca. 350 m W jct Hidden Springs Rd, 30.88376°N 84.46531°W, 19 Sep 2008, *R. Carter 18555* (VSC, others tbd).—Native to the Old World, this grass was introduced for livestock forage and erosion control, is widely distributed in the southwestern United States, and is naturalized in Louisiana, southern Arkansas, Mississippi, southern Alabama and Florida in the southeast (Allred 2003b).

†*Bothriochloa laguroides* (DC.) Herter subsp. *torreyana* (Steud.) Allred

U.S.A. GEORGIA. **Tift Co.:** E Tifton, jct Hwy US 319 and Hwy US 82, 31.44615°N 83.48867°W, mowed roadside along Hwy US 82, locally common, 21 Aug 2008, *R. Carter 18501, W.W. Baker and G. Nelson* (VSC, others tbd).—Although long known from northern Georgia, these voucher data provide the first documentation of this introduced weed in the Coastal Plain region of the state (cf. Jones & Coile 1988; Sweeney & Giannasi 2000).

Botrychium lunarioides (Michx.) Sw.
(Ophioglossaceae)

U.S.A. GEORGIA. **Brooks Co.:** ca. 1.0 mi N of Morven, Mt. Zion Campground Methodist Church, 30.9607°N 83.4991°W, cemetery, locally occasional, 15 Mar 2002, *R. Carter 14622 and A. Rollins* (VSC). **Charlton Co.:** S Moniac, W of Hwy GA 185, Moniac Cemetery, 30°30.646'N 82°13.479'W, 16 Mar 2006, *R. Carter 16363 and W.W. Baker* (VSC, others tbd). **Thomas Co.:** ca. 4.0 air mi NW Boston, jct Eason Crossing Rd and Summerhill Rd, Summerhill Baptist Church, 30.8345°N 83.8342°W, cemetery, local, 15 Mar 2002, *R.*

Carter 14624 and A. Rollins (VSC).—This infrequently encountered grapefern occurs sporadically in the Piedmont and Coastal Plain of Georgia and was reported from only Decatur, Echols, and Lanier counties in southern Georgia (Snyder & Bruce 1986; Sweeney & Giannasi 2000).

Brickellia cordifolia Elliott (Asteraceae) – T

U.S.A. GEORGIA. **Grady Co.:** Mistletoe Plantation, between Meridian Rd and Ochlocknee River, 30°41.455'N 84°15.369'W, rolling upland, oldfield land, locally common, 17 Sep 2006, *R. Carter 17218, W.W. Baker and G. Nelson* (VSC, others tbd).—These data provide documentation of *B. cordifolia* from the Tallahassee Red Hills region of Georgia, all other Georgia records are in a narrow corridor along the Georgia-Alabama state line from middle Georgia south to the Georgia-Florida boundary (cf. Chafin 2007). The following woody associates were noted: *Pinus taeda* L., *P. echinata* Mill., *Carya glabra* (Mill.) Sweet, *Liquidambar styraciflua*, and *Prunus serotina* Ehrh.

Callirhoe papaver (Cav.) A. Gray (Malvaceae) – S (S2S3)

U.S.A. GEORGIA. **Mitchell Co.:** E of Baconton, 100–200 m E jct Jackson Dairy Rd and Stagecoach Rd, slope along S side Jackson Dairy Rd, 31°21.649'N 84°06.117'W, locally common, 18 Jun 2004, *R. Carter 15370* (VSC). **Thomas Co.:** ca. 6.1 air mi NE of Ochlocknee, ca. 0.7 air mi NNE of jct Palmer Rd and Pummy Rd, 31°02.269'N 84°00.031'W, slope with *Pinus palustris*, *P. taeda*, *Aristida stricta* and *Schizachyrium tenerum*, local, 25 Jul 2007, *R. Carter 17833 and W.W. Baker* (VSC).—These data document recent voucher collections of this rare mallow, including a new Georgia county record (cf. Jones & Coile 1988).

**Callitriche pedunculosa* Nutt. (Callitrichaceae)
C. nuttallii Torr.

U.S.A. GEORGIA. **Camden Co.:** Jerusalem, ca. 100 m S jct Owens Ferry Rd and Bailey Mill Rd, W side Bailey Mill Rd, 30°58.435'N 81°50.574'W, plowed field, exposed loam, forming small inconspicuous mats with *Sphaerocarpus* sp. and *Callitriche peploides*, locally common, 14 May 2007, *R. Carter 17429* (VSC, others tbd).—This species ranges from Alabama to Texas and Arkansas in the United States and southward to Central America and is also known from Kentucky and central

Florida (Godfrey & Wooten 1981; Wunderlin & Hansen 2008). These data document the first collection of *C. pedunculosa* from Georgia.

****Carex annectens*** (E.P. Bicknell) E.P. Bicknell (Cyperaceae)

U.S.A. GEORGIA. **Camden Co.:** Jerusalem, jct Owens Ferry Road and Bailey Mill Road, 30° 58.566'N 081° 50.551'W, ditch along Owens Ferry Road, plants locally common, cespitose, 29 Apr 2006, *R. Carter 16547* (DOV, SWSL, VSC).—Although Russell and Duncan (1972) indicate its distribution in Georgia includes the Upper Coastal Plain, Piedmont, and Ridge and Valley physiographic regions, Sweeney and Giannasi (2000) do not map this species for Georgia, nor does Standley (2002) include Georgia in its distribution. These voucher specimen data document the occurrence of *C. annectens* in Georgia.

Carex chapmanii Steud.

U.S.A. GEORGIA. **Camden Co.:** ca. 5.0 air mi ESE Burnt Fort, vic. Jim Baileys Mill, USGS Jerusalem quadr., 30° 55.438'N 081° 49.259'W, floodplain forest and adjacent clearing along Satilla River; with *Acer rubrum*, *Taxodium distichum*, *Celtis laevigata*, *Carya glabra*, *Quercus nigra*, *Sabal palmetto*, *Liquidambar styraciflua*, *Juniperus* sp., plants in loose rhizomatous clumps, locally common, 29 Apr 2006, *R. Carter 16530* (VSC, others tbd); USGS Harriets Bluff quadr., UTM 17 448143E 3412439N (WGS84/NAD83), ca. 8.8 mi N St. Marys waterfront, Crooked River State Park, mesic maritime forest adjacent to salt marsh, local, 25 Mar 2006, *R. Carter 16406* (ctb, DOV, VSC); USGS Woodbine quadr., ca. 0.9 mi E of Ceylon, 30° 57.53'N 81° 38.14'W (WGS84/NAD83); hydric hammock, edge of mucky creek bottom, 7 Apr 2006, *R. Carter 16458* and *W.W. Baker* (ctb, DOV, VSC); ca. 0.5 air mi N Rains Landing, USGS Boons Lake quadr., 31° 00.347'N 81° 54.197'W, beech-magnolia bluff along E bank Satilla, near end of 3R Fishcamp Rd, gently sloping terrace near base of bluff, locally common, 9 Jun 2006, *R. Carter 16796* and *W.W. Baker* (VSC, others tbd). **Charlton Co.:** Traders Hill Recreation Area, hardwood slope with sandy creek bottom along St. Marys River, 30° 46.988'N 82° 01.490'W, occasional, 8 Jun 2006, *R. Carter 16765* and *W.W. Baker* (VSC, others tbd).—Although not recorded for Georgia by Sweeney and Giannasi (2000), Bryson

and Naczi (2002) include Georgia within the range of this species. *Carex chapmanii* forms loose rhizomatous clumps and is occasional to locally common on slightly elevated sites in and along the edges of hydric hammocks, mesic maritime forests, and mesic slopes and terraces along streams. These data document the first voucher collections of *C. chapmanii* from southeastern Georgia.

****Carex collinsii*** Nutt. – S(S2)

U.S.A. GEORGIA. **Taylor Co.:** 6.1 mi S of Butler by Hwy GA 137, Atlantic white cedar swamp along Little Whitewater Creek, local under dense canopy of white cedar, 25 May 1991, *R. Carter 8672* and *M.W. Morris* (MICH, VSC, others tbd); 4.3 mi N of Butler by Hwy GA 137, vicinity of Beaver Creek, periodically disturbed powerline right-of-way, plants in peat at edge of bay swamp, 26 May 1991, *R. Carter 8788* and *M.W. Morris* (VSC, others tbd).—Neither Russell and Duncan (1972) nor Jones and Coile (1988) reported *Carex collinsii* for Georgia. The Taylor County record mapped by Sweeney and Giannasi (2000) is based upon *Sheridan and Troup 1581* (FTG) collected 28 May 1994 (W. Zomlefer, personal communication), three years after the vouchers cited above. This northern species is also known from adjacent Alabama (Mohr 1901). It is easily overlooked and is probably undercollected in part because its unusually slender perigynia superficially appear to be immature even when fully developed.

Carex comosa Boott

U.S.A. GEORGIA. **Camden Co.:** Tarboro, along Hwy GA 252, 31° 00.837'N 81° 48.300'W, local along edge of slough, cespitose in large clumps, 18 May 2007, *R. Carter 17588* and *W.W. Baker* (VSC, others tbd).—Infrequent in Georgia, Sweeney and Giannasi (2000) map it from only one county in the extreme northwestern portion of the state and three contiguous counties in the Upper (Gulf) Coastal Plain of southwestern Georgia. These voucher specimen data provide the first documentation of *C. comosa* from southeastern Georgia.

Carex dasycarpa Muhl. – R

U.S.A. GEORGIA. **Camden Co.:** Kings Bay Submarine Base, Etowah Park; 30° 49'20"N 81° 32' 38"W; maritime forest north of boat ramp and dock and east of road; locally common on loamy rises along bluff, 2 Jul 1996, *R. Carter 12982* (VSC,

others tbd); Kings Bay Submarine Base, Etowah Park, vic. Cherry Point, maritime forest E of golf course and N of Etowah Park access rd., locally common, 18 Apr 1997, *R. Carter 13990* (VSC, others tbd). **Coffee Co.:** 8.1 mi N of Hwy US 84 in Willacoochee, sandridge along N bank of Satilla River, S of Bridgeton, disturbed scrub woods, 15 Apr 1989, *R. Carter 7799* (GA, SWSL, VDB, VSC). **Decatur Co.:** vic. Faceville Landing, mesic slope with rich woods along Sandborn Creek, UTM 16 723967E 3407188N (NAD83/WGS84), USGS Faceville (GA) quadr., 2 May 1992, *R. Carter 9649* (VSC, others tbd). **Lowndes Co.:** "Troopville Woods" ca. 0.6 mi W Valdosta jct Hwy GA 94 and I-75, ca. 0.3 mi S of Hwy GA 94, low bluff along floodplain E of Withlacoochee River, UTM 17 276286E 3414815N (NAD83/WGS84), 16 Apr 1998, *R. Carter 14094* (VSC, others tbd). **Ware Co.:** 5.9 mi N of Waycross, just N of Jamestown, sandridge N of Satilla River and W of Jamestown Road, 26 Apr 1987, *R. Carter 5410 and W.K. George* (GA, IBE, MICH, MO, NY, SWSL, TAES, US, VDB, VSC). **Wheeler Co.:** Little Ocmulgee River State Park, sandridge N of river, locally common in hammock, in shade, 15 Apr 1989, *R. Carter 7800* (FLAS, GA, IBE, MICH, MO, SWSL, TAES, VDB, VSC).—These voucher specimen data provide additional documentation of *C. dasycarpa* in Georgia. Curiously, Russell and Duncan (1972) ascribe the species to the Upper Coastal Plain, whereas Sweeney and Giannasi (2000) map it in a cluster of several counties in southwestern Georgia and Long and Liberty counties along the coast. Patrick et al. (1995) map *C. dasycarpa* essentially the same as Sweeney and Giannasi (2000), with the addition of Camden County.

Carex decomposita Muhl. – S(S2?)

U.S.A. GEORGIA. **Camden Co.:** swamp forest along Satilla River at base of Magnolia Bluff, 30° 56.736'N 81° 53.661'W, occasional on decorticated *Taxodium* logs, 9 Jun 2006, *R. Carter 16781 and W.W. Baker* (VSC). **Glynn Co.:** Sansavilla WMA, common on stumps in isolated swamp mainly forested by *Nyssa ogeche*, Jul 1996, *K.R. Tassin s.n.* (VSC). **Lowndes Co.:** ca. 8 mi S Valdosta city center by Loch Laurel Road and Touchton Road, Lake Louise Field Station, 30° 43' 36.38" N 83° 15' 22.91" W, plant local, cespitose, on decaying log at edge of Lake Louise, a limesink pond, 28 Apr 2006, *R. Carter 16495* (DOV, SWSL, VSC, others

tbd).—Rare and local throughout much of its range (Cochrane 2002), Sweeney and Giannasi (2000) map *C. decomposita* in only Baker County. Data reported herein document recent collections of *C. decomposita* from additional Georgia counties. Although the Lowndes County site was visited frequently by the first author over the preceding 23 years, *C. decomposita* was not observed there until 2006. Thus, we are fairly certain that the plants are only recently established at Lake Louise, perhaps in some way related to recent water-level fluctuations resulting from beaver (*Castor canadensis*) activity at the lake outlet.

Carex elliotii Schwein. & Torr.

U.S.A. GEORGIA. **Berrien Co.:** Alapaha River floodplain along Hwy GA 135, ca. 3.3 mi S Willacoochee jct Hwy US 82, swamp margin, 25 May 1992, *R. Carter 9745* (VSC, others tbd). **Camden Co.:** ca. 0.5 air mi N of Rains landing, USGS Boons Lake quadr., bluff along E bank of Satilla River, near end of 3R Fishcamp Rd, 31° 00.347' N 81° 54.197' W, springy seep with *Gordonia*, *Liriodendron*, *Magnolia virginiana*, *Persea palustris*, *Acer rubrum*, *Ilex coriacea*, *Woodwardia areolata*, *Sphagnum*, local, 9 Jun 2006, *R. Carter 16793 and W.W. Baker* (VSC); Oak Grove Acres development, edge of Satilla River floodplain, along E bank of narrow lake at base of slope, 31° 04.702' N 81° 53.337' W, occasional along spring seep, 18 May 2007, *R. Carter 17571 and W.W. Baker* (VSC, others tbd). **Evans Co.:** Ft. Stewart Military Reservation, ca. 0.12 mi north of FS 17 crossing of pond P-17 dam, elev. ca. 30 m, bayswamp along creek, common, 16 June 1992, *R. Carter 9772 and P. Bauer* (GA, VSC, others tbd); Ft. Stewart Military Reservation, ca. 0.2 mi NE of jct FS 13 and dirt road along reservation boundary, then 0.45 mi SE to creek ford, bayswamp adjacent to sandridge, occasional, 16 Jun 1992, *R. Carter 9776 and P. Bauer* (VSC). **Liberty Co.:** Ft. Stewart Military Reservation, 1.7 mi SW jct Hwy GA 129 and FS 30, edge of bayswamp, locally common, 2 Jul 1992, *R. Carter 10047, J. Lusk and D. Thompson* (VSC). **Lowndes Co.:** ca. 2.4 mi E of Valdosta by Howell Road, then ESE 2.6 mi by Boring Pond Road, about 1/4 mi NE of Boring Pond Road, 8 May 1992, *Carter 9651* (VSC, others tbd). **Taylor Co.:** 3.4 mi NE of Charing, by Hwy GA 127, boggy seepage slope in clearing along Little Whitewater Creek, locally abundant, 27 May 1990, *R. Carter 8378* (VSC,

others tbd).—Bryson et al. (1992) report several additional county records of this uncommon sedge from southern Georgia. The data reported herein document additional county records of this infrequently documented species in the state. The following description based on a Lowndes County site is representative of the habitat of *Carex elliotii* in Georgia: open sedge-*Sarracenia minor* bog adjacent to an evergreen shrub bog on mucky sand in a periodically disturbed powerline right-of-way, associated with *Acer rubrum* L., *Aronia arbutifolia* (L.) Pers., *Carex atlantica* L.H. Bailey ssp. *atlantica*, *Cliftonia monophylla* (Lam.) Sarg., *Clethra alnifolia* L., *Drosera capillaris* Poir., *Hypericum fasciculatum* Lam., *Ilex coriacea* (Pursh) Chapm., *I. glabra*, *Lycopodium* spp., *Lyonia lucida*, *Magnolia virginiana* L., *Morella carolinensis* (Mill.) Small, *M. cerifera*, *Nyssa biflora* Walter, *Persea palustris*, *Pinus elliotii*, *P. serotina* Michx., *Polygala lutea* L., *Quercus nigra*, *Rhynchospora* spp., *Taxodium ascendens* Brongn., *Vaccinium corymbosum*, and *V. myrsinites*.

****Carex fissa*** Mack. var. ***aristata*** F.J. Herm. – S (S1)

U.S.A. GEORGIA. **Baker Co.:** ca. 0.3 mi ESE of confluence of Ichauwaynochaway Creek and Flint R., at break in levee of Flint River in moist riparian hammock, 5 May 1992, *L.K. Kirkman 2086 and A.K. Gholson* (VSC). **Brantley Co.:** Nahunta, along N side railroad right-of-way and Broome St near jct with E. Florida Ave, 31.20480°N 81.98006°W, locally common, 30 Apr 2008, *R. Carter 18380 and W.W. Baker* (VSC, others tbd). **Bryan Co.:** Ft. Stewart Military Reservation, 0.55 mi W of Richmond Hill city limit, then 0.7 mi S Hwy GA 144 by unmarked dirt road, mesic flatwoods, infrequent, 25 Jun 1992, *R. Carter 9950 and J. Lusk* (VSC). **Camden Co.:** Kings Bay Submarine Base, vic. SW corner of dredge disposal area N of U.S.S. Mariano Vellajo Ave, 30°48'20"N 81°32'32"W, occasional along levee road, 9 Jul 1996, *R. Carter 13150* (VSC, others tbd); Kings Bay Submarine Base, ditch and roadside by perimeter road along boundary with Etowah Pond, SE of golf course, 30°48'58"N 81°32'55"W, occasional along roadside, 9 Jul 1996, *R. Carter 13222* (VSC); Kingsland, Vacuna Rd, ca. 0.1 mi W of railroad and Hwy US 17, 30°46.865'N 81°41.400'W, open disturbed sandy loam, 8 Apr 2006, *R. Carter 16477 and W.W. Baker* (VSC, others tbd); S of Atkinson, NW

of Tarboro, jct Old Hwy 259 and Old Merrow Community Rd, by Old Hwy 259, 31°03.869'N 81°52.940'W, occasional along edge of ditch, 29 Apr 2006, *R. Carter 16520* (VSC); vic. Jim Baileys Mill, USGS Jerusalem quadr., 30°55.438'N 81°49.259'W, clearing along Satilla River, occasional, 29 Apr 2006, *R. Carter 16527* (VSC, others tbd); Hwy US 17, N of Kingsland, just N of jct Hwy US 17 and Daisy Ave, just S of jct Hwy US 17 and Kinlaw Rd, 30.85883°N 81.70219°W, ruderal roadside adjacent to commercial lot, locally common, 30 Apr 2008, *R. Carter 18373 and W.W. Baker* (VSC, others tbd). **Clinch Co.:** Cogdell, weedy roadside along N side Hwy GA 122, 31.16468°N 82.71743°W, locally common, 30 Apr 2008, *R. Carter 18384 and W.W. Baker* (VSC, others tbd). **Early Co.:** 3.6 mi W of Arlington, along Hwy GA 62, sandy bank of Spring Creek, locally common, 1 Apr 1990, *R. Carter 8289* (VSC, others tbd). **Grady Co.:** SE of Cairo, by Hwy GA 93, Ochlocknee River floodplain between the bridges, where mowed occasionally, 3 May 1989, *R. K. Godfrey 83166* (VSC). **Lowndes Co.:** NW of Valdosta, frontage road west of Hwy I-75, ca. 1 mi S of jct with Hwy GA 7, local in ditch, 5 May 1988, *R. Carter 6556* (VSC, others tbd); N Valdosta, Forrest St, just S jct Inner Perimeter Rd, edge of bayswamp, road bank, 29 Apr 1992, *R. Carter 9635* (VSC, others tbd). **Sumter Co.:** ca. 1.8 mi SW Leslie, beside State Hwy 118, lower bank and ditch, 22 Apr 1990, *R.A. Norris 6014 and M. Owsley* (VSC). **Ware Co.:** Waycross, ca. 150 m W of jct Pendergast St and Samuel St, ruderal lot along Pendergast St, 31.20701°N 82.34967°W, 30 Apr 2008, *R. Carter 18383 and W.W. Baker* (VSC, others tbd).—Sorrie (1998) reported this species new to Georgia based upon a specimen from Clinch County collected 4 June 1988 (*V. McNeilus 88-171*, FLAS). Reported herein, *Carter 6556* was collected about one month earlier. Given the number of records cited here and its propensity for disturbed habitats, i.e., mowed roadsides and ditches, we recommend removing this taxon from Georgia's Special Concern Plants list.

Carex floridana Schwein.

C. nigromarginata Schwein. var. *floridana* (Schwein.) Kük.

U.S.A. GEORGIA. **Camden Co.:** Kings Bay Submarine Base, Etowah Park, vic. Cherry Point,

maritime forest E of golf course and N of Etowah Park access rd., locally common, 18 Apr 1997, *R. Carter 13991* (VSC, others tbd). **Lanier Co.:** Moody Air Force Base, Dudley's Hammock, with *Quercus virginiana*, *Q. alba*, *Q. michauxii*, *Magnolia grandiflora*, *Carya glabra*, *Pinus glabra* and *Ilex opaca*, south side of road, occasional, 3 Apr 1994, *R. Carter 11679* (VSC). **Lowndes Co.:** Troupville Woods, just W of Valdosta along and S of Hwy GA 94, E of Withlacoochee River, USGS Valdosta quadr., UTM 17 276285E 3414782N (WGS84/NAD83), beech-magnolia climax community, 13 April 1987, *R. Carter 5369* (VSC, others tbd).—These data comprise the first report of this species from southcentral and southeastern sectors of Georgia (cf. Sweeney & Giannasi 2000).

Carex gholsonii Naczi & Cochrane

U.S.A. GEORGIA. **Camden Co.:** Kings Bay Submarine Base, Diamondback, 0.81 air mi ESE jct U.S.S. Henry L. Stimson Dr and U.S.S. Daniel Webster Rd, between SWIFLANT and U.S.S. Henry L. Stimson Dr, along NW side SWIFLANT perimeter fence, between fence and drainage ditch, 30°47'20"N 81°32'51"W, plants common, cespitose, 18 Apr 1997, *R. Carter 14010* (VSC); between Woodbine and Tarboro, along Refuge Road, just W of Maryfield Plantation, 31°00.081'N 81°47.005' W, wooded floodplain along branch of Tower Swamp, plants cespitose, 30 Apr 2006, *R. Carter 16589* (ctb, DOV, VSC, others tbd).—Naczi et al. (2002) indicated *C. gholsonii* is rare in Georgia, and, among paratypes, cited vouchers from Early and Lee counties in southwestern Georgia and Jefferson County in the Upper Coastal Plain. The data reported herein provide the first documentation of *C. gholsonii* from southeastern Georgia, where it was observed in a hydric hammock and in a creek floodplain, with *Acer rubrum*, *Arisaema dracontium* (L.) Schott, *A. triphyllum* (L.) Schott, *Asclepias perennis* Walter, *Berchemia scandens* (Hill) K. Koch, *Carpinus caroliniana* Walter, *Celtis laevigata* Willd., *Cephalanthus occidentalis* L., *Cornus foemina* Mill., *Decumaria barbara* L., *Elytraria caroliniensis* (J.F. Gmel.) Pers., *Fraxinus caroliniana* Mill., *Fraxinus profunda* (Bush) Bush, *Lyonia lucida*, *Liquidambar styraciflua*, *Magnolia grandiflora*, *M. virginiana*, *Morella cerifera*, *Morus rubra* L., *Nyssa biflora*, *Quercus laurifolia* Michx., *Q. michauxii* Nutt., *Q. nigra*, *Q. virginiana*, *Rhapidophyllum hystrix* (Pursh) H.Wendl. & Drude

ex Drude, *Rhynchospora miliacea* (Lam.) A. Gray, *Sabal minor* (Jacq.) Pers., *Sabal palmetto* (Walter) Lodd. ex Schult. & Schult. f., *Salix* sp., *Serenoa repens*, *Taxodium distichum* (L.) Rich., *Toxicodendron radicans* (L.) Kuntze, *Ulmus alata* Michx., *U. americana* L., *Viburnum dentatum* L., and *Pinus taeda*

Carex godfreyi Naczi – W(S3?)

