

NEW VASCULAR PLANT RECORDS FOR ALABAMA

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ABSTRACT

Two exotic vascular plant species are reported new to Alabama and one native species is reported new to the southeastern region of the state. *Butia odorata* (Arecaceae) and *Camellia sasanqua* (Theaceae) are reported as new to Alabama. *Populus heterophylla* (Salicaceae) is reported new to southeast Alabama.

New records for native and established exotic species have resulted during field studies in Geneva and Houston counties, Alabama. *Butia odorata* (Arecaceae) and *Camellia sasanqua* (Theaceae) are reported as new to Alabama, and *Populus heterophylla* (Salicaceae) is reported new to southeast Alabama. Complete sets of voucher specimens are housed at the Troy University Herbarium (TROY), and the University of West Alabama Herbarium (UWAL). State records were determined using the Alabama Plant Atlas (Keener et al. 2018, the North American Plant Atlas (Kartesz 2015), and literature searches.

Butia odorata (Barb. Rodr) Noblick. (Arecaceae)

Vouchers. **Alabama. Geneva Co.:** Geneva. Alabama Hwy 27, 0.1 mi N of Alabama Hwy 52, overgrown area and trash dump east of the road, with *Liriope muscari*, *Aspidistra elatior*, and *Quercus nigra*, 31.041617° -85.85813°, elev. 102 ft, 10 Dec 2015, *Diamond 27122* (TROY; UWAL); S side of service road, 0.1 km NE of Alabama Hwy 52 and Hwy 27 intersection, trash dump in disturbed sandy woods, moist sandy soil with partial shade, 31.041234° -85.857699°, elev. 101 ft, 27 Jan 2017, *Byrd 665* (TROY; UWAL); N side of Dogwood Trail, 0.2 km E of Coffee Springs Road intersection, overgrown wooded area with moist sandy soil and partial shade, with *Pinus palustris*, *Liquidambar styraciflua*, and *Quercus nigra*, 31.165822° -85.912165°, elev. 216 ft, 11 Jul 2017, *Byrd 1347* (TROY; UWAL).

These are the first reports of *Butia odorata* escaping in Alabama. It is common in the city of Mobile (Mobile Co.), where it is widely planted for decoration or fruit production (Finch 2010). Previous collections of this species in the USA have been reported as *Butia capitata* (Mart.) Becc. It has previously been reported as naturalizing in Florida and sparsely naturalizing in North Carolina, South Carolina, and Georgia (Nelson 2014).

Noblick (2011) recognized *Butia capitata* (Mart.) Becc. var. *odorata* (Barb. Rodr.) Becc. (on the coastal plain of Uruguay and Brazil) as distinct from var. *capitata* (in the central planalto of Brazil) and raised it to species rank. This was supported by lamina anatomy studies conducted by Sant'Anna-Santos et. al (2015). *Butia odorata* is the entity in cultivation, with *B. capitata* being virtually unknown (Rare Palm Seed 2018).

Butia odorata is usually short and stocky, reaching approximately 6 m in height with an average DBH of 50 cm. This palm has long, strongly recurved pinnate leaves reaching 3 m in length and appearing blue-gray or pale green in color with leaflets ranging close to 1 m in length (Fig. 1). The fruit (Fig. 2) are fleshy drupes and occur on densely packed, elongated structures (Nelson 2011; Nelson et al. 2014).



Figure 1. *Butia odorata* in overgrown vacant lot in Geneva Co., Alabama.



Figure 2. Fruit on *Butia odorata*.

Camellia sasanqua Thunberg (Theaceae)

This represents the first report of this taxon escaping in Alabama. Native to Japan, *Camellia sasanqua* has previously been reported as escaping or persisting from cultivation in Arkansas, Georgia, North Carolina, and South Carolina (Kartez 2015). Three species of *Camellia* have been reported as escapes in the USA: *C. japonica* L., *C. sasanqua* L., and *C. sinensis* (L.) Kuntze (Kartez 2015). Diamond previously reported *C. japonica* as an escape in Alabama (2013). Both species are widely cultivated as ornamentals and often produce abundant viable fruit (Fig. 4).

Camellia sasanqua is a large evergreen shrub reaching 5 m in height with alternate toothed leaves and pubescence on the stems and fruit (Serviss & Peck 2016). Additional differences separating *Camellia sasanqua* from *Camellia japonica* are the size and disposition of the leaves, flowering times, and sepals being deciduous or persistent (Weakley 2015; USDA, NRCS. 2016).

Voucher. **Alabama.** Geneva Co.: Samson, S side of Morris St., 0.1 km E of Alabama Hwy 87, in overgrown wooded lot, moist soil with partial shade, with *Cynodon dactylon*, *Cissus trifoliata*, and *Ilex opaca*, 31.114555° -86.044956°, elev. 205 ft, 27 Jan 2017, Byrd 681 (TROY, UWAL).



Figure 3. *Camellia sasanqua* in vacant overgrown lot in Samson, Alabama.



Figure 4. *Camellia sasanqua* fruit.



Figure 5. *Populus heterophylla* growing in swampy lowland in Geneva Co., Alabama.

Populus heterophylla L. (Salicaceae)

These are the first reports of this taxon from southeastern Alabama. *Populus heterophylla* was previously reported in Alabama from Baldwin, Clarke, Mobile, and Washington counties in southwestern Alabama and Jackson and Limestone counties in northeastern Alabama (Keener et al. 2018). *Populus heterophylla* is a large tree (Fig. 6 reaching 50 m in height, with deciduous cordate leaves (Fig. 5; USDA, NRCS. 2016; Weakley 2015).

Voucher. **Alabama.** Geneva Co.: S side of Geneva Co. 4 and Jessica Rd intersection, in swamp with waterlogged soil and moderate shade, with *Vitis rotundifolia*, *Liriope muscari*, and *Quercus nigra*, 31.028213° -85.488957°, elev. 237 ft, 20 Oct 2017, Byrd 391 (TROY, UWAL). Houston Co.: 0.1 mi E of Rambo Mill Road at the N side of Spring Creek, hardwood swamp forest over limestone, with *Acer rubrum*, *Salix nigra*, *Nyssa aquatic*, and *Taxodium distichum*, 31.009041° -85.347505°, elev. 161 ft, 22 Nov 2016, Diamond 27727 (TROY, UWAL).

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