

## FIRST RECORD OF *FATSIA JAPONICA* (ARALIACEAE) FROM THE NATURALIZED ARKANSAS FLORA

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### ABSTRACT

The first naturalized occurrence of *Fatsia japonica* in the Arkansas flora is reported here from Columbia County. In 2024, two escaped plants were discovered growing along a large drainage at the edge of highly disturbed urban woods within the city of Magnolia. Establishment of the escaped plants likely occurred via bird-mediated seed dispersal from cultivated plants in the vicinity. In the USA flora, naturalized *F. japonica* only is known elsewhere from Florida and North Carolina.

*Fatsia japonica* (Thunb.) Decne. & Planch. (paperplant; Japanese aralia; false castor oil plant) is an evergreen shrub or small tree to about five or six meters tall that is native to Japan and Korea (Bailey & Bailey 1976; Krüssmann 1977; Xiang & Lowry 2007). This species sometimes is cultivated in the southeastern USA for its attractive vegetative form and ornate flowers.

In 2024, two escaped plants of *Fatsia japonica* were discovered growing along a large drainage at the edge of highly disturbed urban woods within the city of Magnolia (Figs. 1–2, 3). Plants were present at the base of a steep, north-facing bank in partial shade. Both plants were less than two meters tall, but based on the level of stem development, were more than one year old. Establishment of the escaped plants likely occurred via seeds carried by birds from cultivated plants of the species that were present in the vicinity — the site is bordered by an extensive residential area. Other exotic taxa also present and naturalized at the site include *Colocasia esculenta*, *Liriope spicata*, and *Trachelospermum asiaticum*. This record also represents the first known occurrence of the genus *Fatsia* outside of cultivation in the Arkansas flora (Gentry et al. 2013; Kartesz 2015; Ogle et al. 2020; Serviss & Tumilson 2021; Weakley 2024) and apparently only the third naturalized occurrence of this species in the USA. It previously has been recorded in the floras of Florida and North Carolina (Kartesz 2015; Weakley 2024).

**Voucher specimen. Arkansas.** Columbia Co.: Magnolia, adjacent to the intersection of Dogwood St. and Sue St., bordering large residential area, 33.2857901° N, 93.2276976° W, two young plants, both less than 2 m tall, separated by a few meters, at the base of a steep, N-facing bank of large drainage at edge of highly disturbed urban woods, 19 Jul 2024, *Serviss 8816* (HEND, ANHC).

Based on the scarcity of naturalized records for the USA, along with observations of the species in Arkansas, the potential for establishment of *Fatsia japonica* in the state's flora appears to be limited. It might be expected outside of cultivation elsewhere in southern Arkansas, in the vicinity of where plants of the species are cultivated and environmental conditions suitable for establishment exist. It is naturalized in a few other regions, including China and New Zealand, where in the latter it occurs as a ruderal near home sites and in waste areas, with establishment via a combination of root suckers and seeds (Rogan 1997; Xiang & Lowry 2007; Popay et al. 2010).



Figure 1. *Fatsia japonica* naturalized in Columbia Co., Arkansas. Larger of the two plants (ca. 1.3 m tall) growing on a small ledge toward the base of a steep bank a few meters distance from the plant shown in Figure 2.



Figure 2. *Fatsia japonica* naturalized in Columbia Co. The smaller of the two plants (ca. 1 m tall) growing at the base of a steep, north-facing bank adjacent to a large culvert (far right). The vining plants in the photograph are *Trachelospermum asiaticum*, which was prevalent at the site.

Ogle et al. (2020) and Serviss and Tumblison (2021) did not include *Fatsia japonica* in their treatments of Arkansas woody plants. In Arkansas, it is distinguished from most other woody species by its large, orbicular, coarsely and deeply palmately lobed leaves. In vegetative condition, however, it potentially could be confused with *Ricinus communis* (castor bean), which is well-naturalized in the state, and *Tetrapanax papyrifer* (rice-paper plant), which although not truly naturalized, occasionally is cultivated and can aggressively spread to form large colonies via suckering. The three taxa can be distinguished using the following key.

1. Leaves, young stems, and inflorescences covered in a dense indument of beige to white, stellate trichomes; plants typically forming large colonies from a spreading, suckering root system  
..... **Tetrapanax papyrifer**
1. Leaves, stems, and inflorescences glabrous or tomentose-pubescent when young (*Fatsia*) and becoming glabrescent with age but not covered in a dense indument of stellate trichomes; plants not forming extensive colonies via suckering.
  2. Leaves coriaceous; petioles without conspicuous, cuplike glands; fruit a black berry  
..... **Fatsia japonica**
  2. Leaves not coriaceous; petioles generally with 1–3 conspicuous, cuplike glands on the adaxial surface; fruit an echinate capsule..... **Ricinus communis**



Figure 3. County distribution of naturalized *Fatsia japonica* in Arkansas.

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