U.S.A. GEORGIA. **Camden Co.:** hydric hammock S of Hwy US 17, 0.8 mi NE of Waverly, USGS Waverly quadr., UTM 17 431516E 3440695N (WGS84/NAD83), 4 Jul 1988, *R. Carter and S. Carter 6929* (VSC, others tbd); Kings Bay Submarine Base, Diamondback, 0.81 air mi ESE jct U.S.S. Henry L. Stimson Dr and U.S.S. Daniel Webster Dr, 30°47'20"N 81°32'51"W, hardwood hammock, 18 Apr 1997, *R. Carter 14008* (VSC); ca. 5.0 air mi ESE Burnt Fort; vic. Jim Baileys Mill, USGS Jerusalem quadr., 30°55.438'N 081°49.259'W; floodplain forest and adjacent clearing along Satilla River, plants occasional, cespitose, 29 Apr 2006, *R. Carter 16528* (ctb, DOV, VSC, others tbd); between Woodbine and Tarboro, along Refuge Road, just W of Maryfield Plantation, 31°00.081'N 081°47.005'W, wooded floodplain along branch of Tower Swamp, plants cespitose, 30 Apr 2006, *R. Carter 16590* (ctb, DOV, VSC, others tbd), *16591* (ctb, DOV, VSC, others tbd).—Sweeney and Giannasi (2000) map this species only in a tight cluster of three counties in the Upper (Gulf) Coastal Plain of southwestern Georgia. These voucher specimen data extend the range of this species to southeastern Georgia where *C. godfreyi* occurs in floodplain forests and hydric hardwood hammocks associated with *C. gholsonii*, other associates are listed under *C. gholsonii*.

Carex venusta Dewey – S(S1?)

U.S.A. GEORGIA. **Berrien Co.:** bay swamp and pond margin 0.5 mi E of Alapaha, just N of Hwy US 82, locally common in bay swamp, 21 May 1988, *R. Carter, S. Carter and H. Brasell 6625* (GA, MICH, SWSL, VDB, VSC); northern edge of county, bayswamp SE of jct Lax Rd and Hwy GA 158, locally common, 16 May 1992, *R. Carter 9707* (VSC, others tbd). **Brooks Co.:** ca. 4.5 mi NNE Dixie, ca. 1 mi W Beulah Hill Church by unmarked dirt road, seepage slope along NW side of bay creek, 27 May 1998, *R. Carter 14097* (VSC,

others tbd). **Evans Co.:** Fort Stewart Military Reservation, ca. 0.12 mi north of FS 17 crossing of pond P-17 dam, elev. ca 30 m, bayswamp along creek, common, 16 Jun 1992, *R. Carter 9769 and P. Bauer* (GA, VSC, others tbd). **Lowndes Co.:** 9.1 mi E of Hahira, bay head along Hwy GA 122, 0.6 mi W of Hwy GA 125, 19 May 1985, *R. Carter 4090* (GA, IBE, MICH, MO, SWSL, TAES, VDB, VSC); 10 Jun 1988, *R. Carter and C. Bryson 6636a* (VSC); 15 April 1989, *R. Carter 7791* (FLAS, GA, IBE, MICH, MO, SWSL, TAES, VDB, VSC). **Randolph Co.:** Holanna Creek bottom by Hwy US 82, 3.8 mi W of Cuthbert, locally abundant in swamp, 11 April 1992, *R. Carter 9599* (VSC, others tbd). **Taylor Co.:** 6.3 mi S of Butler by Hwy GA 137, along bank of Little Whitewater Creek, 25 May 1991, *R. Carter 8669 and M.W. Morris* (VSC, others tbd).—This species was reported from the Upper Coastal Plain and Piedmont provinces by Russell and Duncan (1972). More recently, Sweeney and Giannasi (2000) map it in six Georgia counties, of which half are in the Coastal Plain. These data represent additional collections of *C. venusta* from the Coastal Plain of Georgia, with all but Lowndes being new county records (cf. Sweeney & Giannasi 2000). *Carex venusta* inhabits bayswamps, where its associates include *Itea virginica* L., *Liriodendron tulipifera* L., *Magnolia virginiana*, *Morella carolinensis*, *M. cerifera*, *Nyssa biflora*, *Pinckneya bracteata* (Raf.) Bartr., *Toxicodendron vernix* (L.) Kuntze, and *Viburnum nudum* L. Plants in the Lowndes County population have consistently exhibited very low fertility (seed set <1%).

†***Ceratopteris pteridoides** (Hook.) Hieron.
(Parkeriaceae)

U.S.A. GEORGIA. **Camden Co.:** Kings Bay Submarine Base, Etowah Park, 30°49'00"N 81°32'45"W, exposed, mechanically disturbed reddish brown loam along west bank of Etowah Pond, local, 28 Aug 1996, *R. Carter 13602* (VSC).—This genus was not cited for Georgia by Sweeney and Giannasi (2000), and these voucher specimen data provide documentation of its occurrence in Georgia. *Ceratopteris pteridoides* was associated with *Amphicarpum muhlenbergianum*, *Bulbostylis ciliatifolia* (Ell.) Fern., *B. stenophylla* (Ell.) C.B. Clarke, *Cyperus erythrorhizos* Muhl., *C. filicinus* Vahl, *C. haspan* L., *C. odoratus* L., *C. oxylepis* Nees ex Steud., *C. polystachyos* Rottb. var. *polystachyos*, *C. surimanensis* Röttb., *Eleocharis albida* Torr., *E. flavescens* (Poir.) Urb., *E. geni-*

culata (L.) Roem. & Schult., *E. vivipara* Link, *Euphorbia* sp., *Fimbristylis autumnalis* (L.) Roem. & Schult., *Fuirena scirpoidea* Michx., *Hedyotis* sp., *Lepidochloa uninervia* (J. Presl) Hitchc. & Chase, *Lindernia anagallidea* (Michx.) Pennell, *Ludwigia suffruticosa* Walt., and *Xyris* sp.

Chamaecrista deeringiana Small & Pennell
(Fabaceae) – S(S1?)

U.S.A. GEORGIA. **Mitchell Co.:** Pinewood Plantation, ca. 0.55 air mi ENE Pleasant Grove Baptist Church, ca. 3.25 air mi NW Bridgeboro, 31°25.582'N 84°01.207'W, longleaf pine-wiregrass savanna, local, 17 Jul 2007, *R. Carter 17729 and W.W. Baker* (VSC, others tbd). **Worth Co.:** Jeffords property, 0.3 mi E Hwy GA 33, 31.41400°N 83.83931°W, longleaf pine-wiregrass upland, plants rare and local, 3 Jun 2008, *R. Carter 18396 and W.W. Baker* (VSC).—In Georgia historically only four populations of this clonal perennial were known from four counties—two in the Fall Line sandhills and two in southwestern Georgia—with only two of the populations having been seen in the past 50 years (Chafin 2007). Herein, we report recently observed populations in two additional counties in southwestern Georgia. *Chamaecrista deeringiana* seems to flower earlier than the much more common and similar annual species, *C. fasciculata* (Michx.) Greene.

†***Chloris canterae** Arechav. var. *canterae*
(Poaceae)

U.S.A. GEORGIA. **Decatur Co.:** S Bainbridge, by Hwy GA 253, vic. county prison and industrial park, 30.90727°N 84.59900°W, locally abundant in disturbed soil, 4 Jun 2009, *R. Carter 18862 with P. Bauer and J. Carter* (VSC, others tbd).—Although the infraspecific taxa are not mapped separately, Barkworth (2003a) recognized two varieties of Paraguayan windmill-grass in North America, unequivocally cited *C. c.* var. *canterae* from Texas and Louisiana, stated that *C. c.* var. *grandiflora* has been found at wool mill sites in the southeastern U.S. without indicating which states, and also mapped the species from a small area of coastal South Carolina. Herein, we provide data for the first Georgia collection of this South American native.

Cinna arundinacea L.

U.S.A. GEORGIA. **Camden Co.:** vic. Jim Baileys Mill, USGS Jerusalem quadr., ca. 5.0 air mi ESE

Burnt Fort, 30°55.428'N 81°49.259'W, floodplain forest along Satilla River, locally common in mucky clay, 22 Sep 2006, *R. Carter and W.W. Baker 17233* (VSC, others tbd).—Although widespread and common from middle Georgia northward, except for Chatham County, this species is absent from the Coastal Plain Region of Georgia (Brandenburg et al. 1991; Sweeney & Giannasi 2000; Brandenburg 2007). These data extend the distribution of *C. arundinacea* southward to near the Georgia-Florida state boundary, indicating it might be found in similar habitat in adjacent northeastern Florida. See *Physostegia leptophylla* Small for associates.

†***Cleome viscosa*** L. (Capparaceae)

U.S.A. GEORGIA. **Dooly Co.:** 5 mi ESE of Vienna, 7 Jul 2004, *Ken Lewis s.n.* (VSC).—This introduction occurs sporadically in Florida (Wunderlin & Hansen 2008), and Jones and Coile (1988) map it in only one Georgia county (Wilcox). These voucher specimen data are for the second county record of *Cleome viscosa* in Georgia.

†****Corchorus aestuans*** L. (Tiliaceae)

U.S.A. GEORGIA. **Thomas Co.:** Boston-Monticello Rd, 0.9 mi NW jct with Mitchell Rd, 30°41.367'N 83°47.943'W, locally common along mowed roadside, 17 Sep 2006, *R. Carter 17220* (VSC).—Introduced from Asia as a source of bast fibers (Schery 1972), jute is well established in Florida (Wunderlin & Hansen 2008) but was not recorded for Georgia by Jones and Coile (1988).

Coreopsis integrifolia Poir. (Asteraceae) – T

U.S.A. GEORGIA. **Camden Co.:** 2.52 air mi S Jerusalem, W side Bailey Mill Rd, 30°56.540' N 81°50.871' W, degraded flatwoods along edge of creek floodplain, plants locally common, 22 Sep 2006, *R. Carter 17250 and W.W. Baker* (VSC); 4.07 air mi WNW Waverly jct Hwy US 17 and Hwy GA 110, 0.2 mi SW jct Inachee Rd and Hwy GA 110, 31°06.624' N 81°47.527' W, mixed hardwood pine flat and swale, plants occasional to common along edge of woods and adjacent mowed ditch along S side of Inachee Rd from 0.2 mi SW jct Inachee Rd and Hwy GA 110 to jct New Post Rd and Inachee Rd, then south along New Post Rd to approximately 0.6 mi N jct New Post Rd and Providence Church Rd, 12 Sep 2007, *R. Carter 18067 and W.W. Baker* (VSC).—This species is

listed as “threatened” in Georgia, and previously only four populations had been observed in the state in the last two decades (Chafin 2007). These voucher specimen data document recently discovered populations and a new county record of *C. integrifolia* in Georgia. Associates were *Baccharis glomeruliflora* Pers., *Cephalanthus occidentalis*, *Diospyros virginiana*, *Erianthus (Saccharum)* sp., *Fraxinus* sp., *Hyptis alata* (Raf.) Shinnery, *Liquidambar styraciflua*, *Morella cerifera*, *Nyssa biflora*, *Pinus taeda*, *Plantago sparsiflora* Michx., *Quercus virginiana*, and *Taxodium distichum*.

†****Crocsmia xcrocsmiiflora*** (Lemoine ex Anonymous) N.E. Br. (Iridaceae)

U.S.A. GEORGIA. **Lowndes Co.:** N Valdosta, ditch along Highland Heights Rd about 100 m W of jct Highland Heights Rd and Forrest St, 20 Jul 1988, *R. Carter 7102* (VSC). **Thomas Co.:** Thomasville, Pinetree Blvd, between Millpond Rd and Old Monticello Rd, ca. 150 m NE Camellia Dr, N side Pinetree Blvd, adjacent to Glen Arven Golf Course, 30.81334°N 83.95275°W, 12 Jun 2008, *R. Carter 18402 and W.W. Baker* (VSC).—This hybrid between two African species is the common ornamental montbretia (Bailey 1949). It was cited by Clewell (1985) as occasionally escaping from cultivation in the Florida panhandle, and Goldblatt (2002) indicated its naturalization in Florida, South Carolina and North Carolina. Sweeney and Giannasi (2000) mapped it in Decatur County, Georgia, and Woods and Diamond (2003) reported it new to Alabama flora. Since Jones and Coile (1988) did not include this taxon for Georgia, we presume the Lowndes County collection is the first record of naturalization of this taxon in Georgia. The naturalized population in Lowndes County persisted in a ditch for more than five years until it was destroyed by road maintenance activities (road grading).

Ctenium floridanum (Hitchc.) Hitchc. (Poaceae) – S(S1)

U.S.A. GEORGIA. **Brantley Co.:** 1.5 mi north of jct of Hwys US 84 and GA 15 in Hoboken, sandy rise E of Hwy GA 15, scrub, plants local, 2 Sep 1987, *R. Carter 6274* (UTC, VSC, others tbd). **Camden Co.:** Crooked River State Park, ca. 9 mi NNW St. Marys, 8 Sep 1969, *R. Norris 1413* (VSC); ca. 1.5 mi SE Ceylon, USGS Woodbine quadr., 30°56.898'N 81°37.914'W, sandy upland,

surrounded by longleaf pine savanna, locally common, plants from previous season, 7 Apr 2006, *R. Carter 16446 and W.W. Baker* (VSC); Clarks Bluff, 30°46.349'N 81°46.515'W, narrow sandy ridge with *Pinus palustris* and *Aristida stricta*, 14 Sep 2007, *R. Carter 18105 and W.W. Baker* (VSC). **Charlton Co.:** 6 mi NE Folkston, W Ga. Rt. 252, 0.5 mi N Mays Bluff Branch, longleaf pine-wiregrass forest recently clearcut, 23 Oct 1987, *W.W. Baker s.n.* (VSC); Traders Hill, just E jct Traders Hill Rd and Hwy GA 23/121, 30°47.716'N 82°02.062'W, vacant lot in subdivision along Traders Hill Rd, open sandy soil, locally common, 19 Sep 2003, *R. Carter 15084* (VSC, others tbd); 3.0 air mi S Moniac jct, 30°28.799'N 82°11.933'W, cut-over pine-wiregrass community along W side Hwy GA 185, 21 Sep 2006, *R. Carter 17228 and W.W. Baker* (VSC).—This species is narrowly distributed in northeastern Florida and adjacent southeastern Georgia (Kral 1983; Barkworth 2003b), and Chafin (2007) reported that only five populations were known in Georgia. These previously unreported voucher specimen data include recent collections of *C. floridanum* and records for Camden, an additional Georgia county. It inhabits periodically burned longleaf pine-wiregrass savannas, and associates include *Aristida stricta*, *Castanea pumila* (L.) Mill., *Pinus palustris*, *Quercus geminata*, *Q. hemisphaerica*, *Q. incana*, *Q. laevis* Walter, *Q. margaretta* Ashe ex Small, and *Q. virginiana*. Notable is the parallel association of *C. floridanum* and *Anthaenantia villosa* (Michx.) P. Beauv. in the upland, sandridge phase of the longleaf pine-wiregrass system and that of congeners *C. aromaticum* (Walter) A. Wood and *A. rufa* (Elliott) Schult. in wet savannas and pitcherplant bogs.

†*Cyperus difformis* L. (Cyperaceae)

U.S.A. GEORGIA. **Chatham Co.:** NW Savanna, 1.0 mi S jct Hwy US 80 and Hwy GA 307, E of Hwy GA 307, 32°04.656'N 81°11.722'W, open disturbed lot along S side Prosperity Drive, locally common in depression, most plants yet immature, 13 Jul 2006, *R. Carter 16937* (VSC). **McIntosh Co.:** S of Darien, by Hwy US 17 between Altamaha River and Butler River, James Allen Williamson Champney River Park, 31°20.148'N 81°26.895'W, 13 Jul 2003, *R. Carter 15013* (VSC, others tbd).—The recent dispersal of this introduced weed in the United States has been well documented (Lipscomb 1980; Tyndall 1983). Subse-

quently, it has been reported new to Mississippi (Bryson & Carter 1992), Kentucky (Mears & Libby 1995), Georgia (Carter in Bryson et al. 1996), and Maryland (Strong & Simmons 2002). These voucher specimen data substantiate additional county records of *C. difformis* from Georgia.

†**Cyperus digitatus* Roxb.

U.S.A. GEORGIA. **Camden Co.:** 7.6 air mi ESE Woodbine jct Hwy US 17 and Hwy GA 110, 30°55.591'N 81°36.287'W, barrow pit along unpaved road, locally abundant, 1 Sep 2006, *R. Carter 17190 and W.W. Baker* (VSC, others tbd). **Lanier Co.:** Moody Air Force Base, Winnersville Bombing Range, vic. observation tower, bank of Cooter Creek, locally common, 15 Oct 1994, *R. Carter 12343* (VSC, others tbd).—This robust perennial is closely related to *C. erythrorhizos* but has a primarily tropical distribution, whereas *C. erythrorhizos* is a temperate zone annual. Previously, *C. digitatus* was known only from Texas and Florida in the United States (Tucker et al. 2002).

Cyperus distinctus Steud.

U.S.A. GEORGIA. **Camden Co.:** Cabin Bluff, ditch along main road ca. 200 m W of Cabin Bluff compound, 30°53'19"N 81°31'10"W, 7 Jul 1995, *R. Carter 12504* (VSC); Kings Bay Submarine Base, fill site N of N end of dock and across Kings Bay from N end of Crab Island, USGS Harrietts Bluff quadr., 30°48'47"N 81°31'46"W (WGS84/NAD83), plants local, edge of marsh, 9 Jul 1996, *R. Carter 13184* (VSC, others tbd). **Clinch Co.:** 6.7 mi S of Homerville, sandy ditch bottom in flatwoods, beside Hwy GA 187, locally common, 2 Sep 1987, *R. Carter 6303* (GA, IBE, MO, NLU, NY, SWSL, TAES, US, VDB, VSC). **Glynn Co.:** near S end of Jekyll Island, ditch just N of St. Andrews picnic area, local, 26 Aug 1988, *R. Carter 7437* (GA, MO, MICH, SWSL, VDB, VSC); Colons Island, vicinity of Robert P.T. Young Plant, about 5 mi SW of Brunswick, mucky ditch by paved road off of and S of Hwy US 82, 21 Sep 1991, *R. Carter, P. Bauer, J. Lusk and J. Robertson 9237* (GA, IBE, MICH, MO, SMU, TAES, VDB, VSC). **Lowndes Co.:** 2.6 mi S of Lake Park and 1.6 mi N of state line, flatwoods along Hwy US 41, locally common in ditch, 29 Oct 1988, *R. Carter and M.W. Morris 7762* (FLAS, FSU, GA, GENT, GH, IBE, MO, NLU, NY, NYS, SMU, SWSL, TAES, US, USCH, VDB, VSC).

McIntosh Co.: Sapelo Island, swale near head of nature trail near south end of island, local, 27–28 Oct 2001, *R. Carter 14621* (VSC); Darien, bank along Darien River at foot of Screven Street, open sandy site at edge of brackish marsh, 21 Sep 1991, *R. Carter, P. Bauer, J. Lusk and J. Robertson 9272* (GA, IBE, VDB, VSC).—This species is known from South Carolina, Georgia, Florida, Louisiana, and the Bahamas (McGivney 1938; O'Neill 1939; Denton 1978; Godfrey & Wooten 1979; Kessler 1983). *Cyperus distinctus* has previously been reported from only three counties along the Georgia coast: Glynn, McIntosh and Liberty (Jones & Coile 1988; Sweeney & Giannasi 2000). These data report additional localities, including inland stations in Clinch and Lowndes counties. *Cyperus distinctus* bears a superficial resemblance to, and is sometimes confused with, *C. virens* Michx., but its smooth subterete culm and achene with torulose base distinguish it from that species.

Cyperus drummondii Torr. & Hook. in Torr. – W(S3?)

C. virens Michx. var. *drummondii* (Torr. & Hook. in Torr.) Kük.

U.S.A. GEORGIA. **Camden Co.:** ca. 1.2 air mi E of Rains Landing, USGS Burnt Fort quadr., 3R Fishcamp Rd, just W jct 3R Fishcamp Rd and Old Post Rd, 30°59.976'N 81°53.142'W, ditch adjacent to shallow flatwoods cypress-gum pond, local and infrequent, 9 Jun 2006, *R. Carter 16802 and W.W. Baker* (VSC, others tbd). **Miller Co.:** 16.6 mi W of Newton jct Hwy GA 91 and GA 37, 300 m E jct Kimbrel Rd and Hwy GA 91, open disturbed depression along N side Hwy GA 91, 1.5 mi W Baker-Miller county line, 31°11.043'N 84°33.829'W, 16 Aug 2007, *R. Carter 17998 and R. Kral* (VSC, others tbd). **Mitchell Co.:** ca. 1.0 mi S Camilla, ditch along E side Hwy US 19 at jct Hwy US 19 and Molasses Rd, 31°12.486'N 84°10.524'W, 18 Jun 2004, *R. Carter 15372* (VSC, others tbd). **Thomas Co.:** ca. 5.8 air mi NE Ochlocknee, ca. 0.1 air mi NE jct Palmer Rd and Pummy Rd, along drain tributary of Little Ochlocknee River, 31°01.789'N 84°00.226'W, local, 25 Jul 2007, *R. Carter 17823 and W.W. Baker* (VSC, others tbd).—These data represent additional Georgia county records of *C. drummondii*, a poorly known sedge that until recently was not recognized in floristic treatments, even infraspecifically (Carter et al. 1999). Recently, range extensions in Texas and Mexico have been reported (Rosen 2004; Rosen & Carter 2007).

†***Cyperus entrerianus*** Boeck.

U.S.A. GEORGIA. **Chatham Co.:** NW Savanna, 1.0 mi S jct Hwy US 80 and Hwy GA 307, E of Hwy GA 307, 32°04.656'N 81°11.722'W, open disturbed lot along S side Prosperity Drive, locally common, 13 Jul 2006, *R. Carter 16939* (VSC, others tbd). **Long Co.:** SW of Ludowici, 31°42.166'N 81°45.461'W, swamp forest along Jones Creek, locally common to scattered in clearings along shaded trail, 14 Jul 2007, *R. Carter 16981* (VSC, others tbd). **Tattnall Co.:** Big Hammock WMA, just N of Altamaha River, W of Hwy GA 144, 31°52.414'N 82°06.113'W, 1.0 mi SE of J.E. Stanfield Landing, floodplain, near edge of slough, 23 Jun 2007, *R. Carter 16856* (VSC). **Tift Co.:** Tifton, jct Hwy I-75 and S Central Ave, vic. exit 60, disturbed sandy clay along exit ramp from Hwy I-75 southbound, W side Hwy I-75, 31.43062°N 83.51778°W, local, 1 Sep 2008, *R. Carter 18503* (VSC, others tbd).—This umbrella sedge was first reported in the United States in 1990, when it was described as a potential invasive weed (Carter 1990). Subsequently, its dispersal in the southeastern United States has been documented (Carter & Jones 1991; Bryson & Carter 1994; Carter & Bryson 1996). More recently, invasion of natural plant communities (e.g., bottomland hardwood forest, coastal prairie) by *C. entrerianus* in Texas was shown (Rosen et al. 2006). These data comprise three new county records (Chatham, Tattnall and Tift) for Georgia and document the occurrence of this invasive sedge in bottomland forests in Georgia. Monitoring and eradication programs should be implemented to protect natural systems from invasion by *C. entrerianus*.

Cyperus flavicomus Michx.

C. albomarginatus (Mart. & Schrad.) Steud.

U.S.A. GEORGIA. **Hall Co.:** 4.0 mi N of Buford, open mud flat along exsiccated margin of artificial pond by Hwy GA 13, with *Bidens* sp., *Cephalanthus occidentalis*, *Cyperus erythrorhizos*, *C. odoratus*, *C. polystachyos*, *C. strigosus*, *Eleocharis*, sp., *Fimbristylis* sp., *Hypericum* spp., *Ludwigia* spp., *Rotala* sp., *Sagittaria* sp., *Salix nigra*, *Scirpus* sp., and *Utricularia* sp., 16 Sep 1990, *R. Carter 8499 and M.W. Morris* (VSC, others tbd).—This species occurs sporadically in the southeastern United States where it is infrequent to rare. Previously, in Georgia it was known from only Oglethorpe County (Jones & Coile 1988; Sweeney & Giannasi 2000). These

voucher specimen data document the second Georgia county record for *C. flavicomus*.

†****Cyperus fraternus*** Kunth

U.S.A. GEORGIA. **Baker Co.:** 1.9 mi N of Coolewahee Creek bridge, N of Newton, right-of-way along W side Hwy GA 91 just S powerline crossing, 31°20.859'N 84°18.312'W, recently cleared ground and adjacent ditch, locally common, 7 Aug 2007, *R. Carter 17959 and W.W. Baker* (VSC, others tbd). **Miller Co.:** 16.6 mi W of Newton jct Hwy GA 91 and GA 37, 300 m E jct Kimbrel Rd and Hwy GA 91, open disturbed depression along N side Hwy GA 91, 1.5 mi W Baker-Miller county line, 31°11.043'N 84°33.829'W, 16 Aug 2007, *R. Carter 17997 and R. Kral* (VSC, others tbd).—This obscure sedge was treated as *C. reflexus* Vahl var. *fraternus* (Kunth) Kuntze by Denton (1978) and was given no status in the recent *Flora of North America* (Tucker et al. 2002). It has an amphitropical distribution in the New World, previously known from temperate South America, Mexico, and Texas and Louisiana in the United States (Denton 1978). Its habit, inflorescence form, scale color, and achene are very different from *C. reflexus*; thus, we treat it at the rank of species. These voucher specimen data comprise the first report of *C. fraternus* from east of the Mississippi River.

