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COMMENTS ON *BUDDLEJA LINDLEYANA* (BUDDLEJACEAE) IN TEXAS

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ABSTRACT

Buddleja lindleyana, a non-native species known to occur in east Texas, is recognized as relying on repeated introductions through cultivation and subsequent abandonment for long term persistence.

KEY WORDS: *Buddleja*, Texas, naturalized, persistent.

Buddleja lindleyana Fortune (Buddlejaceae), a native of China, has been mentioned as occurring in Texas since 1913 (Small), yet, other than for generalities, little is known about its occurrence and distribution in the state. Herbarium and field studies have yielded the following information concerning the species in Texas.

Small (1913), which appears to be the initial report of the species in Texas, mentioned the distribution of the species as "Florida to Texas." The inclusion of Texas within the distribution is likely based upon a Montgomery County, Texas, specimen collected in 1909 (see exsiccatae). Cory and Parks (1937) gave the distribution as the Coastal Prairies, while Gould (1962) cited the species as present in the Pineywoods and, in error, considered the species native. In 1970, Correll and Johnston, in their *Manual of the Vascular Plants of Texas*, where it is afforded full specific treatment, gave the following comments: "Roadsides & cult. ground in s.e. Texas, summer-fall, nat. of China, cult. & escapes to become naturalized in the coastal plain from Fla.-Ga.-Tex." Hatch et al. (1990) included the species in their checklist of the state's flora, citing its distribution as the Pineywoods and the Gulf Prairies and Marshes vegetational areas. Johnston (1990) and Jones et al. (1997) included the species in their respective works, but without comment. The species is not included in the *Atlas of the Vascular Plants of Texas* (Turner et al. 2003).

Specimens examined: **Montgomery Co.:** in an old abandoned field, 18-21 Jul 1909, *Dixon 480* (BAYLU photo, NY). **Morris Co.:** Daingerfield State Park, 14 Nov 1998, *Singhurst 7160* (BAYLU). **Travis Co.:** University of Texas campus, Austin, *McKee & Wesley 3840* (TEX).

The Travis County record is presumably cultivated, while the Montgomery County specimen lacks precise location data and information about the nature of the plant's occurrence. The disturbed nature of the habitat (old abandoned field) may indicate that the plant was persistent from cultivation. The Morris County record also seems persistent from cultivation.

Field observations and specimens available for study suggest that the species does not form long-term self-replacing populations, particularly in the Pineywoods vegetational region. Its continued presence relies on cultivation and subsequent long persistence after abandonment. In

Texas, the species is best considered alien or casual alien (categories from Pyšek et al. 2004). In the classification of Nesom et al. (2010), the species is given an invasive index of F3 (woody plants that are few in number, repeatedly introduced and/or long persisting).

Buddleja lindleyana presents neither immediate nor long-term concern as a problematic plant in Texas. Judging from the scattered localities from where it is reported elsewhere in the USA, from Texas, Oklahoma, and Arkansas eastward through the coastal states to North Carolina (USDA, NRCS 2010; Kartesz 2010), the extra-cultivation occurrence of the species probably is similar to that in Texas.

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