## LIRIOPE AND OPHIOPOGON (RUSCACEAE) NATURALIZED IN ALABAMA

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## **ABSTRACT**

Liriope muscari, L. spicata, and Ophiopogon japonicus are documented as naturalized in Alabama, where they occur on wooded slopes, in floodplains and riparian habitats, and in disturbed sites. The occurrences of O. japonicus are the only known instances of naturalization of that species in the USA. Each species is documented by photos of one or more vouchers. KEY WORDS: Liriope, Ophiopogon, naturalized, Alabama

Published documentation for the naturalization of *Liriope* and *Ophiopogon* in the USA is essentially lacking, although species of both genera are reported to grow outside of cultivation (e.g., Kartesz 2010; USDA, NRCS 2010). To accompany an overview of these genera as cultivated and naturalized in the USA (Nesom 2010), collections of plants naturalized in Alabama are here placed on record. Specimens are from ANNISTON, JSU, and VDB.

Many of the Alabama sites with naturalized *Liriope* ("monkey grass") and *Ophiopogon* ("mondo grass") are wooded slopes with residential or commercial development above. Habitats of naturalized plants are mostly undisturbed along the Cahaba River in Jefferson and Shelby counties (in the middle of Birmingham), along Black Creek at Noccalula Falls (downstream from the park where they were grown in the garden area) in Etowah County, and along the Tennessee River with residential development above in the town of Sheffield in Colbert County. Naturalized habitats where disturbance is typically minimal include floodplains and riparian sites. Collectively, however, the liriopogons also may occur in historically disturbed areas, cemetaries, or old homesites like those cited below from Dallas County.

Both genera are commonly used in landscapes in our area as a border-grass. As escapes they often have the appearance of an upland *Carex*, except that they usually occur in large clumps, and these plants are not represented well in herbaria because they are probably often overlooked. Each of the species documented here can be expected to become more common in nature — they spread by

asexual fragmentation of the stoloniferous clones and the fruits easily wash away from source populations to establish new ones.

## **OPHIOPOGON JAPONICUS** (Thunb.) Ker-Gawl.

**Alabama**. **Colbert Co.**: rich woods on N-facing ravine (Cliff Haven) with exposed Tuscumbia Limestone and Fort Payne Chert, adjacent to the Tennessee River (Pickwick Lake) across from McFarland Park in Sheffield; slope scattered with clusters of this exotic along with *Liriope muscari*, most likely spread from development above the ravine, 17 Apr 2006, *Spaulding 12410* (ANNISTON-Fig. 1). **Dallas Co.**: Old Cahawba FW Tract, SW of Selma, near old pecan orchard in historic black cemetary, near N32.32534 W87.09684, 20 Oct 2010, *Barger and Holt OC-95* (ANNISTON-Fig. 2).

# LIRIOPE MUSCARI (Dcne.) Bailey

Alabama. Calhoun Co.: Coldwater, jct US Hwy 78 and Coldwater Ck, floodplain, 30 Jul 1986, Lawler 890-Whetstone 15462 (JSU-Fig. 4). Clay Co.: forested floodplain area adjacent to campgrounds at Lake Chinnabee Recreation Area, 18 Mar 1995, Spaulding 8908 (JSU). Coffee Co.: vic. of Kingston, along Hwy 474 (Hwy 6 on old map) at 0.1-0.3 mi W of jct with Pea River, local colony on S side of road ca. 0.1 mi W of bridge in small patch of trees by dirt road, 2 Jan 1999, McDonald 12521 (VDB). Colbert Co.: rich woods on N-facing ravine (Cliff Haven) with exposed Tuscumbia Limestone and Fort Payne Chert, adjacent to the Tennessee River (Pickwick Lake) across from McFarland Park in Sheffield; slope scattered with clusters of this exotic along with *Ophiopogon* japonicus, most likely spread from development above the ravine, 17 Apr 2006, Spaulding 12404 (ANNISTON-Fig 3). Etowah Co.: rocky sandstone woods along Black Creek along Noccalula Falls on Lookout Mountain in Gadsden, 6 Aug 1994, Hodge 2967-Spaulding 7095 (JSU); Gadsden, rocky slope near Paseur Park on Lookout Mountain at jct of Bellevue Drive and Highland Ave., 7 May 1995, Hodge 4218-Spaulding 7957 (JSU). Henry Co.: woods along Chattahoochee River W from Ft. Gaines, Ga.; one large clump just NW of boat launch area, 26 Mar 1999, McDonald 12605 (VDB). **Houston Co.**: Dothan (NW side of town), along Murphy Mill Rd at jct with Murphy Mill Creek Bridge, on bank near bridge, 22 Jun 1991, McDonald 2632 (VDB). Jefferson Co.: secondary woods in NE Birmingham along Village Creek, Birmingham-Big Canoe Valley district of the Ridge & Valley province, 11 Jun 2000, Spaulding 10,882 (JSU).

### LIRIOPE SPICATA Lour.

Alabama. Baldwin Co.: Co. Hwy 47, 0.1 mi E of Interstate Hwy 65, hardwood area with thick understory of *Ligustrum sinense*, 25 May 2002, *Diamond 13220* (ANNISTON-Fig. 5, VDB). Dallas Co.: Old Cahawba FW Tract, SW of Selma, near N32.32534 W87.09684, in field leading through old pecan orchard by historic black cemetary, 15 Apr 2010, *Barger and Holt OC-130* (ANNISTON-Figs. 6 and 7), 20 Oct 2010, *Barger and Holt 130a* (ANNISTON), and 20 Oct 2010, *Barger and Holt OC-130b* (ANNISTON); Selma, E of US Hwy 80 along N side of the Alabama River, old warehouse district along the river, 12 Jul 2004, *Diamond 14493* (VDB). Shelby Co.: Cahaba River at Co-29, escaped from cultivation but well established, 28 Jul 1977, *Sessler 1772* (VDB); alluvial woods along the Cahaba River, SE of Birmingham, 11 Oct 1997, *Spaulding 10,134* (JSU, VDB).

## LITERATURE CITED

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Figure 1. Ophiopogon japonicus naturalized in Colbert County.



Figure 2. Ophiopogon japonicus naturalized in Dallas County.



Figure 3. Liriope muscari naturalized in Colbert County.



Figure 4. Liriope muscari naturalized in Calhoun County.



Figure 5. Liriope spicata naturalized in Baldwin County.



Figure 6. Liriope spicata naturalized in Dallas County.



Figure 7. Liriope spicata naturalized in Dallas County.





Figures 8a and 8b. Ophiopogon japonicus in Dallas County, population vouchered by Barger and Holt OC-95, 10 Oct 2010. Photos by Wayne Barger.