****Cyperus lecontei*** Torr. – W(S3)

U.S.A. GEORGIA. **Charlton Co.:** 4.4 mi S of St. George (2.7 mi S by Hwy GA 121-23, then S 1.7 mi by dirt road), E of Hwy GA 121-23, between Mill Branch and Saucer Branch, local in open sandy, peaty barrow pit, flatwoods, 12 May 1990, *R. Carter 8333 and M.W. Morris* (VSC). **Taylor Co.:** 3.0 mi W of Butler, drainage ditch along Hwy GA 96, 16 May 1974, *W.R. Faircloth 7567* (VSC).—This species is distributed from North Carolina, southward into southern Florida, then westward into Louisiana. It is most common near the coast in swales and ditches amid dunes, sandy shores of estuaries, banks of tidal creeks, and lake shores (Radford et al. 1968; Godfrey & Wooten 1979), but, as *Faircloth 7567* from the Fall Line Sandhills of the Upper Coastal Plain shows, *C. lecontei* also occurs sporadically inland. Sorrie (1998) reported it new to Georgia based upon his 1994 collection from Glynn County. Sweeney and Giannasi (2000) map it in only two Georgia counties, Baker and

McIntosh. The voucher specimen data reported herein provide documentation for earlier collections and additional county records of *C. lecontei* in Georgia, where in Charlton County it was found in exposed, seepy sand of a barrow pit in the flatwoods and was associated with *Calopogon pallidus* Chapm., *C. tuberosus* (L.) Britt. et al., *Cleistes divaricata* (L.) Ames, *Hypericum fasciculatum*, *H. suffruticosum* Adams & Robson, *Lycopodium* spp., *Morella caroliniensis*, *M. cerifera*, *Pinguicula caerulea* Walt., *Pogonia ophioglossoides* (L.) Ker Gawl., *Polygala* spp., and *Sarracenia minor* Walt.

†****Cyperus pilosus*** Vahl

U.S.A. GEORGIA. **Bacon Co.:** Alma, jct Hwy GA 32 and Industrial Drive, 31°32.659'N 82°30.683'W, locally abundant in ditch, 10 Aug 2005, *R. Carter 16081* (VSC, others tbd).—This species, apparently an accidental introduction from Asia with rice agriculture, occurs sporadically in the lower Gulf coastal plain from southern Louisiana, southern Mississippi, to the Florida panhandle (Burkhalter 1985; Bryson & Carter 1992, 1994, 2008). It is also known from South Carolina (Tucker et al. 2002) and has recently been reported from eastern Texas (Carter et al., in press). Given the historical importance of rice agriculture in Georgia, it is surprising that it has not previously been found in the state, especially from the old rice district along the Atlantic coast. These voucher specimen data comprise the first report of *C. pilosus* from Georgia.

Cyperus tetragonus Elliott – W(S3?)

U.S.A. GEORGIA. **Camden Co.:** Cumberland Island, S end of island near Dungeness ruin, locally common in hammock at edge of salt-marsh, 5 Dec 1987, *R. Carter 6417* (GA, MO, VDB, VSC); 11.75 air mi NNE of St. Marys waterfront, ca. 1.25 mi N Cabin Bluff Lodge, 30°54'13"N 81°30'50"W, maritime live oak forest, locally common, 15 Sep 1995, *R. Carter 12727* (VSC, others tbd); maritime live oak forest NW of Shellbine, ca. 30°54'39"N 81°31'09"W, common, 15 Sep 1995, *R. Carter 12757* (VSC, others tbd). **McIntosh Co.:** Sapelo Island, ca. 250 m NE of UGAMI headquarters, maritime forest with *Quercus virginiana*, *Sabal palmetto*, *Sassafras albidum* and *Ilex opaca*, 17 Oct 1999, *R. Carter 14426* (VSC, others tbd).—This species occurs in hammocks throughout much of Florida (Long & Lakela 1971; Clewell 1985; Wunderlin &

Hansen 2003, 2008) and ranges northward along the coast into South Carolina. Sweeney and Giannasi (2000) map it only in Glynn County along the Georgia coast. These data represent additional county records of *C. tetragonus* in Georgia.

†**Dichondra micrantha* Urb. (Convolvulaceae)

U.S.A. GEORGIA. **Camden Co.:** 1.3 mi S jct Bailey Mill Rd and John Bailey Mill Rd, near bank of Satilla River along Satilla Drive, vic. John Baileys Mill, USGS Jerusalem quadr., 30°54.517'N 81°51.761'W, local in disturbed loam, 17 Mar 2006, *R. Carter 16383 and W.W. Baker* (VSC, others tbd).—Wunderlin and Hansen (2008) map this species as occurring throughout Florida. In their revision, Tharp and Johnston (1961) document this taxon in Texas and provide a key separating *D. micrantha* and *D. carolinensis* Michx. Our data comprise the first report of *D. micrantha* from Georgia.

†**Dioscorea alata* L. (Dioscoreaceae) – EPPC

U.S.A. GEORGIA. **Lowndes Co.:** Moody Air Force Base, 0.5 mi E of N end of main runway, along N boundary rd., 30.98590°N 83.17992°W, degraded mesic woods, 11 Jul 2008, *R. Carter 18459 and M. Nichols* (VSC).—This species is not mapped in Georgia by Sweeney and Giannasi (2000). It is listed among Category I invasive weeds (FLEPPC 2007) in Florida.

†**Dioscorea bulbifera* L. – EPPC

U.S.A. GEORGIA. **Camden Co.:** ca. 0.4 air mi SW of Coleraine, abandoned house site along bank of St. Marys River, 30°49.626'N 81°54.437' W, high climbing liana, 20 Jul 2006, *R. Carter 17032 and W.W. Baker* (VSC, others tbd); 3.91 air mi W of Woodbine, 30°58.055'N 81°47.344'W, end of Old Jefferson Hwy at Satilla River, edge of woods, high climbing liana, local, 1 Sep 2006, *R. Carter 17183 and W.W. Baker* (VSC).—This species is not mapped in Georgia by Sweeney and Giannasi (2000). It is listed among Category I invasive weeds (FLEPPC 2007) in Florida.

†**Echium vulgare* L. (Boraginaceae)

U.S.A. GEORGIA. **Cook Co.:** Adel, just E of I-75, 31°08.056'N 83°26.012'W, vacant lot along S side Hwy GA 37, mechanically disturbed sandy loam, 30 Apr 2004, *R. Carter 15327* (VSC, others tbd).—Native to mediterranean Europe, this in-

roduction is naturalized in the piedmont and mountain provinces from South Carolina to Virginia as well as in the coastal plain of Virginia (Weakley 2008). These voucher specimen data comprise the first report of *E. vulgare* from Georgia.

Eleocharis albida Torr. (Cyperaceae) – S(S2S3)

U.S.A. GEORGIA. **Camden Co.:** Kings Bay Submarine Base, 1.09 mile S Jct. U.S.S. Kamehameha Ave and U.S.S. Henry L. Stimson Dr, edge of brackish marsh along W side U.S.S. Kamehameha Ave, 30°47'09"N 81°31'16"W, Harrietts Bluff 7.5' USGS quadr., elev. 0-5 ft, locally abundant, 8 Jul 1996, *R. Carter 13112* (VSC, others tbd); Kings Bay Submarine Base, fill site just NW from N end of dock, across Kings Bay from N end of Crab Island, 30°48'47"N 81°31'46"W, USGS Harrietts Bluff quadr., locally abundant, 9 Jul 1996, *R. Carter 13182* (VSC, others tbd); Kings Bay Submarine Base, concrete storm drain along W side U.S.S. James Monroe Avenue, 1.0 mi NW of Warrior Wharf parking area, elev. ca. 10 ft, USGS Harrietts Bluff 7.5' quadr., locally abundant, 23 Jul 1996, *R. Carter 13346* (VSC, others tbd); Kings Bay Submarine Base, NE quadrant of base, Cherry Point; 0.81 air mi NNE of golf course clubhouse, small tidal creek adjacent to salt marsh, E of eastern perimeter fence, 30°49'57"N 81°32'54"W, USGS Harrietts Bluff 7.5' quadr., locally abundant, 29 Jul 1996, *R. Carter 13407* (VSC). **Glynn Co.:** Brunswick, Lanier Boulevard, between Hwy US 341 and Ocean Avenue, edge of marsh, 21 Sep 1991, *R. Carter 9252b with P. Bauer, J. Lusk and J. Robertson* (VSC, other tbd).—These voucher specimen data indicate *E. albida* is common and locally abundant in disturbed brackish soils and along tidal creeks in coastal Camden County.

Eleocharis cellulosa Torr. – W(SNR)

U.S.A. GEORGIA. **Camden Co.:** Kings Bay Submarine Base, Etowah Park, 30°49'00"N 81°32'45"W, exposed, mechanically disturbed reddish brown loam along west bank of Etowah Pond, locally common, 28 Aug 1996, *R. Carter 13598* (VSC, others tbd). **Seminole Co.:** Lake Seminole, along W bank of Lower Fish Pond Drain, 30.77013°N 84.86723°W, locally abundant in water ca. 3 dm deep along edge of lake, forming monotypic stand, 22 Jul 2008, *R. Carter 18465 with*

W.W. Baker and D. Morgan (VSC, others tbd).—Although reported from Bryan and Camden counties (Eyles 1940) and more recently from Clinch County (Rosen 2006), this species was not mapped for Georgia by Sweeney and Giannasi (2000). The collection data reported herein provide additional documentation of *E. cellulosa* in Georgia, including an additional record from Camden County which, at the time of its collection, was the first from the state in more than 50 years.

Eleocharis melanocarpa Torr. – W(S3)

U.S.A. GEORGIA. **Atkinson Co.:** sphagnum seepage slope and ditch along Hwy GA 135 and adjacent to sandridge, 1.9 mi S of Jct. with Hwy US 82 in Willacoochee, 25 May 1992, *R. Carter 9718* (VSC, others tbd). **Brooks Co.:** ca. 0.25 air mi S Piscola, N Thompson Rd, Pinion Point Plantation, 30°41.184'N 83°40.657'W, 6 Jul 2007, *R. Carter 17658 and W.W. Baker* (VSC). **Bryan Co.:** Ft. Stewart Military Reservation, 2.4 mi NW of FS 59 by FS 60, shallow, intermittently wet drainage, ca. 1400 m WSW of FS 60, elev. ca 5 m, locally common, 30 Jun 1992, *R. Carter 10002, J. Lusk and D. Thompson* (VSC); Ft. Stewart Military Reservation, 0.10–0.50 mi south of FS 43, between FS L-W and FS 88, flatwoods, elev. ca 20 m, shallow, intermittent pond in open, frequently burned pine flatwoods, locally common, 1 Jul 1992, *R. Carter 10028, J. Lusk and D. Thompson* (VSC). **Early Co.:** ca. 3.0 air mi WNW Cedar Springs, Shackelford-Williams TNC Preserve, 31°11.835'N 85°04.710'W, 19 Jul 2007, *R. Carter 17793, R. Kral and W.W. Baker* (VSC). **Irwin Co.:** S of Hwy US 319, E of Alapaha River, 31.49598°N 83.36600°W, shallow pond, with *Taxodium ascendens*, *Nyssa biflora*, *Ilex myrtifolia*, *Litsea aestivalis*, 21 Aug 2008, *R. Carter 18494 with W.W. Baker and G. Nelson* (VSC, others tbd). **Lanier Co.:** 0.9 mi E jct Hwy GA 37 and Hwy US 221, disturbed area between swamp forest and base of Hwy GA 37 berm, plants sterile, local, 23 Jul 1992, *R. Carter 10247 and J. Lusk* (VSC, others tbd). **Lowndes Co.:** just E of Valdosta, between jct Hwy GA 94 and Inner Perimeter Rd and Moulton-Branch Elementary School, ditch and backslope along E side Inner Perimeter Rd, locally common, 15 May 2000, *R. Carter 14464* (VSC, others tbd). **Talbot Co.:** 1.97 mi S Junction City jct Hwy GA 90 and Hwy GA 96, then 1.04 mi NE of railroad crossing at Brownsand by dirt road, edge of sandpit pond, 3 Sep 1994, *R. Carter*

12046 (VSC). **Taylor Co.:** 2.48 mi SW Howard, 1.37 mi W jct in Howard, then 1.09 mi S by Kel Foster Rd, Parks Mill Pond, immersed in swiftly flowing outlet above spillway, 2 Sep 1994, *R. Carter 12038* (VSC, others tbd). **Turner Co.:** 2.3 mi W of Irwin-Turner county line, along north side Hwy GA 107, ca. 31°43'24"N 83°29'39"W, seasonally wet pond embedded in sand ridge, pond margin, locally common, 1 Aug 1995, *R. Carter 12595* (VSC). **Worth Co.:** 1.6 mi W Tyty, heavily cut-over slope and pond, locally common, 28 Jun 1993, *R. Carter 10865 and R. Kral* (VSC, others tbd).—The type locality of *E. melanocarpa* is "near Savannah" (Torrey 1836). Jones and Coile (1988) mapped it only in Dougherty County, and Sweeney and Giannasi (2000) in Dougherty, Montgomery and Bryan counties. In our experience, *E. melanocarpa* is infrequent, and these voucher specimen data confirm additional county records for it in Georgia, where it inhabits fine sands and loamy sands in natural, shallow, seasonal drains or seasonally wet depressions or pond margins in open, periodically burned pine flatwoods. Associates include *Acer rubrum*, *Aster reticulatus* Pursh, *Carex glaucescens* Elliott, *C. striata* Michx., *Centella asiatica* (L.) Urb., *Chaptalia tomentosa* Vent., *Drosera* sp., *Erianthus* sp., *Erigeron vernus* (L.) Torr. & A. Gray, *Gratiola pilosa* Michx., *Ilex glabra* L., *I. myrtifolia* Walter, *Juncus* spp., *Lachnocaulon anceps* (Walter) Morong, *Liquidambar styraciflua*, *Lycopodium alopecuroides* L., *L. appressum* (Chapm.) F.E.Lloyd & Underw., *Morella cerifera*, *Osmunda cinnamomea* L., *Nyssa biflora*, *Pinus palustris*, *Pinus serotina*, *Polygala lutea*, *Rhexia* spp., *Rhynchospora* spp., *Sabatia campanulata* (L.) Torr., and *Woodwardia virginica* (L.) Sm.

†***Eleocharis montana*** (Kunth) Roem. & Schult.

U.S.A. GEORGIA. **Camden Co.:** 0.3 mi N Waverly jct Hwys US 17 and GA 110, 31°05.896'N 81°43.406'W, locally common, edge of bisected wetland along Hwy US 17, 14 Oct 2006, *R. Carter 17314 and W.W. Baker* (VSC, others tbd). **Glynn Co.:** Anguilla, jct Hwy GA 99 and GA 32, 31°15.325'N 81°36.217'W, open swale along right-of-way, locally common in standing water, 13 Jul 2003, *R. Carter 15022* (VSC, others tbd).—This weedy sedge is widely distributed in the New World, ranging from South America through Central America, Mexico and the West Indies into warmer portions of the United States (Smith et al.

2002; Bryson & Carter 2008). Whereas Sweeney and Giannasi (2000) map it only in Decatur and Early counties in extreme southwestern Georgia, our data extend the range of *E. montana* into the southeastern sector of the state by a distance of more than 250 km.

Eleocharis montevidensis Kunth – S(S1)

U.S.A. GEORGIA. **Brantley Co.:** 3.81 mi E of Nahunta jct Hwy US 82 and Hwy US 301, W of Lulaton, edge of cypress gum pond along N side Hwy US 82, 12 Oct 1996, *R. Carter 13927* (VSC). **Camden Co.:** Kingsland, ditch along S side Hwy GA 40 ca. 200 m E jct Hwy I-95, locally abundant, 31 Jul 1996, *R. Carter 13453* (VSC, others tbd); S of Atkinson, NW of Tarboro, jct Old Hwy 259 and Old Merrow Community Rd, by Old Hwy 259, 31°03.869'N 81°52.940'W, locally abundant in mucky ditch, 29 Apr 2006, *R. Carter 16523* (VSC, others tbd). **Glynn Co.:** Anguilla, jct Hwy GA 99 and GA 32, 31°15.325'N 81°36.217'W, open swale along right-of-way, locally common in standing water, 13 Jul 2003, *R. Carter 15023* (VSC, others tbd). **Liberty Co.:** Ft. Stewart Military Reservation, ditch along McFarland Ave, ca. 100 m S of W. 18th St, common, 16 Jul 1992, *R. Carter 10194* and *P. Bauer* (GA, VSC). **Pierce Co.:** 3.4 mi NE jct Hwy GA 15/121 and Hwy US 84 in Blackshear, W side Hwy US 84, locally abundant, 19 Jun 1992, *R. Carter 9859* and *P. Bauer* (VSC, others tbd), 23 Jul 1992, *R. Carter 10245* and *J. Lusk* (VSC, others tbd).—This species is widely distributed in the New World, from South America, Mexico and warmer parts of the United States (Smith et al. 2002). An occasional to common weed of open wet swales and ditches in the lower coastal plain of the southeastern United States, this sedge may be locally abundant proliferating by rhizomes but sometimes only sporadically producing fruits (Bryson & Carter 2008). *Eleocharis montevidensis* was first recorded for Georgia by Eyles (1940). It is often vegetative and is easily overlooked, and its presumed rarity in Georgia is probably an artifact of undercollection.

†* ***Emilia fosbergii*** Nicolson (Asteraceae)

U.S.A. GEORGIA. **Lowndes Co.:** N Valdosta, Jodeco Springs Subdivision, 2943 Sutucka Circle, 22 Oct 1994, *Carter 12366* (VSC).—This species has not been reported from Georgia (Jones & Coile 1988; Barkley 2006). It is a naturalized weed

in Florida (Wunderlin 1982; Clewell 1985) and has been reported from Texas (Williams 1994). These voucher specimen data comprise the first documentation of its naturalization in Georgia, where it spread from an ornamental garden plot and persisted for several years, apparently introduced with nursery stock.

Epidendrum magnoliae Muhl.

(Orchidaceae) – U

E. conopseum R. Br.

U.S.A. GEORGIA. **Camden Co.:** Kings Bay Submarine Base, 0.31 air mi SW jct U.S.S. Henry L. Stimson Dr and U.S.S. Woodrow Wilson Ave, hardwood hammock along N side of SWIFLANT, between SWIFLANT fence and drainage ditch, 30°47'35"N 81°32'23"W, Harrietts Bluff 7.5' USGS quadr., elev. 10–15 ft, 6 Sep 1996, *R. Carter 13659* (VSC); Magnolia Bluff, just N of Satilla River bridge, 30°56.683'N 81°53.585'W, hardwood bluff forest, epiphytic on *Magnolia grandiflora*, 9 Jun 2006, *R. Carter 16771* and *W.W. Baker* (VSC). **Charlton Co.:** 1.88 mi E Folkston (courthouse) by Hwy GA 40, then 200 m N by Reynolds Rd, bayswamp along creek just N Peoples Baptist Church, 30°50'32"N 81°58'33"W, occasional epiphyte, 29 Mar 1996, *R. Carter 12928* (VSC).—This epiphytic orchid occurs on a variety of phorophytes, but more frequently on *Magnolia grandiflora* and *Quercus virginiana* (Bergstrom & Carter 2008). In Camden County, it was found in a hardwood hammock and a hardwood bluff forest; associates included *Arundinaria gigantea*, *Asimina parviflora* (Michx.) Dunal, *Carya glabra*, *Chasmanthium* sp., *Juniperus* sp., *Ilex opaca*, *Lyonia ferruginea*, *Liquidambar styraciflua*, *Magnolia grandiflora*, *Morella cerifera*, *Pinus elliotii*, *P. glabra* Walter, *P. taeda*, *Quercus hemisphaerica* W. Bartram ex Willd., *Q. nigra*, *Q. virginiana*, *Serenoa repens*, *Smilax pumila* Walter, *Vaccinium arboreum*, and *Vitis rotundifolia* Michx. We suspect this arboreal species is often overlooked and undercollected and is more common than herbarium records would indicate.

†* ***Eriobotrya japonica*** (Thunb.) Lindl.

(Rosaceae)

U.S.A. GEORGIA. **Lowndes Co.:** Valdosta, vic. city bike trail along S bank One Mile Branch, between Sustella Ave and Wainwright St, UTM 17 280214E 3414480N (NAD83/WGS84), degraded slope forest, urban woodlot, occasional, 4 Mar

2007, *R. Carter 17424* (VSC).—Loquat is naturalized throughout much of Florida (Wunderlin & Hansen 2008; Judd 2003) but has not been previously recorded as naturalized in Georgia (Jones & Coile 1988). These voucher specimen data provide the first documentation of a naturalized population of loquat in Georgia.

Eriochloa michauxii (Poir.) Hitchc. var. ***michauxii*** (Poaceae) – S(S2?)

U.S.A. GEORGIA. **Charlton Co.:** ca.1.7 air mi WNW Coleraine lodge, 30°50.184'N 81°55.846'W, sawgrass depression along SE side St. Marys Cut, occasional, 20 Jul 2006, *R. Carter 17051 and W.W. Baker* (VSC, others tbd).—Sweeney and Giannasi (2000) map this species from only three Georgia counties, all coastal. These voucher specimen data confirm the occurrence of this infrequently collected species in yet another Georgia county.

Eustachys floridana Chapm. – S(S1?)

U.S.A. GEORGIA. **Berrien Co.:** S of Willacoochee, xeric sandridge, S of Alapaha River on E side Hwy GA 135, 6 Oct 2006, *W.W. Baker and F. Snow s.n.* (VSC).—Herein we report an additional voucher for this rare grass that Sweeney and Giannasi (2000) map in only Baker County. Common woody associates were *Pinus palustris*, *Quercus geminata*, *Q. incana*, *Q. laevis*, *Q. margaretta*, and *Vaccinium arboreum*, and *V. stamineum* L.

†****Eustachys retusa*** (Lag.) Kunth

U.S.A. GEORGIA. **Bryan Co.:** 1.7 mi W Pembroke jct Hwys US 280 and GA 119, 32°08.256'N 81°39.134'W, jct Hwy US 280 and Conley Rd (CR 80), along railroad adjacent to S side Hwy US 280, locally common, 12 Jul 2006, *R. Carter 16927* (VSC, others tbd).—Native to South America, this species was previously known in the United States from Texas, northwestern Florida, and central South Carolina, but not from Georgia (Jones & Coile 1988; Aulbach 2003).

Fagus grandifolia Ehrh. (Fagaceae)

U.S.A. GEORGIA. **Camden Co.:** ca. 0.5 air mi N of Rains Landing, USGS Boons Lake quadr., bluff along E bank of Satilla River, near end of 3R Fishcamp Rd, 31°00.347'N 81°54.197'W, beech-magnolia slope forest, 9 Jun 2006, *R. Carter 16799 and W.W. Baker* (VSC).—American beech has not been documented previously from southeastern

Georgia (Little 1971; Godfrey 1988). The population reported herein occurs on bluffs along the Satilla River in western Camden County, where several isolated pockets with mature specimens of *F. grandifolia* were observed mostly along north-facing slopes of ravines extending eastward from the main west-facing Satilla River bluff. Trees were also observed in Camden County at Magnolia Bluff and in a remnant hardwood hammock on an expansive flat along Owens Ferry Road ca. 2.0 mi east of Jerusalem. Our efforts to locate the parasite *Epifagus virginiana* (L.) Barton at these sites have been thus far unproductive.

Forestiera segregata (Jacq.) Krug & Urb. (Oleaceae) – S(S2)

U.S.A. GEORGIA. **Camden Co.:** Kings Bay Submarine Base, 0.66 air mi NE of S end of U.S.S. Kamehameha Ave, shell midden off E side of small southward projecting peninsula E of head of Point Peter Creek, 30°45'49"N 81°30'26"W, Harrietts Bluff 7.5' USGS quadr., elev. 5–10 ft, local, 31 Jul 1996, *R. Carter 13446* (VSC, others tbd), 13 Sep 1996, *R. Carter 13708* (VSC, others tbd). **McIntosh Co.:** Sapelo Island, vic. Sapelo Island Post Office, USGS Dobby Sound quadr., UTM 17 473118E 3477438N (NAD83/WGS84), shell mound along Post Office Creek/Duplin River, local, 17 Oct 1999, *R. Carter 14399* (VSC, others tbd).—Herein, we report additional records of this rare shrub that ranges from the West Indies, through coastal peninsular Florida and coastal Georgia into coastal South Carolina (Chafin 2007; Wunderlin & Hansen 2008). It inhabits calcareous shell middens along saline marshes associated with coastal scrub and maritime forests.

Fuirena scirpoidea Michx. (Cyperaceae) – S(S1?)

U.S.A. GEORGIA. **Camden Co.:** Kings Bay Submarine Base, Etowah Park, W bank of Etowah Pond, 30°49'00"N 81°32'45"W, Harrietts Bluff 7.5' USGS quadr., elev. 15–20 ft, mechanically disturbed pond margin, local, 28 Aug 1996, *R. Carter 13597* (VSC, others tbd).—Distributed through peninsular Florida and along the Gulf Coast into Texas, this sedge reaches the northern limit of its distribution in southeastern Georgia (Kral 1978).

†****Fumaria parviflora*** Lam. (Fumariaceae)

U.S.A. GEORGIA. **Lowndes Co.:** Valdosta, city bike trail between Sustella Ave and Wainwright St,

UTM 17 280214E 3414480N (NAD83/WGS84), shaded mesic site along drain along S side One Mile Branch, 24 Apr 2007, *R. Carter 17512* (VSC).—This introduced herb with the phenology of a spring ephemeral was locally abundant and invasive in a degraded, mesic, urban woodlot. Jones and Coile (1988) do not map it for Georgia.

Galax urceolata (Poir.) Brummitt (Diapensiaceae)

U.S.A. GEORGIA. **Taylor Co.:** Atlantic white cedar swamp along Little Whitewater Creek, 6.3 mi S of Butler by Hwy GA 137; slope along creek, in remnant woods, 19 May 1991, *R. Carter 8644* (VSC).—*Galax urceolata* is restricted to the northern half of Georgia, and, according to Jones and Coile (1988), the Piedmont county of Meriwether is the southernmost Georgia county in which it is known. These voucher specimen data document a southward range extension into the Fall-line Sandhills of the Upper Coastal Plain, where a dense growth of *G. urceolata* was found in a narrow strip of remnant woods along Little Whitewater Creek associated with *Epigaea repens* L., *Chamaecyparis thymoides* (L.) Britt. et al., and *Carex collinsii*.

†* ***Glaucium comiculatum*** (L.) Rudolph (Papaveraceae)

U.S.A. GEORGIA. **Elbert Co.:** fescue pasture, 29 Apr 2002, *David Spaid s.n.* (VSC).—Jones and Coile (1988) do not map this species in Georgia.

Gratiola aurea Pursh (Scrophulariaceae)

U.S.A. GEORGIA. **Cook Co.:** about 6.5 mi W of Adel, N of Hwy GA 37, Reed Bingham State Park, locally abundant in slough along Little River, 18 Aug 1990, *R. Carter 8444* (GA, VDB, VSC).—This species is apparently rare in Georgia and was previously mapped only in Brooks County (Jones & Coile 1988).

†* ***Habranthus tubispathus*** (L'Hér.) Traub (Liliaceae)

U.S.A. GEORGIA. **Irwin Co.:** Waterloo, N side Hwy GA 125, 30°35.592'N 83°28.490'W, road shoulder and adjacent residential lawn, locally abundant, 10 Aug 2005, *R. Carter 16079* (VSC, others tbd).—The yellow-flowered copper-lily is known from South America, Texas, Louisiana, Alabama and the western panhandle of Florida (Flagg et al. 2002); it has not been previously reported from Georgia (Sweeney & Giannasi 2000).

Hartwrightia floridana A. Gray ex S. Watson (Asteraceae) – T

U.S.A. GEORGIA. **Charlton Co.:** 2.86 air mi S Moniac jct Hwy GA 185 and Hwy GA 94, W side Hwy GA 185, between Hwy and St. Marys River, ca. 150 m W of 30°28.944'N 082°11.941'W, seepage slope along W side of upland oak-pine woods, local, 12 Oct 2006, *R. Carter 17283 and W.W. Baker* (VSC); 5.91 air mi SSW St. George jct Hwy GA 23/121 and Hwy GA 94, Hwy GA 23/121, ca. mile marker #7 and cement power pole #60, 30°26.675'N 82°04.685'W, seepage slope above creek, local, 12 Oct 2006, *R. Carter 17291 and Baker* (VSC); 4.68 air mi SSW St. George jct Hwy GA 23/121 and Hwy GA 94, along Hwy GA 23/121, 30°27.542'N 82°03.906'W, gradual seepy slope at edge of cypress-gum pond, locally common, 12 Oct 2006, *R. Carter 17293 and Baker* (VSC); 11.8 air mi SSW Folkston jct Hwy US 1 and Hwy GA 23/121, ca. 0.1 mi N mile marker #23 along Hwy GA 23/121, ca. 0.2 mi N jct Joe Cone Rd and Hwy GA 23/121, between 30°40.011'N 82°03.673'W and 30°40.038'N 82°03.680'W, seepage slope along W side Hwy GA 23/121, local, 13 Oct 2006, *R. Carter 17298 and Baker* (VSC).—*Hartwrightia floridana* was found along open seepage slopes and in shallow seasonally wet flatwoods depressions and strands. Common associates were *Acer rubrum*, *Bidens* sp., *Bigelovia nudata* (Michx.) DC., *Cliftonia monophylla*, *Coreopsis* sp., *Cyrilla racemiflora* L., *Drosera capillaris*, *Erigeron vernus*, *Eriocaulon decangulare* L., *Eupatorium* spp., *Fuirena* sp., *Gordonia lasianthus* (L.) J. Ellis, *Helianthus angustifolius* L., *Hypericum fasciculatum*, *Ilex coriacea*, *I. myrtifolia*, *Juncus* spp., *Lobelia glandulosa* Walter, *Lycopodium alopecuroides*, *L. appressum*, *L. carolinianum* L., *Lyonia lucida*, *Magnolia virginiana*, *Morella caroliniensis*, *M. cerifera*, *Nyssa biflora*, *Osmunda cinnamomea*, *Oxypolis filiformis* (Walter) Britton, *Persea palustris*, *Pinus elliottii*, *Rhexia mariana* L., *R. petiolata* Walter, *Rhynchospora* spp., *Sabatia macrophylla* Hook., *Sarracenia minor*, *Scleria reticularis* Michx., *Serenoa repens*, *Smilax laurifolia* L., *Solidago* spp., *Taxodium ascendens*, *Toxicodendron vernix*, *Woodwardia areolata* (L.) T. Moore, and *Xyris* spp. Using data provided by the Georgia Department of Natural Resources Natural Heritage Program courtesy of botanist, Tom Patrick, the first two authors attempted in 2006 to relocate historical populations of *H. floridana* in southeastern Georgia and to discover new ones. In all, 12 extant

populations were found in Charlton County including eight previously undocumented ones (Carter & Baker 2006). Herein we report vouchers for some additional Georgia populations of this rare species. Our intensive search efforts for *H. floridana* in adjacent Camden County have to date been futile.

Helenium brevifolium (Nutt.) A. Wood – S1

U.S.A. GEORGIA. **Taylor Co.:** 6.1 mi S Butler by Hwy GA 137, slope along Little Whitewater Creek, open seepage bog upslope from creek, 20 Apr 1991, *R. Carter 8564 and M.W. Morris 4148* (VSC, others tbd).—Herein we report a new county record for this rare composite, which, in Georgia, is restricted to a tight cluster of counties in the west-central portion of the state (cf. Chafin 2007). Our record is from a contiguous county.

Hexastylis arifolia (Michx.) Small var. *arifolia* (Aristolochiaceae)

U.S.A. GEORGIA. **Charlton Co.:** Traders Hill Recreation Area, along W side of St. Marys River, hardwood slope and terrace just above confluence of two small streams, 30.78306°N 82.02895°W, plants locally common, several extensive patches observed, 21 Mar 2008, *R. Carter 18838 and W.W. Baker* (VSC, others tbd).—This species has not previously been documented from the southeastern sector of Georgia (Jones & Coile 1988; Whittemore & Gaddy 1997). First noted by Lynch and Baker (1988), the population reported herein was only recently vouchered.

†***Hibiscus trionum*** L. (Malvaceae)

U.S.A. GEORGIA. **Ware Co.:** Waycross, Rice Yard, weed in rail yard, 7 Aug 1990, *W.K. George s.n.* (VSC).—*Hibiscus trionum*, a European introduction, is widespread in eastern United States (Fernald 1950; Radford et al. 1968). Whereas Jones and Coile (1988) record it from only Clarke County, this is apparently the second vouchered county record for the state and the first for the Georgia coastal plain.

†****Hypochaeris microcephala*** (Schultz-Bipont.) Cabrera var. *albiflora* (Kuntze) Cabrera (Asteraceae)

U.S.A. GEORGIA. **Camden Co.:** Hwy US 17, N of Kingsland, just N of jct Hwy US 17 and Daisy Ave, just S of jct Hwy US 17 and Kinlaw Rd,

30.85883°N 81.70219°W, ruderal roadside adjacent to commercial lot, locally abundant, roots with latex, heads white, 30 Apr 2008, *R. Carter 18369 and W.W. Baker* (VSC, others tbd).—Prior to the record reported herein, this introduced South American weed was thought to be restricted to Louisiana, Texas and Oklahoma in the United States (Bogler 2006).

Ilex amelanchier M.A. Curtis ex Chapm. (Aquifoliaceae) – S(S2)

U.S.A. GEORGIA. **Camden Co.:** vic. Douglas Fish Club, N side Douglas Fish Club Rd, SSW from Old Merrow Community Rd, S from Old Hwy 259, 31°01.612'N 81°54.072'W, floodplain along base of bluff, 29 Jun 2006, *R. Carter 16876 and W.W. Baker* (VSC, others tbd); Oak Grove Acres development, edge of Satilla River floodplain, along E bank of narrow lake at base of slope, 31°04.702'N 81°53.337'W, locally common, 18 May 2007, *R. Carter 17568 and W.W. Baker* (VSC, others tbd); Satilla River floodplain at base of bluff, along E bank of river, ca. 30.00233°N 81.90614°W, 5 m shrub, locally common, 1 Jul 2008, *R. Carter 18427 and W.W. Baker* (VSC, others tbd).—These data document an additional county record of this rare species in Georgia (cf. Jones & Coile 1988). Associates were *Acer rubrum*, *Cephalanthus occidentalis*, *Dulichium arundinaceum* (L.) Britt., *Fraxinus* sp., *Hypericum myrtifolium* Lam., *Ilex myrtifolia* L., *Leucothoe racemosa* (L.) A. Gray, *Lobelia puberula* Michx., *Lyonia lucida*, *Morella cerifera*, *Nyssa biflora*, *N. ogeche* W. Bartr. ex Marsh., *Taxodium distichum*, and *Sabatia dodecandra* (L.) Britt. et al.

†****Indigofera spicata*** Forssk. (Fabaceae)

U.S.A. GEORGIA. **Camden Co.:** Kings Bay Submarine Base, mowed roadside ca. 100 m E of St. Marys Gate, 30 Aug 1996, *R. Carter 13628* (VSC); Kingsland, lot of Public Works Department, 691 N Lee St (Hwy US 17), 30°48.581'N 81°41.546'W, 15 Oct 2007, *R. Carter 18230 and W.W. Baker* (VSC, others tbd); Kingsland, Hwy I-95 rest stop and welcome center along E side of northbound lane, 30.75313°N 81.64894°W, 17 Nov 2007, *R. Carter 18305 and W.W. Baker* (VSC, others tbd).—This African native is a weed of disturbed sites (Isley 1990). These voucher specimen data represent the first records for Georgia, as Jones and Coile (1988) do not include it.

†*Ipomoea fistulosa* Mart. ex Choisy
(Convolvulaceae)

I. carnea Jacq. subsp. *fistulosa* (Mart. ex Choisy)

D.F. Austin

U.S.A. GEORGIA. **Grady Co.:** cultivated, 5.2 mi N of Reno by Hwy GA 111 and to the S of Cairo, 17 Jul 1989, *R.K. Godfrey 83364* (MO, VSC).

Lowndes Co.: Valdosta, persisting in garden at corner of N Fry Street and East Hill Avenue, 30 Nov 1991, *R. Carter 9558* (VSC).—Native to western Brazil and eastern Bolivia, this species spreads and overwinters by rhizomes, has upright aerial stems that may be 2 m high, and is an aggressive pest of wetland habitats in India where it is cultivated for its attractive flowers (Cook 1987). In the United States it has become naturalized in Texas (Correll & Johnston 1970) and Florida (Long & Lakela 1971; Wunderlin 1982; Clewell 1985). *Ipomoea fistulosa* is on Florida's list of prohibited aquatic plants (Ramey 1990). It is winter hardy in southern Georgia and persists with little or no care. Although it has not been observed to spread from plantings, it likely has the potential to do so. Because of its invasive tendencies in wetland habitats, it should be prohibited and eradicated in Georgia and elsewhere outside its native range.

Iris tridentata Pursh (Iridaceae) – S(S2?)

U.S.A. GEORGIA. **Camden Co.:** Great Satilla Preserve along W side of Old Merrow Community Rd, off Old Hwy 259, swamp forest in Satilla River floodplain, local, 31°02.636'N 81°53.845'W, 29 Jun 2006, *R. Carter 16863 and W.W. Baker* (VSC).—Sweeney and Giannasi (2000) map this species in Georgia only in Wayne and Bryan counties.

Isolepis carinata Hook. & Arn. ex Torr.
(Cyperaceae)

Scirpus koilolepis (Steud.) Gleason

U.S.A. GEORGIA. **Lanier Co.:** Moody Air Force Base, E.O.D. Range, just W of Dudley's Hammock, open rutted field, rare, 9 Apr 1994, *R. Carter 11685* (VSC); zoysiagrass production field, 14 Apr 2006, *T.R. Murphy s.n.* (VSC); 1.1 mi E of Lakeland by Hwy US 129, 31°02.788'N 83°02.42'W, floodplain E of Alapaha River, S of Hwy US 129, local in exposed rutted trail, 21 Apr 2006, *R. Carter 16494* (VSC). **Lowndes Co.:** North Valdosta, ca. 200 m east of Valdosta High School, loamy soil in shallow ditch, along Eastwind Road, 7 April 1993, *R. Carter 10644* (VSC). **Wilcox Co.:** vic.

Oscawiechee Spring and Ocmulgee River, 22 Apr 1989, *W.K. George s.n.* (GA, VSC); Oscawiechee Springs, just NE of Bowen Mill State Fish Hatchery, SE corner of Wilcox County, ca. 2 mi NE of Hwy US 129, UTM 17 291919E 3528033N (NAD83/WGS84), USGS Queensland quadr., locally abundant in ruts along jeep trail in Ocmulgee River floodplain, 16 May 1992, *R. Carter 9677* (VSC, others tbd).—This species appears to be common in the Piedmont; however, there are only a few county records from the Coastal Plain (Sweeney & Giannasi 2000). Herein we provide additional distributional data on *I. carinata* in the Coastal Plain of Georgia.

**Isolepis pseudosetacea* (Daveau) Gand.

Scirpus molestus M.C. Johnston

U.S.A. GEORGIA. **Jeff Davis Co.:** sandstone outcrop N of Hwy GA 107, 4.1 mi W of Snipesville, 23 Apr 1988, *R. Carter 6489* (VSC, others tbd).—This species was not reported for Georgia by Sweeney and Giannasi (2000).

Juncus coriaceus Mack. (Juncaceae)

U.S.A. GEORGIA. **Ben Hill Co.:** Red Bluff, ca. 16 mi ENE of Fitzgerald by Hwy GA 107, then 1.5 mi N along county line road, slough and bottomland at base of bluff, 13 Aug 1987, *R. Carter 6097* (VSC). **Camden Co.:** Cooper Creek swamp, ca. 2.5 air mi NW Cabin Bluff Lodge, ca. 30°55'08"N 81°32'06"W, 7 Jul 1995, *R. Carter 12481* (VSC, others tbd); Kings Bay Submarine Base, 0.75 air mi SE of Franklin Gate, 30°46'31"N 81°33'58"W, wetland strand with *Nyssa biflora*, *Acer rubrum*, *Pinus elliotii*, *Persea palustris*, *Cephalanthus occidentalis*, *Morella cerifera*, *Cyrtilla racemiflora*, *Woodwardia virginica*, *W. areolata*, *Osmunda cinnamomea* and *O. regalis*, 22 Jul 1996, *R. Carter 13318* (VSC, others tbd); 3.1 mi N Kingsland jct Hwys US 17 and GA 40, 0.3 mi E jct Hwy US 17 and Harrietts Bluff Rd, hydric hammock along creek, S side Harrietts Bluff Rd, 30°50.573'N 81°41.780'W, 19 May 2005, *R. Carter 15965* (VSC, others tbd).—Sweeney and Giannasi (2000) map this species as occurring throughout much of Georgia; however, vouchered records were apparently lacking from the south-central and southeastern sectors of the state.

Justicia angusta (Chapm.) Small
(Acanthaceae) – S(SH)

U.S.A. GEORGIA. **Charlton Co.:** 9.1 mi W of

St. George jct Hwys GA 94 and 23, pond cypress depression along N side of Hwy GA 94, plants locally abundant, rhizomatous, <1% of stems with flowers, leaves fleshy, corolla lavender with darker purple lines on lower lip, 27 May 1989, *R. Carter 7868* and *M.W. Morris 3374* (VSC, others tbd).—Sorrie (1998) reported a 1954 collection (*Ahles 7798* and *Bell*, NCU) from Camden County as a state record. Our collection cited above adds a second Georgia county to the known distribution of this species. The following associates were observed with *J. angusta* at the Charlton County site: *Acer rubrum*, *Aletris lutea* Small, *Centella asiatica*, *Cyrilla racemiflora*, *Eleocharis tuberculosa* (Michx.) R. & S., *Gaylussacia* sp., *Gordonia lasianthus*, *Gratiola ramosa* Walt., *Hypericum cistifolium* Lam., *H. fasciculatum*, *H. mutilum* L., *Ilex coriacea*, *I. glabra*, *I. myrtifolia*, *Juncus* spp., *Kalmia hirsuta* Walt., *Lachnocaulon anceps*, *Lyonia lucida*, *Morella cerifera*, *Nyssa biflora*, *Panicum hemitomon* Schult., *Persea palustris*, *Pluchea* sp., *Polygala lutea*, *P. ramosa* Ell., *Proserpinaca pectinata* Lam., *Rhexia alifanum* Walt., *R. lutea* Walt., *Sarracenia minor*, *Smilax laurifolia*, *S. walteri* Pursh, *Syngonanthus flavidulus* (Michx.) Ruhl., *Taxodium ascendens*, *Toxicodendron radicans*, *Vaccinium myrsinites*, and *Xyris* spp.

†***Kyllinga gracillima*** Miq. (Cyperaceae)

Cyperus brevifolioides Delahoussaye & Thieret

K. brevifolioides (Delahoussaye & Thieret) Tucker, *nom. illeg.*

U.S.A. GEORGIA. **Gilmer Co.:** marshy ditch along creek and at base of steep road cut at intersection Hwys GA 382 and GA 5/515, about 6 mi S of Ellijay city center, with *Typha latifolia* and *Cyperus strigosus*, 14 Sep 1991, *R. Carter 9145* and *J. Robertson* (VSC, others tbd). **Gordon Co.:** E of Fairmont, Pleasant Grove Baptist Church grounds along S side of Hwy GA 53, branch run below cemetery, disturbed open moist clayey loam in vicinity of baptismal pool, locally common, with *Cyperus iria*, *C. strigosus*, *Eleocharis obtusa*, *K. pumila*, and *Scirpus atrovirens*, 13 Sep 1991, *R. Carter 9128* and *Robertson* (VSC, others tbd). **Pickens Co.:** bottom along Talking Rock Creek by Hwy GA 5, 0.4 mi SE of intersection with Hwy GA 136 in Talking Rock, disturbed clayey loam with *Acer negundo*, *Cyperus bipartitus*, *C. croceus*, *C. flavescens*, *C. lancastriensis*, *C. squarrosus*, *C. strigosus*, *Eleocharis obtusa*, *Fimbristylis*, *Fraxinus*, *Juglans*, *Kyllinga pumila*, *Liquidambar*, *Liriodendron*, *Platanus*, *Quercus*, *Rhus glabra*,

and *Salix*, 14 Sep 1991, *R. Carter 9135* and *J. Robertson* (VSC, others tbd).—This species was previously reported from Walker County, Georgia (Webb et al. 1981). It is also known from Alabama, North Carolina, and Tennessee (Delahoussaye and Thieret 1967; Kral 1981; Webb et al. 1981; Bryson et al. 1997). These voucher specimen data substantiate additional populations of *K. gracillima* in Georgia.

†****Kyllinga squamulata*** Thonn. ex Vahl

U.S.A. GEORGIA. **Camden Co.:** Kingsland, Hwy I-95 rest stop and welcome center along E side of northbound lane, 30.75313°N 81.64894°W, 17 Nov 2007, *R. Carter 18306* and *W.W. Baker* (VSC, others tbd). **Chatham Co.:** Savannah, Chatham County Soccer Complex, jct Eisenhower Drive and Sally Mood Drive, in turf and adjacent areas of soccer field, locally common, 23 Nov 2002, *R. Carter 14779* (VSC, others tbd). **Lowndes Co.:** Valdosta, NE sector, Valdosta High School grounds, vic. jct Inner Perimeter Rd and Forrest St, mowed strip between track and retention ponds by Inner Perimeter Rd, locally common, 1 Nov 1998, *R. Carter 14207* (VSC, others tbd); N Valdosta, just E of jct Bemiss Rd and Mt. Zion Church Rd, along Mt. Zion Church Rd, local, 17 Aug 2001, *R. Carter 14615* (VSC, others tbd); Valdosta, Valdosta State University campus, 30° 50.495'N 83°17.811'W, open infrequently mowed playing field and adjacent slope S of One Mile Branch, W of Sustella Ave, 2 Nov 2004, *R. Carter 15836* (VSC, others tbd).—*Kyllinga squamulata* is readily distinguished from its congeners in the southeastern United States by the combination of cespitose habit and lacerate-winged floral scales. It is widely distributed in tropical and subtropical regions of both Eastern and Western Hemispheres, known from the West Indies, tropical Asia, and Africa (Hooper & Napper 1972; Haines & Lye 1983; Tucker 2002). In the United States it was previously known from Florida and South Carolina where it is a weed of roadsides, lawns, athletic fields, golf courses and ruderal areas and is likely being dispersed in turf-grass sod (Bryson et al. 1997; Carter 2005; Bryson & Carter 2008). Anderson (2000) has recently documented its presence in northern Florida. This species is becoming increasingly common in Lowndes County, Georgia, where its dispersal, at least in part, appears to be related to the movement of turf-grass.

†***Lamium purpureum*** L. (Lamiaceae)

U.S.A. GEORGIA. **Lowndes Co.:** vic. Valdosta Airport, roadbank and ditch by Airport Rd, 30° 47.658'N 83°16.748'W, with *Lamium amplexicaule*, locally common, 8 Mar 2005, *R. Carter 15925* (VSC, others tbd).—Jones and Coile (1988) do not map this species from the southern half of Georgia, with Harris County being its southern limit of distribution. Wunderlin and Hansen (2008) do not include *L. purpureum* among Florida's flora. These data document the first record of this species from Georgia's coastal plain, extending its range about 250 km southward, and indicate it should be sought in northern Florida.

Leersia virginica Willd. (Poaceae)

U.S.A. GEORGIA. **Camden Co.:** 3.1 mi N Kingsland jct Hwys US 17 and GA 40, 0.3 mi E jct Hwy US 17 and Harrietts Bluff Rd, 30°50.573' N 81°41.780'W, hydric hammock along creek, S side Harrietts Bluff Rd, 4 Nov 2005, *R. Carter 16332* (VSC, others tbd).—Sweeney and Giannasi (2000) do not map this species in the southeastern quadrant of Georgia; this coastal record from Georgia's southeasternmost county represents a significant range extension.

Liatis patens G.L. Nesom & Kral (Asteraceae)

U.S.A. GEORGIA. **Camden Co.:** 6.8 mi N Tarboro jct Hwy 259 and Old Post Rd, 31°04.771'N 81°52.944'W, open sandy slope W side Hwy 259, 15 Oct 2006, *R. Carter 17339* and *W.W. Baker* (VSC, others tbd). **Lanier Co.:** Grand Bay Wildlife Management Area, disturbed old field along S side east-west runway of abandoned airfield, just N Lanier-Lowndes county line, vic. campground and observation grounds, local, 7 Nov 1993, *R. Carter 11596* (VSC, others tbd).—These records provide additional documentation of this recently described species in Georgia.

Liatis tenuifolia Nutt. var. ***quadriflora*** Chapm. – S(S1)

U.S.A. GEORGIA. **Camden Co.:** Kings Bay Submarine Base, remnant longleaf pine forest just west of north end of golf course, 0.80 mi NNW of golf clubhouse, plants occasional, 11 Oct 1996, *R. Carter 13869* (VSC, others tbd).—These voucher specimen data provide additional documentation of this taxon from Georgia, where previously it was known from adjacent Charlton County

(Nesom 2006b). Nesom (2006b) treats this name as a synonym of *L. laevigata* Nutt.

†***Linaria vulgaris*** Hill. (Scrophulariaceae)

U.S.A. GEORGIA. **Taylor Co.:** 3.4 mi NE of Charing, vicinity of Hwy GA 137 bridge over Little Whitewater Creek, locally common along edge of gravelly roadbed near bridge, *R. Carter 8370* (GA, VSC).—Jones and Coile (1988) mapped this species from only three counties, all located in northern Georgia, and these voucher specimen data comprise the first report of this species from the coastal plain of Georgia. *Linaria vulgaris*, a European introduction, has been present in North America since colonial times (Pennell 1935).

†****Lipocarpa microcephala*** (R. Br.) Kunth (Cyperaceae)

U.S.A. GEORGIA. **Brantley Co.:** 5.55 mi S Atkinson jct Hwy GA 110 and Hwy US 82, Hwy GA 110, 50 m N jct Bamboo Tr. (CR 175), 31.16376° N 81.79086°W, ditch along W side Hwy GA 110, locally common, 14 Oct 2008, *R. Carter 18666* (VSC, others tbd). **Camden Co.:** 7.83 air mi N of Kingsland jct Hwy US 17 and Hwy GA 40, vic. Seals, 30°54.709'N 81°42.736'W, ditch along W side of Hwy US 17, occasional to locally common, 1 Sep 2006, *R. Carter 17193* and *W.W. Baker* (VSC, others tbd).—Tucker (2002) reported this Old World introduction from Florida and Alabama in the United States, but it has not been previously reported from Georgia. At both sites reported herein, *Lipocarpa microcephala* was found in wet soil along the edge of a ditch with a number of other ruderals: *Alternanthera philoxeroides* (Mart.) Griseb., *Bacopa* spp., *Cyperus haspan*, *C. lanceolatus* Poir., *C. polystachyos*, *C. strigosus* L., *Eleocharis quadrangulata* (Michx.) Roem. & Schult., *Fimbristylis schoenoides* (Retz.) Vahl, *Kyllinga brevifolia* Rottb., *Phyla nodiflora* (L.) Greene, *Ludwigia* spp., *Phyllanthus urinaria*, *Pontederia lanceolata* Nutt., *Sacciolepis indica* (L.) Chase, *Sesbania herbacea* (Mill.) McVaugh, and *Setaria* sp.

Litsea aestivalis (L.) Fern. (Lauraceae) – R

U.S.A. GEORGIA. **Camden Co.:** Kings Bay Submarine Base, 30°50'07"N 81°33'17"W, exsiccated cypress-gum pond bisected by ditch, ca. 100 m west of north end of golf course, with *Nyssa biflora* and *Taxodium ascendens*, pond being invaded by *Ilex vomitoria*, *Morella cerifera*, *Rubus* sp., *Triadica*

sebilifera, local, 9 Jul 1996, *R. Carter 13201* (VSC, others tbd).; Kings Bay Submarine Base, 0.63 air mi NNW of S end U.S.S. Kamehameha Ave, between U.S.S. Kamehameha Ave and North River marsh, crescent-shaped pond adjacent to N side Torpedo Magazine, 30°45'57"N 81°31'09"W, Harrietts Bluff 7.5' USGS quadr., elev. 5–10 ft, locally common, 23 Jul 1996, *R. Carter 13357* (VSC, other tbd). **Turner Co.:** 2.3 mi W of Irwin-Turner county line, along north side Hwy GA 107, ca. 31°43'24"N 83°29'39"W, 1 Aug 1995, *R. Carter 12593* (VSC).—These data provide additional records of this rare species. Inland, in Turner County, it was observed in a seasonally wet sinkhole pond embedded in a sand ridge, whereas in Camden County, along the coast, it was found in shallow, seasonal ponds and depressions. Associates at the Turner County site included *Acer rubrum*, *Aster reticulatus*, *Carex glaucescens*, *C. striata*, *Centella asiatica*, *Cephalanthus occidentalis*, *Chaptalia tomentosa*, *Clethra alnifolia*, *Drosera capillaris*, *Dulichium arundinaceum*, *Eleocharis melanocarpa*, *Erianthus* sp., *Erigeron vernus*, *Gratiola pilosa*, *G. ramosa*, *Hypericum nitidum* Lam., *Ilex glabra*, *I. myrtifolia*, *Itea virginica*, *Juncus* spp., *Lachnanthes caroliniana* (Lam.) Dandy, *Lachnocaulon anceps*, *Liquidambar styraciflua*, *Lycopodium alopecuroides*, *L. appressum*, *Lyonia lucida*, *Magnolia virginiana*, *Morella cerifera*, *Osmunda cinnamomea*, *Nyssa biflora*, *Panicum tenerum* Beyrich ex Trin., *Persea palustris*, *Pinus elliotii*, *P. serotina*, *Polygala cymosa* Walter, *P. lutea*, *Rhexia* spp., *Rhynchospora* spp., *Sabatia campanulata*, *Sagittaria graminea* Michx. var. *graminea*, *Taxodium ascendens*, *Utricularia cornuta* Michx., *Xyris jupicai* Rich., *X. smalliana* Nash, and *Woodwardia virginica*.

†***Lolium arundinaceum*** (Schreb.) Darbysh. (Poaceae)

Festuca arundinacea Schreb.

Schedonorus arundinaceus (Schreb.) Dumort.

U.S.A. GEORGIA. **Camden Co.:** S of Atkinson, NW of Tarboro, jct Old Hwy 259 and Old Merrow Community Rd, by Old Hwy 259, 31°03.869' N 81°52.940' W, plants loosely cespitose-rhizomatous, locally abundant, 29 Apr 2006, *R. Carter 16524* (VSC, others tbd).—Giannasi and Sweeney (2000) map this species in Georgia from only Long County. Thus, herein we provide a second county record and additional documentation of *L. arundinaceum* for Georgia. Although he maps it as wide-ranging in the United States and in sur-

rounding southeastern states, Darbyshire (2007) does not include Georgia in the distribution of this species. More common in Georgia than herbarium records would indicate, this species has been observed frequently along roadsides in southern Georgia, where its inflorescences are readily observed in April and May prior to mowing.

†****Lupinus angustifolius*** L. (Fabaceae)

U.S.A. GEORGIA. **Treutlen Co.:** weed in bean field, 16 Jun 2004, *Stanley Culpepper s.n.* (VSC).—These data document the occurrence of this species in Georgia. According to Isley (1990), it is native to Mediterranean Europe, is cultivated for soil improvement and early spring forage, and is established to some extent in Florida and probably sporadically elsewhere in the southeastern United States.

Macranthera flamma (W. Bartram) Pennell (Scrophulariaceae) – T

U.S.A. GEORGIA. **Worth Co.:** Oakridge Farm, ca. 5.75 air mi ESE Anderson City, E of Sumner Rd, 31°20.964' N 83°45.844' W, shrubby edge along N side of drain, tributary of Warrior Creek, local, 27 Sep 2007, *R. Carter 18163* and *W.W. Baker* (VSC); Jeffords Tract, 4.35 air mi NNW Anderson City, W of Old Hwy 33, 31.434561° N 83.868287° W, edge of drain within recently burned *Pinus palustris*-*Aristida stricta* community, plants local, 11 Sep 2008, *R. Carter 18531* and *W.W. Baker* (VSC).—Alford and Anderson (2002) provide distributional data on this rare species, including the citation of a Worth County collection (*R.F. Thorne 6362*, NY) made in 1947. Our voucher data document the persistence and additional populations of *M. flamma* in Worth County. The Oakridge Farm population was first observed in 2002 by W.W. Baker. At this same site in 2007, *M. flamma* was observed flowering after a winter burn and associated with *Acer rubrum*, *Aster reticulatus*, *Clethra alnifolia*, *Cyrilla racemiflora*, *Eupatorium rotundifolium* L., *E. semiserratum* DC., *Ilex glabra*, *Magnolia virginiana*, *Nyssa biflora*, *Osmunda cinnamomea*, *Pinckneya bracteata*, *Pinus elliotii*, *Vaccinium corymbosum*, and *Woodwardia virginica*.

†***Manihot grahamii*** Hook. (Euphorbiaceae)

U.S.A. GEORGIA. **Colquitt Co.:** SW Moultrie, N of Lower Meigs Rd, off Walter Murphy Rd, Carlton Farms property, 31°08.664' N 83°48.558'

W, 12 Jul 2007, *R. Carter 17707 and W.W. Baker* (VSC). **Lowndes Co.:** Valdosta, W side of Jerry Jones Dr along S bank Two Mile Branch, vic. Joree Millpond outlet, shrub 3–4 m tall, locally abundant, 6 Sep 2008, *R. Carter 18527* (VSC, others tbd); Valdosta, S bank of One Mile Branch, between Wainwright St and Sustella Ave, ca. 100m E of Wainwright St, along city bike trail, shrub or small tree with broad spreading crown, 5–6 m tall, ca. 15 cm dbh, locally abundant, 6 Sep 2008, *R. Carter 18528* (VSC, others tbd).—Jones and Coile (1988) map this introduced shrub only in Miller County, and, in review, Dr. Loran C. Anderson (personal communication) brought to our attention a 1974 collection from Early County (*L.C. Anderson 3778*, FSU). Our observations of *M. grahamii* in woodlots and disturbed urban sites in southern Georgia indicate it is potentially invasive. It is also naturalized in Florida and Louisiana (Reese 1992; Wunderlin & Hansen 2003, 2008).

†***Melinis repens*** (Willd.) Zizka (Poaceae)
Rhynchelytrum repens (Willd.) C.E. Hubb.

U.S.A. GEORGIA. **Clinch Co.:** 2.9 mi ENE Stockton, CSX right-of-way S of Hwy US 84, 30.95292°N 82.96253°W, 16 Nov 2007, *R. Carter 18287 and W.W. Baker* (VSC, others tbd). **Echols Co.:** Mayday, along railroad right-of-way, just E Mayday Rd crossing, 30.82685°N 83.00892°W, 14 Oct 2008, *R. Carter 18656* (VSC, others tbd). **Lowndes Co.:** E of Valdosta by Howell Rd, railroad right-of-way just S of Howell Rd, vic. jct Howell Rd and Otter Creek Rd, UTM 17 294105E 3412428N (NAD27), plants locally abundant, 15 Oct 2003, *R. Carter 15165* (VSC, others tbd). **Ware Co.:** E Waycross, vic. jct Hwy US 82 and Driggers Lane, along railroad by N side of Hwy US 82, 31° 11.884'N 82°18.164'W, 21 Nov 2004, *R. Carter 15913* (VSC, others tbd).—Widely introduced in tropical and subtropical regions, this species is native to South Africa (Hitchcock & Chase 1951; Wipff 2003b). Natal grass was mapped from Lowndes and Echols counties in southern Georgia (Jones & Coile 1988; Sweeney & Giannasi 2000). Its dispersal has been observed along railroads and highways in recent years, and the preceding data document recent collections of *M. repens* in southern Georgia.

Mikania cordifolia (L.f.) Willd. (Asteraceae) – S (S1)

U.S.A. GEORGIA. **Camden Co.:** 3.1 mi N Kingsland jct Hwys US 17 and GA 40, 0.3 mi E jct Hwy US 17 and Harrietts Bluff Rd, 30°50.573' N 81°41.780'W, hydric hammock along creek, S side Harrietts Bluff Rd, 19 May 2005, *R. Carter 15964* (VSC-specimen sterile); 4 Nov 2005, *R. Carter 16329* (VSC, others tbd).—Holmes (2000) reported this species new to Georgia, based upon a Bryan County specimen. Herein, we document the second station and a new county record of *M. cordifolia* in Georgia.

†****Mitracarpus hirtus*** (L.) DC. (Rubiaceae)

U.S.A. GEORGIA. **Charlton Co.:** 5.67 air mi S Moniac jct Hwys GA 185 and GA 94, vic. creek crossing by Hwy GA 185, roadside, 30°26.497'N 82°11.898'W, 12 Oct 2006, *R. Carter 17286 and W.W. Baker* (VSC).—These voucher specimen data comprise the first report of this species from Georgia.

†***Orobanche minor*** Smith (Orobanchaceae) – FNW

U.S.A. GEORGIA. **Colquitt Co.:** SW corner of county, McCracken Farm, jct Hwy GA 202 and Luke Rd (CR 40), vic. milemarker 3, 31°05.237'N 83°57.196'W, residential yard along E side Hwy GA 202, locally common, 6 Apr 2003, *R. Carter 14821* (VSC). **Mitchell Co.:** Pelham, just E jct Cannon St and Castleberry St, 31°07.747'N 84° 09.421'W, 30 Apr 2003, *R. Carter 14920* (VSC). **Thomas Co.:** Ochlocknee, weedy roadside, about 100 yards E of SCL Railroad on Hwy GA 188, 13 May 1975, *J.A. Rollins s.n.* (VSC); same site, 22 Apr 1988, *R. Carter and S. Carter 6488* (GA, VSC); between Ochlocknee and Coolidge, 100–200 m E jct Hwy GA 188 and Hwy GA 202, right-of-way along Hwy GA 188, locally abundant, parasitic on *Hypochoeris brasiliensis*, 7 May 1993, *R. Carter 10708* (VSC); Coolidge, locally common in lawns and along streets, 21 May 1993, *R. Carter 10732, M. Overstreet and R. Eaton* (VSC).—A federally regulated noxious pest (Anonymous 2006), small broomrape is native to the Middle East and North Africa and is parasitic on tobacco, clover, and tomatoes (Miller et al. 1997). Duncan (1985) reported it from Baker County, Georgia, based upon a 1983 collection, and Jones and Coile (1988) mapped it only in Baker County. The data reported herein substantiate this species from additional Georgia counties. Also, there are reliable

anecdotal reports of small broomrape from Pavo, Brooks County, near the Brooks-Thomas county line from where it has ostensibly been eradicated.

***Orobanche uniflora* L.**

U.S.A. GEORGIA. **Colquitt Co.:** Moultrie, vicinity of Spence Field, N of Hwy GA 33, mown area around buildings adjacent to main runway, 22 Apr 1988, *R. Carter and S. Carter 6486* (GA, VDB, VSC). **Lowndes Co.:** Moody Air Force Base, mowed area along edge of woods, vicinity Mission Pond picnic shelter, 9 Apr 1994, *R. Carter 11700 and C. Wilson* (VSC); Hahira, 303 Lee Street, in lawn, 11 Apr 1994, *C. Wilson 113* (VSC); N Valdosta, ca. 150 m S jct Staten Rd and Orr Rd, along E side State Rd, locally abundant, 30.922147°N 83.291225°W, 5 Apr 2009, *R. Carter 18791* (VSC). **Thomas Co.:** weedy roadside in Ochlocknee, just E of railroad track along Hwy GA 188, local, 9 Apr 1988, *R. Carter 6475* (GA, VDB, VSC); Hwy US 84, W of Thomasville, at entrance to River Creek Wildlife Management Area, locally abundant along S side Hwy US 84, 30.87667°N 84.06081°W, 17 Apr 2009, *R. Carter 18792 and P. Bauer* (VSC). **Tift Co.:** Tifton, northern end of town along Missouri Avenue, near intersection of Hwy 41 and 20th Street, locally abundant in lawns, 12 Mar 1990, *L. Taylor 043* (VSC). **Worth Co.:** Sylvester, corner of Hwy US 82 W and Isabella Street, Jeffords Park, 11 April 1992, *L. Taylor s.n.* (VSC).—This species was not mapped for the Georgia coastal plain by Jones and Coile (1988). However, in 1988 it was discovered in Colquitt County in the coastal plain by Ms Edna Virgo, USDA, APHIS PPQ, Moultrie, GA, and was reported by Musselman (1988) without citation of a voucher specimen. Subsequently, it has been found in three additional coastal plain counties, where its primary host is *Hypochaeris chillensis* (Kunth) Britt., a widespread and common lawn weed. However, in one case Ms Lynn Taylor (personal communication) noted and collected an apparent haustorium-root connection with centipede grass! These voucher specimen data document the occurrence of *O. uniflora* from additional counties in the Coastal Plain Region of Georgia.

†***Oxycaryum cubense*** (Poepp. & Kunth) Palla fo. ***paraguayense*** (Maury) Pedersen (Cyperaceae)

U.S.A. GEORGIA. **Seminole Co.:** Lake Seminole, 30.76063°N 84.89085°W, common and lo-

cally abundant in floating batteries along edge of lake, 22 Jul 2008, *R. Carter 18461 with W.W. Baker and D. Morgan* (VSC, others tbd).—This aquatic sedge was first reported from Georgia by Carter in Bryson et al. (1996) and was recently reported as an invasive weed along the Tennessee-Tombigbee Waterway in east-central Mississippi and adjacent west-central Alabama (Bryson et al. 2008). Herein, we report an additional and second county record of *O. cubense* from Georgia.

†****Paederia foetida*** L. (Rubiaceae)

U.S.A. GEORGIA. **Camden Co.:** E side I-95 between river and welcome station, Exit 1, mixed with Carolina jasmine, Virginia creeper, briars, grapevine, 30 Jun 1998, *A.E. Miller AEM-PD-04* (VSC). **Lowndes Co.:** Valdosta, Michael Terrace, weed in residential yard, locally common vine on foundation shrubs, 1 Aug 2002, *R. Carter 14659* (VSC, others tbd). **Thomas Co.:** Greenwood Plantation, low pine woods, burned annually, 27 Jul 1983, *R. Komarek s.n.* (TTRS); Thomasville, 105 Boston Rd, yard, 25 Jun 1998, *A.E. Miller AEM-PD-03* (VSC).—These voucher specimen data provide documentation of skunkvine in Georgia. This Asian introduction is widely distributed in Florida (Wunderlin & Hansen 2008), where it is listed as a Category I exotic invasive species (FLEPPC 2007).

Palafoxia integrifolia (Nutt.) Torr. & A. Gray (Asteraceae) – S(S2?)

U.S.A. GEORGIA. **Brooks Co.:** ca. 4.3 air mi E of Nankin, flatwoods along Rocky Ford Rd, ca. 0.2 mi E Nankin Rd, 30°39.095'N 83°24.619'W, 7 Nov 2003, *R. Carter 15270* (VSC). **Camden Co.:** vic. Kingsland, Scrubby Bluff Rd, 30°46.354'N 81°40.120'W, sandscrub, 14 Oct 2006, *R. Carter 17316 and W.W. Baker* (VSC); 4.52 air mi SW Tarboro, 0.1 mi SE jct Old Hwy 259 and Midriver Road, 30.99055°N 81.87205°W, sandy upland, locally common, 14 Oct 2008, *R. Carter 18664* (VSC, others tbd). **Charlton Co.:** just E Folkston, N Hwy GA 40, vic. Peoples Baptist Church, 30°50.529'N 81°58.559'W, sandridge, 3 Oct 2003, *R. Carter 15115* (VSC); 2.86 air mi S Moniac jct Hwys GA 185 and GA 94, W side Hwy GA 185, between Hwy GA 185 and St. Marys River, 30°28.944'N 82°11.941'W, 12 Oct 2006, *R. Carter 17282 and W.W. Baker* (VSC); Devils Elbow TNC Preserve, 30°46.406'N 82°01.718'W, 13 Oct 2006, *R. Carter 17302 and W.W. Baker* (VSC). **Lanier Co.:** NE of

Lakeland, E of Hwy GA 135 by Linda St, disturbed sand ridge, vic. borrow pit and powerline, local, 5 Sep 2002, *R. Carter 14748* (VSC).—This species is infrequent to rare on dry sandy sites where it is associated with *Aristida stricta*, *Asclepias humistrata* Walter, *Asimina incana* (W. Bartram) Exell, *Berlandiera pumila* (Michx.) Nutt., *Carphephorus corymbosus* (Nutt.) Torr. and A. Gray, *Ctenium floridanum*, *Cyperus plukenetii* Fern., *Eryngium aromaticum*, *Pinus palustris*, *Quercus hemisphaerica*, *Q. incana*, *Q. laevis*, *Q. margaretta*, *Q. nigra*, *Q. pumila*, and *Serenoa repens*.

†***Panicum maximum*** Jacq. (Poaceae)

Urochloa maxima (Jacq.) R.D. Webster

Megathyrsus maximus (Jacq.) B.K. Simon & S.W.L. Jacobs

U.S.A. GEORGIA. **Lowndes Co.:** SW of Kinderlou, 30°46.835'N 83°22.989'W, small opening in pine plantation, common, 6 Sep 2007, *R. Carter 18007* and *W.W. Baker* (VSC, others tbd). **Thomas Co.:** Boston-Monticello Rd, 0.9 mi NW jct with Mitchell Rd, 30°41.367'N 83°47.943'W, locally common in ditch adjacent to woods, 17 Sep 2006, *R. Carter 17221* (VSC, others tbd).—These data provide additional county records for this robust tropical American panic grass that Sweeney and Giannasi (2000) map in only Spalding County.

†****Panicum repens*** L.

U.S.A. GEORGIA. **Camden Co.:** Kings Bay Submarine Base, dredge disposal area ca. 300 m southeast of U.S.S. Kamehameha Ave and ca. 1.25 air mi west of Warrior Wharf, 30°47'25"N 81°31'06"W, steep embankment along service road atop dike, common, 8 Jul 1996, *R. Carter 13072* (VSC, others tbd); Kings Bay Submarine Base, flatwoods along edge of cypress-gum wetland, 0.5 mi W jct U.S.S. Mariano Vellajo Ave and U.S.S. Sam Houston Rd, 30°48'13"N 81°33'12"W, locally abundant, 22 Aug 1996, *R. Carter 13586* (VSC, others tbd); just N Woodbine, N of Satilla River, W of Hwy US 17, 30°58.615'N 81°43.607'W, disturbed area below bridge, local, 20 May 2006, *R. Carter 16656* and *W.W. Baker* (VSC); St. Marys, vic. public boat ramp at end of E. Meeting St, 30°43.937'N 81°32.394'W, open disturbed sand, common, 18 Aug 2006, *R. Carter 17149* and *W.W. Baker* (VSC). **Chatham Co.:** S Savannah, ditch along W side Veterans Parkway, 3.4 mi N jct Hwy GA 204 and Veterans Parkway, 32°01.249'N 81°10.384'W, lo-

cally abundant in ditch and along roadbank, 14 Jul 2006, *R. Carter 16950* (VSC, others tbd). **Colquitt Co.:** Moultrie, 1.4 mi N jct Hwys US 319 and GA 33, 31°07.971'N 83°46.288'W, ditch along W side Hwy US 319, locally abundant, 18 Jun 2004, *R. Carter 15375* (VSC, others tbd). **Cook Co.:** Adel, just W jct I-75 and Hwy GA 37, 31°08.248'N 83°26.532'W, ditch slope along S side Hwy GA 37, locally abundant, 18 Jun 2004, *R. Carter 15377* (VSC, others tbd). **Glynn Co.:** Anguilla, jct Hwy GA 99 and GA 32, 31°15.325'N 81°36.217'W, open swale along right-of-way, locally common in standing water, 13 Jul 2003, *R. Carter 15024* (VSC, others tbd). **Lowndes Co.:** 1.5 mi S Cecil by Hwy US 41, 31°01.015'N 83°22.724'W, locally abundant in shallow ditches on both sides of Hwy US 41, 18 Jun 2004, *R. Carter 15378* (VSC, others tbd); Valdosta, Valdosta State University campus, 30°50.495'N 83°17.811'W, moist slope adjacent to playing field along One Mile Branch, W of Sustella Ave, 2 Nov 2004, *R. Carter 15837* (VSC, others tbd). **Worth Co.:** Poulan, N Hwy US 82, E jct Whidden Mill Rd and Hwy US 82, 31°31.646'N 83°47.739'W, ditch and road berm along Whidden Mill Rd, locally abundant, 22 Jul 2005, *R. Carter 16053* (VSC, others tbd).—These voucher specimen data document the distribution *P. repens* and its recent dispersal in Georgia. Although a common weed along roadside ditches in Florida and along the Gulf Coast westward into eastern Texas and listed as a Category I invasive weed in Florida and as a Noxious Weed in Alabama, Arizona, Hawaii, and Texas (USDA Plants Database 2008), torpedo grass was scarcely known from Georgia until recently (cf. Freckmann & Lelong 2003b). Jones and Coile (1988) did not map it at all, and Sweeney and Giannasi (2000) show it only in Crisp County. Moreover, there were no specimens of *P. repens* from Georgia at VSC until 1996; therefore, the 1996 vouchers cited above probably represent the first collections for the state.

Panicum sphagnicola Nash

D. sphagnicola (Nash) LeBlond

U.S.A. GEORGIA. **Camden Co.:** Kings Bay Submarine Base, 1.22 air mi WNW of St. Marys Gate, wetland along E side of cypress-gum strand, S of unmarked dirt trail, 30°46'17"N 81°33'59"W, Harrietts Bluff 7.5' USGS quadr., elev. 20–25 ft, 5 Sep 1996, *R. Carter 13654* (VSC, others tbd). **Lanier Co.:** Moody Air Force Base, Winnersville

Bombing Range, along eastern end of crescent-shaped wetland, locally common, 15 Oct 1994, *R. Carter 12345* (VSC, others tbd).—These voucher specimen data document additional records of this distinctive grass in Georgia (LeBlond 2001), which was not mapped by Sweeney and Giannasi (2000). Freckmann and Lelong (2003a) treat *P. sphagnicola* as a synonym of *Dichanthelium dichotomum* (L.) Gould subsp. *lucidum* (Ashe) Freckmann & Lelong. *Panicum sphagnicola* occurs in open grass-sedge dominated habitats along shrubby wetland margins, with *Acer rubrum*, *Carex* spp., *Eriocaulon* sp., *Hypericum cistifolium*, *Ilex glabra*, *Juncus* spp., *Lyonia lucida*, *Morella cerifera*, *Nyssa biflora*, *Panicum* sp., *Persea palustris*, *Pinus elliotii*, *Pluchea* sp., *Rhexia* sp., *Rhynchospora* spp., *Sarracenia minor*, *Serenoa repens*, *Taxodium ascendens*, *Vaccinium corymbosum*, and *Xyris* spp.

Panicum tenerum Beyrich ex Trin. – S(S1)

U.S.A. GEORGIA. **Turner Co.:** 2.3 mi W of Irwin-Turner county line, along north side Hwy GA 107, ca. 31°43'24"N 83°29'39"W, seasonally wet pond embedded in sand ridge, margin of pond, locally common, 1 Aug 1995, *R. Carter 12591* (VSC).—These voucher specimen data substantiate an additional county record for this rare grass, which, in Georgia, was previously known from only Miller County (Sweeney & Giannasi 2000). See *Litsea aestivalis* for associates.

****Panicum virgatum*** L. var. ***cubeense*** Griseb.

U.S.A. GEORGIA. **Talbot Co.:** 4.0 mi S of Geneva by Hwy GA 41, Upatoi Creek bottom, N side of creek, locally common, open sandy creek bank, 13 Aug 2002, *R. Carter 14685* and *R. Kral* (VSC, others tbd).—Although Hitchcock and Chase (1951) indicate its distribution as extending from Massachusetts to Florida, Freckmann and Lelong (2003) dismissed *P. virgatum* var. *cubeense* as an “end point” of clinal variation, and others have not recognized this distinctive variety of *P. virgatum*. Since it has not been treated as a component of the state's flora (cf. Jones & Coile 1988; Sweeney & Giannasi 2000), herein we provide voucher collection data documenting its occurrence in Georgia.

†****Parthenium hysterophorus*** L. (Asteraceae)

U.S.A. GEORGIA. **Colquitt Co.:** ca. 1.5 air mi SSE Berlin center, S of Hwy GA 133 by Scott

Cemetery Rd, vic. Mahadev Temple, UTM 17 251630E 3437611N (NAD27), USGS Berlin East quadr., locally abundant weed around farm buildings, 18 Oct 2003, *R. Carter 15169* (VSC, others tbd).—Although wide-ranging and a common weed in some parts of the United States, especially in the mid-portion of the country, *P. hysterophorus* has not been reported previously from Georgia (Jones & Coile 1988; Strother 2006b).

†****Paspalum malacophyllum*** Trin. (Poaceae)

U.S.A. GEORGIA. **Grady Co.:** Sherwood Plantation, 0.9 mi N of Rocky Hill Church, old field land with sandy-loam soil, 6 Sep 1991, *A. Gholson, Jr. 12447* with *W. Baker* (TTRS); Sherwood Plantation by Meridian Rd, locally abundant in old field and adjacent cut-over pineland, both annually burned, 10 Jul 1992, *R.K. Godfrey 84321* with *A. Gholson* and *H.L. Stoddard, Jr.* (VSC).—Sweeney and Giannasi (2000) do not include this species.

†***Pavonia hastata*** Cav. (Malvaceae)

U.S.A. GEORGIA. **Camden Co.:** 0.15 mi S Jerusalem jct Bailey Mill Rd and Owen Mill Rd, by Bailey Mill Rd, 30°58.432N 81°50.572W, disturbed edge of mesic flatwoods, locally common, 30 Jun 2006, *R. Carter 16903* and *W.W. Baker* (VSC, others tbd).—This South American species is introduced in Mexico and Australia and the southeastern United States, where it was previously known only from Charlton County, Georgia, and Citrus and Levy counties in Florida (Fryxell 1988; Jones & Coile 1988; Wunderlin & Hansen 2008). Herein we provide data for the second county record of *P. hastata* in Georgia.

†****Pectis prostrata*** Cav. (Asteraceae)

U.S.A. GEORGIA. **Camden Co.:** Kingsland, Hwy I-95 rest stop and welcome center along E side northbound lane, 30.75313°N 81.64894°W, 17 Nov 2007, *R. Carter 18304* and *W.W. Baker* (VSC, others tbd).—Keil (2006) reported this species from Mexico, the West Indies, Central America, and in the United States from Florida, Louisiana, Texas, and westward into Arizona and predicted its northward dispersal out of Florida. The collection data reported herein comprise the first report of *P. prostrata* from Georgia, where it was locally abundant, forming extensive mats in a mowed area along a parking lot at an interstate rest stop.

Pedicularis canadensis L. (Scrophulariaceae)

U.S.A. GEORGIA. **Camden Co.:** ca. 6.0 air mi W of Kingsland by Hwy GA 40, just W of Temple Creek Rd and E of Temple Creek, cemetery at Temple Creek Church, 30°48.571'N 81°47.324'W, locally abundant in cemetery and adjacent woods, 25 March 2006, *R. Carter 16425* (VSC, others tbd).—This species is distributed primarily in northern Georgia and in three counties in the Chattahoochee-Flint River drainage in the southwestern part of the state (Jones & Coile 1988). In Florida it is mapped in the panhandle with an outlier in Clay County (Wunderlin & Hansen 2008). The data reported herein comprise the first record of *P. canadensis* from the southeastern quadrant of Georgia.

Penthorum sedoides L. (Crassulaceae)

U.S.A. GEORGIA. **Camden Co.:** 1.86 air mi NNE Whiteoak jct Hwys US 17 and GA 252, 1.12 air mi W of Red Bluff by Oscar Rd, 31°03.124'N 81°42.651'W, swampforest along creek, locally common, 22 Sep 2006, *R. Carter 17261 and W.W. Baker* (VSC, others tbd).—According to Jones and Coile (1988), this species is not known from the southeastern quadrant of Georgia, and the nearest stations are in southwestern Georgia and Screven County along the Savannah River. Moreover, it is mapped in Florida only from the panhandle (Wunderlin & Hansen 2008). These data document an outlying population of *P. sedoides* and the first collection from southeastern Georgia.

Phragmites australis (Cav.) Trin. ex Steud. (Poaceae)

U.S.A. GEORGIA. **Camden Co.:** 0.6 mi S of Woodbine jct Hwys US 17 and GA 110, along E side Hwy GA 110, 30°57.845'N 81°44.005'W, local in marshy wetland, 22 Sep 2006, *R. Carter 17258 and W.W. Baker* (VSC, others tbd). **Seminole Co.:** Lake Seminole, 30.75515°N 84.89085°W, locally common along edge of lake, plants 4–5 m tall, with drooping inflorescences, 22 Jul 2008, *R. Carter 18460, W.W. Baker and D. Morgan* (VSC, others tbd); Lake Seminole, 30.74997°N 84.88372°W, locally abundant along edge of lake, plants 7–8 m tall, 20 Nov 2008, *R. Carter 18733, W.W. Baker and D. Morgan* (VSC, others tbd).—Although widely distributed throughout North America, the distribution of this species does not include Georgia in *The Flora of North America* (Allred 2003a), and

Sweeney and Giannasi (2000) mapped it only in Glynn County. Herein, we report two additional county records for Georgia: one from along the Atlantic coast in Camden County and the other from the Gulf Coastal Plain in Seminole County. Our specimens are of two types. Those from Camden County along the Atlantic coast are less robust plants with smaller, more-or-less erect, purplish inflorescences and appear to be either the non-native, invasive *P. a. ssp. australis* or the native, northern *P. a. ssp. americanus* Saltonstall, Peterson & Soreng. Ligules (including cilia) on these specimens exceed the range given for *P. a. ssp. australis*, but the lower glumes (2.5 mm) are shorter than allowed for *P. a. ssp. americanus*. Thus, we could not reliably place them using keys in Saltonstall et al. (2004) and Barkworth et al. (2007). Our plants from Seminole County in the Gulf Coastal Plain—considerably more robust with larger, nodding, tan inflorescences—fit *P. a. ssp. berlandieri* (Fourn.) Saltonstall & Hauber, the native Gulf Coast taxon. Ward and Jacono (2009) provide an informative discussion and key for the two native taxa that occur in Florida, but lacking from their key is the non-native, invasive *P. a. ssp. australis*.

Physostegia leptophylla Small (Lamiaceae) – S (S2S3)

U.S.A. GEORGIA. **Bryan Co.:** Ft. Stewart Military Reservation, floodplain along Ogeechee River, 0.25 mi SE of Jct. FS 60 and FS 61, elev. 2–5 m, rare, 4 Aug 1992, *R. Carter 10264 and J. Lusk* (VSC); Ft. Stewart Military Reservation, vic. Kelly's Landing, bank of Ogeechee River, elev. ca 2 m, locally common, 5 Aug 1992, *R. Carter 10290 and J. Lusk* (VSC). **Camden Co.:** ca. 4.5 air mi SSE of Jerusalem, vic. Jim Baileys Mill, 30°55.442' N 81°49.263'W, floodplain woods along Satilla River, locally common, 20 May 2006, *R. Carter 16696 and W.W. Baker* (VSC).—These data provide additional documentation of this rarely collected species in Georgia, where it was observed in fine-textured soils of frequently flooded floodplain forests along tidal coastal rivers. Associates include *Acer rubrum*, *Alnus serrulata* (Aiton) Willd., *Amorpha fruticosa* L., *Betula nigra* L., *Carex intumescens* Rudge, *C. louisianica* L.H. Bailey, *Carya aquatica* (Mill.) Sweet, *Celtis laevigata*, *Cephalanthus occidentalis*, *Eryngium aquaticum* L., *Fraxinus caroliniana*, *Gleditsia aquatica* Marshall, *Hibiscus laevis* All., *Leucothoe racemosa*, *Peltandra virginica* Raf., *Planera aquatica* J.F.

Gmel., *Platanthera flava* (L.) Lindl., *Polygonum sagittatum* L., *Quercus laurifolia*, *Q. lyrata* Walter, *Sabal minor*, *Salix caroliniana* Michx., *Sebastiania fruticosa* (Bartram) Fernald, *Selaginella apoda* (L.) Spring, and *Taxodium distichum*.

Pinguicula primuliflora C.E. Wood & R.K.

Godfrey (Lentibulariaceae) – T

U.S.A. GEORGIA. **Taylor Co.:** 3.2 mi N of Rupert by Hwy US 19 to just north of Whitewater Creek, then E 2.1 mi by gravel road S2093, in sphagnum mat on small island in cool clear tributary of Whitewater Creek, 23 Apr 1989, *R. Carter 7818 and T. Patrick* (VSC); 6.1 mi S of Butler by Hwy GA 137, Atlantic white cedar swamp along Little Whitewater Creek, shallow sandy highly branched spring-fed tributary of Little Whitewater Creek, 25 May 1991, *R. Carter 8675 and M.W. Morris* (VSC).— Jones and Coile (1988) mapped this in Georgia from only Early County. Herein, we report the second county record of this species from the state. Associates of *P. primuliflora* at the Taylor County sites were *Acer rubrum*, *Alnus serrulata*, *Chamaecyparis thyoides* (L.) Britt. et al., *Ilex coriacea*, *Itea virginica*, *Leucothoe racemosa* (L.) A. Gray, *Liriodendron tulipifera*, *Lyonia lucida*, *Magnolia virginiana*, *Nyssa biflora*, *Sarracenia rubra* Walter, and *Xanthorrhiza simplicissima* Marshall.

Plantago sparsiflora Michx. (Plantaginaceae) – S (S2)

U.S.A. GEORGIA. **Camden Co.:** 6.5 mi SE Kingsland by M.L. King Blvd, 2.8 mi SE Camden County High School, 1.0 mi NW jct Hwy GA 40 and Colerain Rd by Colerain Rd, then 0.24 mi E jct Colerain Rd and Co. Rd 78 by Co. Rd 78, 30° 48'02"N 81°36'34"W, locally common road shoulder and edge of swamp, 25 Oct 1996, *R. Carter 13952* (VSC, others tbd); S of Atkinson, NW of Tarboro, jct Old Hwy 259 and Old Merrow Community Rd, by Old Hwy 259, 31°03.869'N 81° 52.940'W, plants loosely cespitose-rhizomatous, locally common, roadside, 29 Apr 2006, *R. Carter 16516* (VSC, others tbd); 2.4 mi S Jerusalem jct Bailey Mill Rd and Owen Mill Rd, by Bailey Mill Rd, locally common along road and in disturbed flatwoods, 30°56.540'N 81°50.871'W, 30 Jun 2006, *R. Carter 16901 and W.W. Baker* (VSC). **Charlton Co.:** 3.7 mi ENE Folkston by Hwy GA 40, 0.6 mi ENE powerline right-of-way, roadside, locally common, 8 Apr 2001, *R. Carter 14476* (VSC,

others tbd); just NW of Homeland along Old Dixie Hwy, vic. hydric barrowpit along W side of road, roadside, locally common, 30°52.298'N 82° 02.665'W, 22 Oct 2003, *R. Carter 15240* (VSC, others tbd).—Harper (1903b) commented on the rarity of *P. sparsiflora* in Georgia. Although it has a restricted range in southeastern Georgia, it is occasional to common and sometimes locally abundant there. In fact, after a point it seemed counterproductive to make additional voucher specimens documenting populations from these counties. It was almost invariably found along mowed roadsides and nowhere else; however, one population (*Carter 16901 and Baker*) did extend some distance away from a dirt road into adjacent cut-over mesic flatwoods with a pine-hardwood mixture.

****Polygala crenata*** C.W. James (Polygalaceae)

U.S.A. GEORGIA. **Charlton Co.:** Devil's Elbow Natural Area, vic. Traders Hill, 30°45.863'N 82° 01.291'W, clay-based seasonal wetland, 8 Jun 2006, *R. Carter 16758 and W.W. Baker* (VSC).—Wunderlin and Hansen (2008) map it in most of the counties of the Florida Panhandle, including those along the southwestern boundary of Georgia; however, Jones and Coile (1988) do not map this species for Georgia.

****Polygonum meisnerianum*** Cham. & Schltdl. var. ***beyrichianum*** (Cham. & Schltdl.) Meisn. (Polygonaceae) – S(S1?)

Persicaria meisneriana M. Gómez var. *beyrichiana* (Cham. & Schltdl.) C.C. Freeman

U.S.A. GEORGIA. **Brooks Co.:** 12.1 air mi SW Quitman jct Hwys US 84 and US 221, 0.55 mi SW Grooverville Cemetery, vic. Aucilla River bridge on Old Grooverville Rd, 30°42.743'N 83°44.692' W, floodplain along E bank of river, swamp forest, locally common along S side bridge, clambering vine, 17 Sep 2006, *R. Carter 17223* (VSC).— This species was first observed at this site by W.W. Baker in 1995, and the voucher specimen data cited herein document its occurrence in Georgia.

Prenanthes autumnalis Walter (Asteraceae)

U.S.A. GEORGIA. **Appling Co.:** 8.8 mi N Baxley by E side Hwy US 1, powerline right-of-way, gentle seepage slope, sandy loam, 29 Oct 2005, *R. Carter 16293 and R. Kral* (VSC). **Camden Co.:** 0.81 mi S Tarboro jct Hwy GA 252 and Refuge Rd, by

Owens Ferry Rd, 31.00178°N 81.80392°W, local, 8 Nov 2007, *R. Carter 18261* (VSC); NW Seals, 0.2 mi S jct Old Jefferson Rd and Groover Rd, Tiger Island, 30.90208°N 81.72553°W, open edge flatwoods adjacent to cypress-gum depression, infrequently mowed strip along E side Old Jefferson Rd, under powerline, with *Acer rubrum*, *Anthaenantia rufa*, *Erigeron vernus*, *Ilex glabra*, *Lobelia glandulosa*, *Morella cerifera*, *Osmunda cinnamomea*, *Persea palustris*, *Pinus elliotii*, *P. palustris*, *P. serotina*, *P. taeda*, *Polygala lutea*, *Pteridium aquilinum*, *Quercus nigra*, *Q. pumila*, 17 Nov 2007, *R. Carter 18312* and *W.W. Baker* (VSC).—Jones and Coile (1988) show only two counties in Georgia, Toombs and Laurens. Herein, we report two additional county records of *P. autumnalis*, both in the Lower Coastal Plain.

†****Pseudognaphalium luteoalbum*** (L.) Hilliard & B.L. Burt

U.S.A. GEORGIA. **Brooks Co.:** Hwy US 84, 0.45 mi W Dixie jct, 30.79239°N 83.67565°W, 12 Jun 2008, *R. Carter 18403* (VSC, others tbd). **Camden Co.:** Hwy GA 40, 0.3 mi W jct Hwy GA 40 and Springhill Rd, 30.81068°N 81.83528°W, locally abundant on roadshoulder along S side Hwy GA 40, 30 Apr 2008, *R. Carter 18363* and *W.W. Baker* (VSC, others tbd). **Charlton Co.:** 5.6 mi S Racepond jct Hwy US 17 and Hwy GA 15/121, 0.3 mi N Spanish Creek, 30.92457°N 82.09232°W, locally abundant along roadside, 29 Apr 2008, *R. Carter 18360* and *W.W. Baker* (VSC, others tbd). **Clinch Co.:** 2.5 mi E Dupont, Hwy US 84, ca. milemarker 9, 31.01153°N 82.84188°W, locally abundant along weedy roadside, 29 Apr 2008, *R. Carter 18353* and *W.W. Baker* (VSC, others tbd). **Crisp Co.:** Hwy I-75, 1.67 mi S of Arabi exit, 31.81202°N 83.70812°W, disturbed ground in median, locally abundant, 20 May 2009, *R. Carter 18861* and *J. Carter* (VSC, others tbd). **Lowndes Co.:** 3.1 mi W Naylor, Hwy US 84, between milemarker 20–21, 30.88958°N 83.12589°W, locally abundant along road shoulder, 29 Apr 2008, *R. Carter 18351* and *W.W. Baker* (VSC, others tbd). **Thomas Co.:** Hwy US 84, 1.7 mi E Thomasville jct Hwy US 84 and Hwy US 19, 30.82815°N 83.91777°W, 12 Jun 2008, *R. Carter 18400* (VSC, others tbd). **Tift Co.:** Tifton, W side I-75 at Southwell Blvd (exit 59), 31.41676°N 83.50610°W, locally abundant along roadside, 20 May 2009, *R. Carter 18858* and *J. Carter* (VSC, others tbd).—This weed is widespread in the Old World and has been

reported from southern Florida, Arkansas, Louisiana and west into California, Oregon and Washington, but populations have not been previously documented from Georgia (Wunderlin & Hansen 2003, 2008; Nesom 2004, 2006a). Timing of field work relative to mowing of highway rights-of-way would seem to be critical in detecting this species. Although locally abundant along extensive stretches of highway in southern Georgia, *P. luteoalbum* would probably have gone undetected had mowing occurred just prior to our activity.

†***Pteris vittata*** L. (Pteridaceae)

U.S.A. GEORGIA. **Camden Co.:** 4.45 air mi SSE Kingsland jct Hwy US 17 and Hwy GA 40, open ruderal site below I-95 bridge near bank of St. Marys River, 30°44.706'N 81°39.186'W, 18 Aug 2006, *R. Carter 17156* and *W.W. Baker* (VSC).—Herewith, we report voucher data for an additional Georgia county for this naturalized species that Sweeney and Giannasi (2000) map only in Echols and Chatham counties. Stanford and Diggs (1998) added this Asian fern to the Texas flora, and Woods and Diamond (2003) reported a range extension in southern Alabama.

Pteroglossaspis ecristata (Fern.) Rolfe (Orchidaceae) – T, S(S1)

U.S.A. GEORGIA. **Camden Co.:** Kings Bay Submarine Base; ca. 0.35 mi (air) ENE of south end of U.S.S. Kamehameha Avenue, Davis Farm, meadow-like, annually mowed, open field, Harrietts Bluff 7.5' quadr., elev. 5–10 ft, 30°45' 35"N 81°30'40"W, local, 13 Sep 1996, *R. Carter 13710* (VSC). **Charlton Co.:** Devil's Elbow Natural Area, vic. Traders Hill, 30°46.406'N 82°01.718'W, degraded sandridge planted in *Pinus taeda*, with *Pinus palustris*, *Quercus laevis*, *Q. incana*, *Q. margareta*, *Q. geminata*, *Serenoa repens*, *Rhus copallinum*, *Asimina incana*, *Palafoxia integrifolia*, *Eryngium aromaticum*, single fruiting specimen from previous season observed and photographed, 13 Oct 2006, *R. Carter and W.W. Baker s.n.* (VSC-photograph only, no voucher). **Worth Co.:** 1.2 mi W jct Sumner Rd and Phillip Causey Rd by Philip Causey Rd, elev. ca. 320 ft, 31°21.804'N 83°47.219'W, 27 Sep 2007, *R. Carter 18147* and *W.W. Baker* (VSC).—Although Romero-Gonzalez (2002) does not include Georgia in the distribution of this species, Sweeney and Giannasi (2000) map it in four counties in eastern Georgia: Brantley, Long, McIntosh and Tatnall.

Herein, we report additional county records of this state-listed rare species.

Pycnanthemum floridanum Grant & Epling (Lamiaceae)

U.S.A. GEORGIA. **Camden Co.:** 4.9 mi S Woodbine jct Hwy US 17 and Hwy GA 110, vic. milemarker 11, USGS Woodbine quadr., UTM 17 432019E 3418917N (NAD27), W side Hwy US 17, locally abundant, 22 Jun 2007, *R. Carter 17648* (VSC, others tbd).—Coile and Garland (2003) cited *P. floridanum* among Florida's threatened and endangered plants, and, in Georgia, Jones and Coile (1988) show this essentially Floridian species only in Glynn County. Thus, herein, we report an additional Georgia county record for *P. floridanum*.

Quercus austrina Small (Fagaceae) – S(S3?)

U.S.A. GEORGIA. **Camden Co.:** Kings Bay Submarine Base, 0.5 mi (air) NNW of south end of U.S.S. Kamehameha Ave, scrub hammock along north side Torpedo Magazine access road, W of U.S.S. Kamehameha Ave, between U.S.S. Kamehameha Ave and Torpedo Magazine, 30°45'55"N 81°31'05"W, Harrietts Bluff 7.5' quadr., elev. 10–15 ft, rare, 13 Sep 1996, *R. Carter 13704* (VSC, others tbd); John Baileys Mill (USGS Jerusalem, GA, quadr.), SE of Magnolia Bluff via Bailey Mill Rd to John Bailey Mill Rd, near end of John Bailey Mill Rd, mesic hammock along bank of Satilla River, 30°54.621'N 81°51.868'W, 13 Sep 2007, *R. Carter 18089 and W.W. Baker* (VSC, others tbd).—These data provide additional documentation of this rare species in Georgia. At Kings Bay, *Carter 13704* was found in a scrub hammock with *Bejaria racemosa*, *Carya glabra*, *Ilex ambigua* (Michx.) Torr., *I. opaca*, *Lyonia ferruginea*, *L. lucida*, *Morella cerifera*, *Osmanthus americanus* (L.) Benth. & Hook.f. ex A.Gray, *Persea borbonia* (L.) Spreng., *Quercus chapmanii*, *Q. geminata*, *Q. myrtifolia*, *Q. nigra*, *Q. virginiana*, and *Serenoa repens*. *Carter 18089 and Baker* was taken in a mesic hammock with *Carya glabra*, *Crataegus marshallii* Ettl., *Liquidambar styraciflua*, *Nyssa sylvatica* Marsh., *Pinus taeda*, *P. glabra*, *Quercus alba*, *Q. hemisphaerica*, *Q. virginiana*, *Sabal minor*, *S. palmetto* and *Viburnum obovatum* Walter.

Quercus chapmanii Sarg. – S(S2)

U.S.A. GEORGIA. **Camden Co.:** Kings Bay Submarine Base, Etowah Park, ca. 100 m W of western finger of Etowah Pond, ca. 600 m SW

Etowah Park dock and launch, 30°49'01"N 81°32'49"W, Harrietts Bluff 7.5' USGS quadr., elev. 20–25 ft, local, 2 Jul 1996, *R. Carter 13008* (VSC); Kings Bay Submarine Base, ca. 300 m S of perimeter road along northern boundary of base, W of golf course, ca. 0.75 mi (air) N of golf course club house, 30°50'03"N 81°33'27"W, Harrietts Bluff 7.5' USGS quadr., elev. 20–25 ft, 28 Aug 1996, *R. Carter 13608* (VSC); Kings Bay Submarine Base, ca. 0.70 mi (air) NNW of southern end of U.S.S. Kamehameha Ave, scrub hammock along W side of U.S.S. Kamehameha Ave, between U.S.S. Kamehameha Ave and North River, and between DOSF and Torpedo Magazine, 30°46'01"N 81°31'06"W, Harrietts Bluff 7.5' USGS quadr., elev. 10–15 ft, 29 Aug 1996, *R. Carter 13612* (VSC, others tbd), 25 Oct 1996, *R. Carter 13949* (VSC, others tbd). **Ware Co.:** 13.9 mi W of Waycross, then 1.7 mi N of Hwy US 82 by dirt road, sandridge S of Satilla River, 2 Sep 1987, *R. Carter 6286* (VSC, others tbd); vic. Talmo, sandridge along W side Hwy GA 158 and S of main channel of Satilla River, 31°18.007'N 82°33.574'W, 12 Nov 2006, *R. Carter 17392 and S. Carter* (VSC, others tbd).—These data document additional occurrences of this species which reaches the northern limit of its range in southeastern Georgia and is considered to be rare in the state.

Rhexia nuttallii James (Melastomataceae) – S (S1?)

U.S.A. GEORGIA. **Camden Co.:** vic. Clarks Bluff, "Piney Bluff", 30.77457°N 81.78306°W, 21 Jul 2006, *R. Carter 17077 and W.W. Baker* (VSC); Colerain-May Bluff Rd, 4.1 mi N Hwy GA 40, 30.83633°N 81.89011°W, cut bank with seepage, edge of pine plantation, sandy soil, local and occasional, *R. Carter 18445 and W.W. Baker* (VSC).—Occurring throughout peninsular Florida and into the Florida panhandle, this species reaches its northern limit of distribution in extreme southeastern Georgia (Kral and Bostick 1969). Jones and Coile (1988) map *R. nuttallii* for Georgia only in Brantley and Echols counties. Herein, we report an additional Georgia county record for this state-listed rare species. In Camden County, it was found along the moist ecotone between an infrequently burned longleaf pine-wiregrass savanna and a titi-myrtle holly swamp associated with *Aletris* sp., *Centella asiatica*, *Drosera capillaris*, *Erigeron vernus*, *Ilex glabra*, *Lachnocaulon anceps*, *Lycopodium*

prostratum R.M. Harper, *Mitreola sessilifolia* (J.F. Gmel.) G. Don, *Pinguicula* sp., *Polygala lutea*, *Rhexia alifanus*, *R. mariana*, *Rhynchospora* spp., and *Sarracenia minor*.

Rhexia salicifolia Kral & Bostick

U.S.A. GEORGIA. **Early Co.:** ca. 3.0 air mi WNW Cedar Springs, Schackleford-Williams TNC Preserve, 31°12.090'N 85°04.871'W, elliptical pond surrounded by longleaf pine-wiregrass community, open exsiccated pond bottom, plants locally abundant and dense, 19 Jul 2007, *R. Carter 17755*, *R. Kral and W.W. Baker* (VSC, others tbd).—Previously known only from the Florida Panhandle, this species was initially discovered at the location reported herein by John B. Jensen, Malcolm Hodges and Thomas Floyd on 26 June 2007 (Jensen 2007). Herein, we report voucher specimens documenting this species in Georgia.

Rhododendron alabamense Rehder (Ericaceae) – W(S2S3)

U.S.A. GEORGIA. **Grady Co.:** 4 mi N of Cairo by Hwy GA 112, then W 2.1 mi, woods along Black Creek, 9 Apr 1988, *R. Carter, S. Carter, L. Taylor and P. Medrano 6471* (FLAS, FSU, GA, IBE, MO, NLU, NY, US, VDB, VSC).—In Georgia, *R. alabamense* was thought to be restricted to a series of counties along the extreme western edge of the state (Jones & Coile 1988). This recent collection from Grady County extends the range eastward from adjacent Decatur County, and documents a sizable colony on a stream terrace by Black Creek.

Rhododendron austrinum (Small) Rehder – W (S3)

U.S.A. GEORGIA. **Baker Co.:** 0.2 mi W of Elmodel, along and N of Hwy GA 37 and along E bank of Chickasawhatchee River, local 6–8 ft shrub, 1 April 1990, *R. Carter 8288* (FLAS, GA, VDB, VSC). **Decatur Co.:** 4.5 mi N of Bainbridge, along Hwy GA 253, steep bluff along Flint River, 30 Mar 1986, *R. Carter 4692* (FLAS, GA, IBE, MO, NLU, NY, VDB, VSC). **Early Co.:** 3.8 mi W of Arlington, low ground along creek, just S of Hwy GA 62, shrubs to 12 ft, locally common, 1 Apr 1990, *R. Carter 8290* (FLAS, GA, MO, NY, VDB, VSC).—*Rhododendron austrinum* is rare to infrequent from southwestern Georgia into northwestern Florida and westward into southern Alabama and Mississippi. Herein we report additional collections from Georgia.

Rhynchosia mollissima Elliott (Fabaceae)

R. tomentosa (L.) Hook. & Arn. var. *mollissima* (Elliott) Torr. & A. Gray

U.S.A. GEORGIA. **Camden Co.:** vic. Kingsland, Scrubby Bluff Rd, sandscrub remnant, 30°46.354' N 81°40.120'W, 30 Apr 2006, *R. Carter 16570* (VSC).—Jones and Coile (1988) do not record this taxon for Georgia; however, Isley (1990) reports it as an endemic to peninsular Florida and southeastern Georgia. These voucher specimen data document *R. mollissima* in Georgia. Associates at this site degraded by conversion to pine plantation were *Pinus elliotii*, *P. taeda*, *Quercus laevis*, *Q. incana*, *Q. hemisphaerica*, *Q. geminata*, *Vaccinium stamineum*, *Juniperus* sp., *Asimina incana*, *Serenoa repens*, *Berlandiera pumila*, *Eupatorium compositifolium*, *Eryngium aromaticum* Baldw., *Orbexilum lupinellus* (Michx.) Isely, *Cyperus plukenetii*, *Cnidocolus stimulosus* (Michx.) Engelm. & A. Gray, and *Lupinus nuttallii* S. Watson. In light of the species composition, sandy soil, and excessive drainage at this site one would expect *Pinus palustris*; however, our searches for it here were unproductive.

Rhynchospora leptocarpa (Chapm. ex Britton) Small (Cyperaceae)

U.S.A. GEORGIA. **Liberty Co.:** Ft. Stewart Military Reservation, 0.3 mi S of jct FS 6 and FS 9, bayhead E of FS 9, in shade, locally common, stems lax, 9 Jul 1992, *R. Carter 10114 and P. Bauer* (VSC). **Lowndes Co.:** Moody Air Force Base, 0.45 mi E jct of airfield by Eiseman Hwy, ecotone between bayswamp and mesic hammock, locally common in shade, plants cespitose, stems lax, 17 Jul 1993, *R. Carter 11040 and C. Wilson* (VSC, others tbd); E of Hahira, jct Hwy GA 122 and Skipper Bridge Rd, along S side Hwy GA 122, SW quadr. jct, dense woods along baycreek, locally common, cespitose, stems lax, 16 Jul 2004, *R. Carter 15392, W.W. Baker and G. Nelson* (VSC, others tbd).—Including a duplicate of the preceding *Carter 10114*, Sorrie (2000) cited vouchers of *R. leptocarpa* from only four counties in Georgia, all in the Coastal Plain. Whereas Sweeney and Giannasi (2000) do not map this species for Georgia, herein we cite vouchers, including those from Lowndes – a new county record.

Rhynchospora stenophylla Chapm. – S(S2)

U.S.A. GEORGIA. **Taylor Co.:** 4.3 mi N of Butler, open sphagnous bog in periodically disturbed

powerline right-of-way in vicinity of Beaver Creek, east of Hwy GA 137, 26 May 1991, *R. Carter 8795 and M.W. Morris* (GA, VDB, VSC); S Butler, open boggy slope along Little Whitewater Creek, 32°30' 20"N 84°20'30"W, 6 May 1995, *R. Carter 12406* (VSC).—These voucher data represent additional Georgia collections of this rare plant.

Robinia viscosa Vent var. ***viscosa*** (Fabaceae) – W(SNR)

U.S.A. GEORGIA. **Marion Co.:** ca. 6 mi S of Geneva, long slope just S of Juniper Creek, edge woods along W side of Hwy GA 41, 32°31.219'N 84°34.023'W, 2–4 m shrub, locally common, 23 May 2003, *R. Carter 14949 and R. Kral* (VSC).—Although Jones and Coile (1988) did not include this taxon, Isley (1990) cited Georgia in its distribution.

†***Rottboellia cochinchinensis*** (Lour.) W.D.

Clayton (Poaceae) – FNW

U.S.A. GEORGIA. **Brooks Co.:** E Quitman, Southeastern Livestock Company, along S side Hwy US 84, locally common along railroad track, 9 Aug 1994, *R. Carter 11842* (VSC, others tbd); ca. 2.9 mi WSW Quitman city center by Grooverville Hwy, CSX railroad crossing, locally abundant, 12 Aug 2002, *R. Carter 14664* (VSC, others tbd). **Camden Co.:** Old Hwy 259, 1.1 mi S Brantley-Camden county line, then 0.2 mi W, 31°04.916'N 81°53.083'W, seepy ditch with introduced railroad (?) slag, locally common, 14 Oct 2007, *R. Carter 18179 and W.W. Baker* (VSC, others tbd). **Decatur Co.:** E Bainbridge, Hwy US 84 at jct Blackjack Rd, 30.89872°N 84.51510°W, railroad right-of-way along N side Hwy US 84, 19 Sep 2008, *R. Carter 18556* (VSC, others tbd). **Houston Co.:** N of Unadilla, 0.3 mi N jct I-75 and Hwy US 41, 50 m S mile marker 122, 32.26542°N 83.75088°W, local along N bound lane I-75, one large patch observed, 1 Sep 2008, *R. Carter 18515* (VSC). **Lowndes Co.:** Valdosta, Valdosta State University campus, overgrown disturbed bank of One Mile Branch, just W of Patterson St, growing amidst concrete rubble, locally common, 25 Oct 2001, *R. Carter 14619* (VSC, others tbd). **Thomas Co.:** 5.7 mi E jct Thomasville jct Hwy US 84 and Hwy US 19/391 bypass, 250 m W Eason jct Hwy US 84 and New Hope Rd, 30.81206°N 83.85208°W, 26 Sep 2008, *R. Carter 18637* (VSC). **Tift Co.:** Hwy US 319, just W jct Goat Rd (CR 27), berm along S

side Hwy US 319, 31.47799°N 83.45188°W, local, 21 Aug 2008, *R. Carter 18500 with W.W. Baker and G. Nelson* (VSC). **Worth Co.:** Sylvester, vic. jct Kelly St and Davis St, along railroad across Kelly St from Pope Park, S Hwy US 82, 31°31.650'N 83°49.712'W, locally common, 22 Jul 2005, *R. Carter 16055* (VSC, others tbd).—This native of southeastern Asia is listed as a Federal Noxious Weed in the United States (Anonymous 2006), where it has apparently dispersed along railroads (Hall and Patterson 1992). Its leaf sheaths possess stinging trichomes, hence the common name itch-grass (Hall and Patterson 1992). Although Duncan (1985) provided anecdotal information indicating it was known from 13 counties in southern Georgia, he cited only one voucher specimen (Tift County). These voucher specimen data provide further, more recent documentation of *R. cochinchinensis* in Georgia.

†****Rubus*** cf. ***armeniacus*** Focke (Rosaceae)

U.S.A. GEORGIA. **Camden Co.:** 2.47 air mi ENE of Waverly jct Hwys US 17 and GA 110, N of Hwy US 17 between Hwy and Gowrie Creek, 31°06.904'N 81°41.513'W, ruderal edge of mixed pine-oak woods, plants apparently persisting from cultivation, 14 Oct 2006, *R. Carter 17311 and W.W. Baker* (VSC).

****Rubus hispidus*** L. – W(SU)

U.S.A. GEORGIA. **Hall Co.:** 1 mi E of Brookton, S side of Hwy GA 52, on stream terrace with much *Sphagnum* in *Acer rubrum*-*Liriodendron tulipifera*-*Nyssa sylvatica* swamp below Glades Shoals Granite Outcrop and waterfall of Flat Creek over outcrop edge, associated with *Carex intumescens*, *Galax urceolata*, *Gentiana saponaria*, *Ilex verticillata*, *Kalmia latifolia*, *Lindera benzoin*, *Mitchella repens*, *Pinus strobus*, *Platanthera clavellata*, *Thelypteris noveboracensis*, *Toxicodendron vernix*, and *Xanthorhiza simplicissima*, occasional, 14 July 2008, *M.W. Morris s.n.* (TROY). **Lumpkin Co.:** ca. 9 mi W of Dahlonega, then N 1.5 mi on Mill Creek Road, then NW and W ca. 1 mi on Little Mountain Road and Greenway Road, respectively, opposite entrance to Fern Park real estate development, in *Acer rubrum*-*Alnus serrulata*-*Liriodendron tulipifera*-*Oxydendrum arboreum* swamp with braided streams and *Sphagnum*, associated with *Amianthium muscaetoxicum*, *Arundinaria gigantea*, *Galax urceolata*, *Hexastylis shuttleworthii*, *Medeola virginiana*, *Mitchella repens*, *Rhododendron* spp., *Thelypteris*

noveboracensis, *Toxicodendron vernix*, *Uvularia sessilifolia*, *Vaccinium corymbosum*, *Viburnum nudum*, and *Xanthorhiza simplicissima*, occasional, 14 July 2008, *M.W. Morris s.n.* (TROY). **Taylor Co.:** 4.3 mi N of Butler, periodically disturbed sphagnous bog in powerline right-of-way, vicinity of Beaver Creek, locally common, 26 May 1991, *R. Carter 8786* and *M.W. Morris 4330* (GA, VDB, VSC).—*Rubus hispidus* is not shown in Georgia by Jones and Coile (1988) nor is it shown as occurring in the state in the USDA Plants database (U.S.D.A. 2008), thus it is treated here as an addition to the state's flora.

Sageretia minutiflora (Michx.) C. Mohr (Rhamnaceae) – T, S(S1)

U.S.A. GEORGIA. **Camden Co.:** Kings Bay Submarine Base, Etowah Park, ca. 300 m north of boat ramp, between boat ramp and osprey tower, dry maritime forest along Mariana Creek estuary, 30°49'20"N 81°32'38"W, Harrietts Bluff 7.5' USGS quadr., elev. 15–20 ft, 1 Jul 1996, *R. Carter 12941* (VSC); Kings Bay Submarine Base, S end Etowah Park, old King Cemetery site on small peninsula adjacent to salt marsh, Harrietts Bluff 7.5' USGS quadr., elev. 15–20 ft, 30°48'55"N 81°32'26"W, locally common, 14 Sep 1996, *R. Carter 13736* (VSC).—Herein we report voucher specimen data for a new county record for this rare shrub (cf. Jones & Coile 1988). It was found on shell middens in dry maritime forest associated with *Aesculus pavia* L., *Sideroxylon tenax* L., *Carya glabra*, *Cornus* spp., *Diospyros virginiana*, *Ilex opaca*, *I. vomitoria* Aiton, *Juniperus virginiana* L., *Liquidambar styraciflua*, *Lyonia ferruginea*, *Osmanthus americanus*, *Persea borbonia*, *Prunus serotina*, *Ptelea trifoliata* L., *Quercus hemisphaerica*, *Q. nigra*, *Q. virginiana*, *Sabal palmetto*, *Serenoa repens*, *Tilia americana* var. *caroliniana* (Mill.) Castigl., *Vaccinium arboreum*, *V. corymbosum*, *V. stamineum*, and *Zanthoxylum clava-herculis* L.

Sagittaria graminea Michx. subsp. ***chapmanii*** (J.G. Sm.) R.R. Haynes & Hellq. (Alismataceae) – W(S3?)

U.S.A. GEORGIA. **Camden Co.:** ca. 1.5 air mi SE of Ceylon, USGS Woodbine quadr., 30°56.898' N 81°37.914'W, intermittent shallow, isolated wetland, local, 7 Apr 2006, *R. Carter 16449* and *W.W. Baker* (VSC, others tbd). **Charlton Co.:** ca. 1.35 air mi WSW Coleraine lodge, 30°49.422'N 81°55.401'W, degraded pine flatwoods, converted to slash pine, locally common in ditch, 20 Jul 2006,

R. Carter 17033 and *W.W. Baker* (VSC).—These are additional county records for this uncommon to rare aquatic.

†***Sagittaria montevidensis*** Cham. & Schldl. subsp. ***montevidensis***

U.S.A. GEORGIA. **Bryan Co.:** Richmond Hill, degraded bayswamp along W side of Hwy US 17, near NW quadrant of jct of Hwy US 17 and Hwy GA 144, 31°57.189'N 81°18.647'W, locally abundant, 19 Jul 2006, *R. Carter 17007* and *W.W. Baker* (VSC, others tbd).—Sweeney and Giannasi (2000) map this species in Georgia only in Chatham County. The voucher specimen data cited herein provide documentation for the second Georgia county record of this South American introduction. Its robust size (1.5–2 m high) and large, showy flowers make this plant spectacular in the field.

†***Salvinia molesta*** D.S. Mitch. (Salviniaceae) – FNW

U.S.A. GEORGIA. **Gwinnett Co.:** Lilburn, Denmark Dr., neighborhood pond at Evergreen Lakes, 18 Oct 1999, *A. Miller s.n.* (VSC). **Lamar Co.:** vic Liberty Hill, Lake Weldon Rd, 1 mi S jct Lake Weldon Rd and Morgan Dairy Rd, farm pond, 3 Dec 1999, *A. Miller AEM-NW-99/02* (VSC).—Giant salvinia has been dispersed in warmer parts of the southeastern U.S. through its use in the aquarium trade and in water gardens (Jacono 1999; Haynes & Jacono 2000; Jacono et al. 2001). Herein we report additional vouchers of this aquatic noxious pest from Georgia not reported by Jacono et al. (2001). The Gwinnett County infestation was found by A.C. Mauldin II, Senior Fisheries Biologist, Georgia Department of Natural Resources, and reported to Mr. Art Miller, USDA-APHIS. It is our understanding that efforts have been taken by USDA-APHIS personnel to eradicate this aquatic noxious pest from both Georgia sites.

Schoenolirion albiflorum (Raf.) R.R. Gates (Liliaceae) – S(S1?)

S. elliottii Feay ex A. Gray, nom. illeg.

U.S.A. GEORGIA. **Bacon Co.:** 4 mi E Nichols jct along S side Hwy GA 32, pond cypress depression, local, 26 Jun 1993, *R. Carter 10822* and *R. Kral* (VSC, others tbd). **Charlton Co.:** 1.9 mi W of St. George jct Hwy GA 94 and Hwy GA 121, by Hwy GA 94, 30°31.311'N 82°04.136'W, edge of shallow

pond, local, 8 Jun 2006, *R. Carter 16751 and W.W. Baker* (VSC, others tbd).—Reaching the northern limit of its distribution in southeastern Georgia, this species has an essentially Floridian distribution. Sweeney and Giannasi (2000) map *S. albiflorum* in Georgia only in Brantley and Wayne counties. These voucher specimen data document the presence of this rare species in two more Georgia counties. It inhabits shallow, seasonally wet, flatwoods ponds with *Acer rubrum*, *Carex striata*, *Hypericum* spp., *Ilex myrtifolia*, *Morella cerifera*, *Nyssa biflora* and *Taxodium ascendens*.

****Schoenoplectus etuberculatus*** (Steud.) Soják (Cyperaceae) – S(S1S2)

Scirpus etuberculatus (Steud.) Kunth

U.S.A. GEORGIA. **Berrien Co.:** ca. 1.5 mi ENE Ray City, 31°04.854'N 83°10.450'W, Rays Mill Pond, near boat ramp, 24 May 2004, *R. Carter 15357* (VSC, others tbd). **Lowndes Co.:** island in Boring Pond, 5.5 mi SE of Valdosta, 1 mi N of Hwy GA 94, 19 May 1974, *J. Leflès s.n.* (VSC); ca. 7.3 mi SE of Valdosta city center, N of Hwy GA 94, Boring Pond, 17 Aug 1990, *W.K. George s.n.* (VSC). **Talbot Co.:** 4 mi S of Geneva by Hwy GA 41, Upatoi Creek bottom, north side of creek, locally common in swift flowing creek, stems lax and swept over by water, 13 Aug 2002, *R. Carter 14684 and R. Kral* (VSC). **Taylor Co.:** 6.3 mi S of Butler by Hwy GA 137, rooted in white sandy bottom of Little Whitewater Creek, culms lax, immersed in running water ca. 0.5 m deep, 25 May 1991, *R. Carter 8667 and M.W. Morris* (VSC, others tbd). **Ware Co.:** SSE of Waycross, 3.45 mi S jct Hwys US 1 and GA 177, N of Okefenokee Swamp Park, barrowpit and adjacent flatwoods along Hwy GA 177, locally common in shallow water, 17 May 1997, *R. Carter 14022 and J. Carter* (VSC, others tbd).—Although Smith (2002) included Georgia in the range of this species, neither Jones and Coile (1988) nor Sweeney and Giannasi (2000) mapped it for the state. These voucher specimen data substantiate the presence of *S. etuberculatus* in Georgia. The variable habit of this aquatic sedge seems to be correlated with habitat. When inhabiting blackwater ponds in southern Georgia, its emergent culms – leafless except for a terminal bract that appears to be an extension of the stem – may grow a meter or more above the water's surface, imparting an oddly curious aspect. Contrastingly, in swiftly flowing blackwater

streams of the fall-line sandhills, swept along by the current, the culms are lax and immersed.

Scirpus lineatus Michx.

U.S.A. GEORGIA. **Camden Co.:** hydric hammock S of Hwy US 17, 0.8 mi NE of Waverly, USGS Waverly quadr., UTM 17 431516E 3440695N (WGS84/NAD83), 4 Jul 1988, *R. Carter and S. Carter 6927* (VSC, others tbd).—Sweeney and Giannasi (2000) map this species in Georgia from only Charlton County. These voucher specimen data document *S. lineatus* in adjacent Camden, the second county for the state. Associates are the same as those listed above for *Carex godfreyi* and *Carex gholsonii*.

Sida elliotii Torr. & A. Gray (Malvaceae) – S (S2?)

U.S.A. GEORGIA. **Camden Co.:** 4.24 air mi WNW Waverly jct Hwy US 17 and Hwy GA 110, 0.75 mi SW jct Inachee Rd and Hwy GA 110, 31°06.416'N 81°47.764'W, edge disturbed mesic hammock, occasional, sprawling herb, 12 Sep 2007, *R. Carter 18068 and W.W. Baker* (VSC, others tbd); New Post Rd, 0.6 mi N Providence Church, 31°03.955'N 81°48.599'W, edge pine plantation converted from mesic coastal hammock, occasional, 12 Sep 2007, *R. Carter 18070 and W.W. Baker* (VSC, others tbd); SE of Magnolia Bluff, 0.5 mi S jct Bailey Mill Rd and John Bailey Mill Rd, mesic flatwoods converted to pine plantation by John Bailey Mill Rd, 30°55.232'N 81°51.515'W, 13 Sep 2007, *R. Carter 18093 and W.W. Baker* (VSC).—Jones and Coile (1988) map *S. elliotii* from three widely scattered counties in Georgia, none from the southeastern sector of the state.

****Solanum carolinense*** L. var. ***floridanum*** Chapm. (Solanaceae)

U.S.A. GEORGIA. **Camden Co.:** ca. 1.1 mi W of Forestview, Kingsland NE quadr., maritime bluff forest, W side of Hermitage Swamp, 30°55.804'N 81°36.686'W, occasional along loamy jeep trail, 19 May 2006, *R. Carter 16642 and W.W. Baker* (VSC). **Colquitt Co.:** ca. 5.75 mi SE Crosland, disturbed roadside and edge of field, 26 Jun 1988, *R. Carter 6809 and W.K. George* (VSC, others tbd).—These voucher specimen data document the occurrence of this taxon in Georgia (cf. Jones & Coile 1988).

†****Solanum chenopodioides*** Lam.

U.S.A. GEORGIA. **Camden Co.:** Kings Bay Submarine Base, open sandy area SE of SE end of U.S.S. James Monroe Ave, vicinity of Warrior Wharf, sandy area within loop road, 30°47'02"N 81°29'55"W, 23 Jul 1996, *R. Carter 13337* (VSC, others tbd).—These voucher specimen data comprise the first report of this species for Georgia.

Solidago rugosa Mill. var. ***celtidifolia*** (Small) Fern. (Asteraceae)

U.S.A. GEORGIA. **Camden Co.:** vic. Owens Ferry, 1.6 mi E Jerusalem jct Owens Ferry Rd and Bailey Mill Rd, by Owens Ferry Rd, 30.97150°N 81.81600°W, locally common, 8 Nov 2007, *R. Carter 18267* (VSC, others tbd).—Jones and Coile (1988) do not map *S. rugosa* from the southeastern sector of Georgia, and Wunderlin and Hansen (2008) do not show it in northern peninsular Florida. These voucher specimen data represent a substantial range extension eastward into extreme southeastern Georgia, where *S. rugosa celtidifolia* was found in moist, fine sand along a shallow road ditch by a disturbed remnant hardwood hammock. Nomenclature for this taxon follows Semple and Cook (2006).

Spiranthes longilabris Lindl. (Orchidaceae) – S (S1)

U.S.A. GEORGIA. **Cook Co.:** 2.5 mi W of Adel, boggy ditch, local, 14 Nov 1987, *R. Carter 6411* (VSC).—This species was not mapped by Sweeney and Giannasi (2000). At the Cook County site it was associated with *Pinus serotina*, *Sarracenia flava* L., *S. minor*, and *Taxodium ascendens*.

†****Sporobolus indicus*** (L.) R. Br. var. ***pyramidalis*** (P. Beauv.) Veldkamp (Poaceae)

U.S.A. GEORGIA. **Camden Co.:** W of Kingsland by Hwy GA 40, 50 m W jct Hwy GA 40 and Colerain Rd, 30°48.649'N 81°44.934'W, locally abundant, 29 May 2006, *R. Carter 16743* (VSC, others tbd). **Lowndes Co.:** 4.7 mi W of Valdosta jct Interstate 75 and Hwy US 84 by Hwy US 84, 30°47.953'N 83°23.414'W, locally abundant along highway embankment, 19 Jun 2005, *R. Carter 16000* (VSC, others tbd).—This taxon, which Peterson et al. (2003) treated as *S. Jacquemontii* Kunth, appears to be dispersing rapidly along highways in southern Georgia and most probably invaded the state from neighboring Florida. As neither Peterson et al. (2003) nor Sweeney and Giannasi (2000)

listed or mapped this taxon for Georgia, these voucher specimen data comprise the first reports of it from the state.

Stewartia malacodendron L. (Theaceae) – R, S (S2)

U.S.A. GEORGIA. **Cook Co.:** Reed Bingham State Park, about 6.5 mi W of Adel, mesic bluff along E bank of Little River, shrub to 3 m high with broad spreading crown, 25 Apr 1990, *Carter 8291* (FSU, GA, VDB, VSC). **Irwin Co.:** S of Hwy US 319, E of Alapaha River, 31.50418°N 83.38054°W, mesic slope along Alapaha River floodplain, plants locally abundant, 21 Aug 2008, *R. Carter 18499 with W.W. Baker and G. Nelson* (VSC, others tbd).—Jones and Coile (1988), in the southwestern quadrant of Georgia, map *S. malacodendron* from only one county (Calhoun County). The voucher specimen data reported herein add an additional county to the distribution of this rare species. At the Cook County site, intensive searching of the area indicated *S. malacodendron* was quite local. Only five plants were found, and these were in close proximity to one another. Moreover, the aerial stems of most of the shrubs of *S. malacodendron* showed evidence of substantial die-back and were suckering from their bases. At the Cook County site *S. malacodendron* was found with the following woody associates: *Asimina parviflora*, *Castanea pumila*, *Carya glabra*, *C. tomentosa* (Michx.) Nutt., *Celtis* sp., *Cercis canadensis* L., *Cornus florida* L., *Halesia diptera* J. Ellis, *Hamamelis virginiana* L., *Ilex opaca*, *Liquidambar styraciflua*, *Lyonia ferruginea*, *Magnolia grandiflora*, *Osmanthus americanus*, *Prunus serotina*, *Styrax grandifolius*, *Symplocos tinctoria*, *Quercus alba* L., *Q. laurifolia*, *Sideroxylon lanuginosum* Michx., *Vaccinium* sp. and *Viburnum rufidulum* Raf. Although Patrick et al. (1995) map *Stewartia malacodendron* for Irwin County, site data on the supporting voucher specimen (*T.R. Colvin and D.W. Speake s.n.*, 17 Jul 1977, VSC-24783) are imprecise: “Edge along sand hill and swamp beside Alapaha River.” Thus, we provide precise locality data for a recent collection from Irwin County.

Stokesia laevis (Hill) Greene (Asteraceae) – S(S1)

U.S.A. GEORGIA. **Charlton Co.:** just W of St. George along Hwy GA 94, low flatwoods, local, 3 Jul 2003, *R. Carter 14999* (VSC). **Colquitt Co.:** ca. 1.25 air mi NNW of Norman Park, 31°17.162'N 83°41.416'W, Page Woods Tract, E side power-

line, seepage slope along drain, locally common, 11 Jul 2007, *R. Carter 17697 and W.W. Baker* (VSC); ca. 75 m N of Moye Rd, 31.31719°N 83.72173°W, 9 Jul 2008, *R. Carter 18448 and W.W. Baker* (VSC). **Worth Co.:** ca. 4.3 air mi NW of Norman Park, seepage slope along NE bank of bay creek tributary of Warrior Creek, 31°19.282'N 83°43.425'W, pitcher plant bog, locally common, 11 Jul 2007, *R. Carter 17675 and W.W. Baker* (VSC).—These voucher specimen citations provide additional records of this rare composite.

Stylisma aquatica (Walter) Raf. (Convolvulaceae)
– W(S3?)

U.S.A. GEORGIA. **Brooks Co.:** ca. 5 mi NNE Dixie, 1.65 mi N jct Hodges Rd and Dry Lake Rd, then 0.95 mi W jct Hodges Rd and Powerline Rd, by Powerline Rd, 30.85998°N 83.68316°W, seasonal pond at upper western edge of seepage slope, with *Taxodium ascendens*, *Nyssa biflora*, *Ilex myrtifolia*, *Acer rubrum* and *Liquidambar styraciflua*, 15 Jun 1998, *R. Carter 14105* (VSC, others tbd). **Iwin Co.:** S of Hwy US 319, E of Alapaha River, 31.50977°N 83.35280°W, Grady pond, with *Pinus taeda*, *Diospyros virginiana*, *Quercus virginiana*, *Q. laurifolia*, *Acer rubrum*, *Morella cerifera*, 21 Aug 2008, *R. Carter 18491 with W.W. Baker and G. Nelson* (VSC, others tbd). **Lowndes Co.:** Grand Bay WMA, Blanton Estate, 0.37 air mi N Knights Academy Rd, wetland along E side access rd., 30°55'32"N 83°11'32"W, 20 Jun 1995, *R. Carter 12416* (VSC). **Miller Co.:** 6.7 air mi NW of Colquitt town center; Mayhaw Wildlife Management Area, ca. 1.5 mi N of Griggs-Lucile Rd by Womble Rd, then NE of Womble Rd by unmarked trail; 31.22266°N 84.83015°W; margin of small sinkhole with *Taxodium ascendens*, *Crataegus aestivalis*, *Quercus laurifolia*; plants forming locally dominant ground cover along exsiccated pond margin; 19 Sep 2008, *R. Carter 18572* (VSC).—Wunderlin and Hansen (2008) map this species from only the panhandle of northwestern Florida, and Jones and Coile (1988) show it only from Miller County in southwestern Georgia. The additional county records of this rare to uncommon species reported herein provide documentation of its occurrence in south-central Georgia.

Thalia dealbata Fraser ex Roscoe (Marantaceae)
– S(S1)

U.S.A. GEORGIA. **Camden Co.:** ca. 3.5 mi S

Woodbine jct Hwy US 17 and Hwy GA 25, E of Hwy US 17, cleared wetland under powerline, adjacent to hydric hammock, 30°54.226'N 81°42.332'W, 27 Oct 2006, *R. Carter 17359 and W.W. Baker* (VSC); 5.1 mi S Woodbine jct Hwy US 17 and Hwy GA 110, ditch along W side Hwy US 17, 30.89450°N 81.70897°W, edge of cypress-gum swamp, 14 Oct 2008, *R. Carter 18662* (VSC, others tbd). **Glynn Co.:** Sterling, NE of jct Hwy US 341 and Hwy GA 99, mucky ditch at edge of swamp forest along Hwy GA 99, 26 Aug 1988, *R. Carter 7414* (FSU, GA, IBE, MO, NLU, VDB, VSC); 23 May 1997, *R. Carter 14031 and D. Alexander* (VSC).—Herein we report additional records of this rare monocot for Georgia. The Glynn County site was initially observed and brought to the attention of the first author by Dr. Wayne R. Faircloth.

****Thalia geniculata*** L.

U.S.A. GEORGIA. **Camden Co.:** ca. 7.0 mi E Folkston, 30°50.173'N 81°53.000'W, jct Hwys GA 40 and GA 110, N side Hwy GA 40, hydric flatwoods, local, 3 Oct 2003, *R. Carter 15112* (VSC, others tbd); 11.6 air mi W of Kingsland jct Hwy GA 40 and Hwy US 17, 0.5 mi E jct Hwy GA 40 and Hwy GA 110, 30°49.986'N 81°52.935'W, cleared right-of-way along Hwy GA 40 in Mill Creek floodplain, local in swale, 1 Sep 2006, *R. Carter 17175 and W.W. Baker* (VSC).—This species was previously thought to be restricted to Florida and the West Indies (Godfrey & Wooten 1979), and neither Jones and Coile (1988) nor Sweeney and Giannasi (2000) map it for Georgia. Thus, the voucher specimen data reported herein document the occurrence of *T. geniculata* in Georgia.

Tillandsia bartramii Elliott (Bromeliaceae) – S
(S2)

U.S.A. GEORGIA. **Camden Co.:** Cabin Bluff Preserve, 30.889°N 81.517°W, USGS Kingsland NE quadr., ca. 11.75 air mi NNE St. Marys waterfront, ca. 2.1 miles NW Cabin Bluff Lodge, ca. 1.2 mi WNW of Shellbine by Shellbine Road, Cooper Creek swamp and hammock, epiphytic on live oak, rare, 6 Oct 1995, *R. Carter 12890* (VSC); Kings Bay Submarine Base, 0.15 air mi NW golf clubhouse, along W edge enclosure for radio tower, N U.S.S. Proteus Rd, 30°49'27"N 81°33'15"W, 20 Jul 1996, *R. Carter 13241* (VSC); Kings Bay Submarine Base, hammock, 0.75 mi W of jct U.S.S. Henry L. Stimson Dr. and U.S.S. James

Monroe Ave, along N side U.S.S. Henry L. Stimson Dr., hammock adjacent to salt marsh at upper reaches of North River, 30°48'09"N 81°32'05"W, 23 Aug 1996, *R. Carter 13588* (VSC, others tbd); Magnolia Bluff, 30°56.683'N 81°53.585'W, hardwood bluff forest, epiphytic on *Carya glabra*, 9 Jun 2006, *R. Carter 16768* and *W.W. Baker* (VSC); Magnolia Bluff, just N of bridge over Satilla River, 30°56.736'N 81°53.661'W, swamp forest along base of bluff, epiphytic on *Taxodium distichum*, 9 Jun 2006, *R. Carter 16780* and *W.W. Baker* (VSC); Clarks Bluff, Clarks Bluff Cemetery at along N bank St. Marys River, USGS Kings Ferry quadr., UTM 17 426777E 3405226N (WGS84/NAD83), hammock with *Pinus palustris*, *P. taeda*, *Quercus hemisphaerica*, *Q. nigra*, *Q. virginiana*, epiphytic on *Prunus serotina*, 10 Jun 2006, *R. Carter 16810* with *W.W. Baker* (VSC). **Charlton Co.:** 1.88 mi E Folkston (courthouse) by Hwy GA 40, then 200 m N by Reynolds Rd, bayswamp along creek just N Peoples Baptist Church, 30°50'32"N 81°58'33"W, locally common epiphyte, 29 Mar 1996, *R. Carter 12929* (VSC); Traders Hill Recreation Area, hardwood slope with sandy creek bottom along St. Marys River, 30°46.988'N 82°01.490'W, epiphytic on *Quercus hemisphaerica*, 8 Jun 2006, *R. Carter 16766* and *W.W. Baker* (VSC, others tbd).—Herein we report additional records of this epiphytic bromeliad near the northern limit of its distribution (Luther & Brown 2000), where it was observed on a variety of phorophytes, including *Carya glabra*, *Prunus serotina*, *Quercus hemisphaerica*, *Q. virginiana*, and *Taxodium distichum*.

Tillandsia recurvata (L.) L. – S(S1)

U.S.A. GEORGIA. **Camden Co.:** Kings Bay Submarine Base, hammock along NW bank of pond P-1, between U.S.S. Kamehameha Avenue and North River marsh, 0.28 air mi NE of North River Causeway, Harrietts Bluff 7.5' quadr., elev. ca. 15 ft, 30°45'45"N 81°31'14"W, disturbed hammock remnant along edge of pond, locally abundant, epiphyte on mature live oak trees, 29 Aug 1996, *R. Carter 13611* (VSC, others tbd); Kings Bay Submarine Base; 0.31 air mi SW Jct. U.S.S. Henry L. Stimson Drive and U.S.S. Woodrow Wilson Avenue; hardwood hammock along N side of SWIFLANT, between SWIFLANT fence and drainage ditch, Harrietts Bluff 7.5' quadr., elev. 15–20 ft, 30°47'35"N 81°32'23"W, hardwood hammock, epiphytic on mature live oak, 6 Sep 1996, *R.*

Carter 13660 (VSC). **Lowndes Co.:** Valdosta, Valdosta State University main campus, local on transplanted *Quercus geminata* behind West Hall, epiphyte, 15 Oct 2000, *R. Carter 14472* (VSC).—The Valdosta, Lowndes County, population (*Carter 14472*) was introduced with nursery-grown specimens of *Q. geminata* shipped from Florida. These epiphytes appear to be thriving on their introduced phorophytes that were established on the Valdosta State University (VSU) campus about 1989. A similarly introduced population grows on ornamental *Lagerstromia indica* L. (crape-myrtle) specimens in downtown Douglas, Coffee County, Georgia, where it has been established for about five years (Frankie Snow, personal communication). The first author has made annual observations for about five years of a single *T. recurvata* plant attached to an aerial utility wire in vicinity of the Clay Road railroad overpass in Valdosta, located about 2.6 air mi SE of the population reported above (*Carter 14472*). Presumably, this plant was established naturally, perhaps from windborne seed produced by “nursery plants” on the Valdosta State University campus.

†****Tradescantia fluminensis*** Vell.
(Commelinaceae)

U.S.A. GEORGIA. **Camden Co.:** St. Marys, Dilworth St and railroad crossing, along S side railroad, E of Dilworth St, 30°44.191'N 81°33.370'W, *R. Carter 15935* (VSC, others tbd), *R. Carter 15968* (VSC, others tbd); ca. 5.0 air mi ESE Burnt Fort, vic. Jim Baileys Mill, USGS Jerusalem quadr., 30°55.428'N 81°49.259'W, floodplain forest along Satilla River, locally abundant in shaded second growth woods, 22 Sep 2006, *R. Carter and W.W. Baker 17241* (VSC, others tbd). **Lowndes Co.:** Valdosta, vic. city bike trail along S bank One Mile Branch, between Sustella Ave and Wainwright St, UTM 17 280214E 3414480N (NAD83/WGS84), terrace along creek, degraded urban woodlot, locally abundant, 4 Mar 2007, *R. Carter 17422* (VSC).—Georgia was not included within the range of this species by Faden (2000), nor was it mapped by Sweeney and Giannasi (2000). Native to South America, Faden (2000) reported this species as introduced and naturalized in the United States in Florida, southern Alabama, Louisiana and California. The voucher specimen data reported herein comprise the first records of *T. fluminensis* in Georgia, where it has been observed to be a locally

abundant weed. *Tradescantia flumenensis* is cited as an invasive pest in Florida (Langeland & Burks 1998).

Triphora trianthophora (Sw.) Rydb.

(Orchidaceae) – S(S2?)

U.S.A. GEORGIA. **Camden Co.:** bluff along E bank of Satilla River, N of 3R Landing, 31°00.688' N 81°54.020'W, mesic slope with *Fagus grandifolia*, *Ilex opaca*, *Nyssa sylvatica*, *Quercus alba*, *Q. michauxii*, *Pinus glabra*, *Carya tomentosa*, *Vaccinium arboreum*, *V. elliotii*, *Asimina parviflora* and *Hamamelis virginiana*, 23 Sep 2006, *R. Carter 17276* and *W.W. Baker* (VSC). **Charlton Co.:** Okefenokee National Wildlife Refuge, Floyd's Island, NW end of island on borders of Indian mound, under oaks, 18 Oct 1975, *W. Cribbs s.n.* (VSC). **Lanier Co.:** Moody Air Force Base, Dudley's Hammock, local and rare under shade of massive live oaks, south side of hammock road, 6 Aug 1994, *C. Wilson 339*, *J. Lusk* and *R. Carter* (VSC).—Despite the fact that this species has long been known from northern Florida (Luer 1972) and the coastal plain of South Carolina (Porcher 1977), Jones and Coile (1988) and Sweeney and Giannasi (2000) only map it in a cluster of counties in the extreme northeastern corner of Georgia. Thus we provide documentation of *T. trianthophora* from the Georgia Coastal Plain. The Dudley's Hammock population in Lanier County was observed on two separate dates, one week apart. On 6 Aug 1994, 37 stems of *T. trianthophora* were counted in an area ca. 1×3 m²; ca. one-third of these had flowers. On 13 Aug 1994, 21 stems were visible in the same area; ca. one-quarter of these had flowers. The Dudley's Hammock site with *T. trianthophora* was dominated by *Quercus virginiana*, and additionally the following species were noted: *Carya glabra*, *Gaylussacia frondosa* (L.) Torr. & Gray ex Torr., *Ilex opaca*, *Lyonia ferruginea*, *Magnolia grandiflora*, *Mitchella repens*, *Nyssa sylvatica*, *Osmanthus americanus*, *Pinus glabra* Walter, *Pteridium aquilinum*, *Quercus michauxii*, *Q. nigra*, *Serenoa repens*, *Vaccinium arboreum*, *V. corymbosum*, and *V. elliotii* Chapm. The vegetation of Dudley's Hammock is characterized further in Bergstrom and Carter (2008).

†****Verbascum virgatum*** Stokes
(Scrophulariaceae)

U.S.A. GEORGIA. **Camden Co.:** S of Atkinson, NW of Tarboro, 0.2 mi N jct Old Hwy 259 and Old Merrow Community Rd, 31°04.105'N 81°

53.008'W, road embankment along Old Hwy 259, locally common, 29 Apr 2006, *R. Carter 16496* (VSC, others tbd). **Charlton Co.:** 4.1 mi S Racepond jct Hwy US 17 and Hwy GA 15/121, 30.94216°N 82.10637°W, median of Hwy US 17, locally common, 29 Apr 2008, *R. Carter 18358* and *W.W. Baker* (VSC, others tbd.). **Lowndes Co.:** S Valdosta, 50 m S jct Hwy US 41 and Inner Perimeter Rd, shoulder along W side Hwy US 41, 30.79435°N 83.241516°W, plants local, 4 Apr 2009, *R. Carter 18790* and *S. Carter* (VSC).—This species, an introduction from Europe, was known from Ontario, the northeastern United States, South Carolina, southeastern Texas and Florida (Pennell 1935; Godfrey & Kral 1958; Gleason & Cronquist 1991; Wunderlin & Hansen 2008). Voucher specimen data reported herein comprise the first report of *V. virgatum* from Georgia.

****Verbesina heterophylla*** (Chapm.) A. Gray
(Asteraceae)

U.S.A. GEORGIA. **Charlton Co.:** 3.2 mi S Moiniac, W side Hwy GA 185, 30°28.891'N 82°11.945' W, upland flat with *Pinus elliotii*, *Aristida stricta*, *Quercus incana*, *Q. minima*, *Serenoa repens*, and *Pteridium aquilinum*, plants local, 9 Aug 2007, *R. Carter 17961* and *W.W. Baker* (VSC, others tbd).—Previously thought to be endemic to northeastern Florida (Cronquist 1980; Chafin 2000; Strother 2006c), *V. heterophylla* is reported herein new to Georgia. The site was an upland sandy flat with native ground cover including *Aristida stricta* and *Ctenium floridanum*, likely formerly dominated by *Pinus palustris* but now converted to slash pine (*P. elliotii*).

†****Vicia ludoviciana*** Nutt. ex Torr. & A. Gray
subsp. ***leavenworthii*** (Nutt. ex Torr. & A. Gray)
Lasseter & C.R. Gunn (Fabaceae)

U.S.A. GEORGIA. **Camden Co.:** Woodbine, 50 m S jct E Oak St and W 4th St, 30°58.015'N 81°43.500'W, edge woodlot by E Oak St, low ground along ditch bank, locally common, 30 Mar 2007, *R. Carter 17472* (VSC, others tbd).—These voucher specimen data comprise the first report of this species from Georgia (cf. Lasseter 1984; Isely 1990).

****Vicia minutiflora*** D. Dietr.

U.S.A. GEORGIA. **Camden Co.:** St. Marys, Oak Grove Cemetery, UTM 17 446939E 3398863N (NAD27), locally abundant in open sandy soil, 22

Feb 2007, *R. Carter 17410 and W.W. Baker* (VSC, others tbd).—Jones and Coile (1988) do not map this species for Georgia, and according to Wunderlin and Hansen (2008), in Florida, it is restricted to four counties along the Apalachicola River in the panhandle. Thus, these voucher specimen data provide documentation of *V. minutiflora* from Georgia.

Vigna luteola (Jacq.) Benth. (Fabaceae) – S(S2?)

U.S.A. GEORGIA. **Camden Co.:** John Baileys Mill (USGS Jerusalem, GA, quadr.), SE of Magnolia Bluff via Bailey Mill Rd to John Bailey Mill Rd, near end of John Bailey Mill Rd along bank of Satilla River, 30°54.621'N 81°51.868'W, 13 Sep 2007, *R. Carter 18090 and W.W. Baker* (VSC, others tbd).—Jones and Coile (1988) map the species in Camden and Chatham counties. Herein, we report recent voucher specimen data of this species, infrequently collected in Georgia.

†***Zephyranthes simpsonii*** Chapm. (Amaryllidaceae) – S(S1)

U.S.A. GEORGIA. **Camden Co.:** 1.6 mi N Waverly jct Hwy US 17 and GA 110, 100 N Butler Rd, 31°06.052'N 81°42.239'W, open right-of-way, edge flatwoods, 5 May 2006, *W.W. Baker s.n.* (VSC); 19 May 2006, *R. Carter 16651 and W.W. Baker* (VSC). **McIntosh Co.:** 4.1 mi N Darien jct Hwy US 14 and Hwy GA 99, 0.2 mi N Ridgeville, ditch along E side Hwy GA 99, 6 Apr 2003, *R. Carter 14898*

(VSC, others tbd).—This species was not mapped by Sweeney and Giannasi (2000).

Zigadenus leimanthoides (A. Gray) A. Gray (Liliaceae) – S(S1)

U.S.A. GEORGIA. **Taylor Co.:** vicinity of Little Whitewater Creek, 6.1 mi S of Butler by Hwy GA 137, open sphagnous seepage slope at edge of Atlantic white cedar swamp, 15 Sep 1990, *R. Carter and M.W. Morris 8469* (VSC, fruiting specimen); 4.3 mi N of Butler, periodically disturbed sphagnous powerline right-of-way in vicinity of Beaver Creek, locally common, 26 May 1991, *R. Carter and M.W. Morris 8785* (GA, MMNS, VSC, WTU).—Jones and Coile (1988) mapped this species in Georgia only in Turner County. The records reported herein provide documentation for this rare plant in a second Georgia county. Associates in Taylor County were *Calopogon tuberosus*, *Carex glaucescens*, *Cleistes divaricata*, *Eriocaulon decangulare*, *Fuirena squarrosa* Michx., *Hypericum crux-andreae* (L.) Crantz, *Juncus trigonocarpus* Steud., *Lycopodium appressum*, *L. alopecuroides*, *Mitreola sessilifolia*, *Oxypolis rigidior* (L.) Raf., *Platanthera blephariglottis* (Willd.) Lindl., *Pogonia ophioglossoides*, *Polygala nana* (Michx.) DC., *P. cruciata* L., *Rhexia petiolata*, *Rhynchospora* spp., *Sabatia* spp., *Sarracenia rubra* Walter, *Syngonanthus flavidulus*, *Utricularia subulata* L., and *Xyris* spp.

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