ABELMOSCHUS ESCULENTUS AND ALCEA ROSEA (MALVACEAE) NEW TO THE ARKANSAS FLORA

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ABSTRACT

Abelmoschus esculentus (L.) Moench and Alcea rosea L. are documented here as new to the Arkansas flora. These records also represent the first reports of these genera outside of cultivation in the state. Escaped/naturalized plants of both species were discovered growing in highly disturbed areas along the Arkansas River floodplain in Pulaski County. Additionally, A. esculentus is documented from Garland County on the shore of Lake Ouachita. Photographs of voucher specimens for both species are provided.

In 2007, several escaped plants of Abelmoschus esculentus (L.) Moench (okra) were documented from both Garland and Pulaski counties from highly disturbed habitats along the Arkansas River floodplain and the Lake Ouachita shoreline (Fig. 1). Also in 2007, escaped plants of Alcea rosea L. (hollyhock) were documented from Pulaski County from highly disturbed habitat along the Arkansas River floodplain (Fig. 2). No previous records of these species have been documented from the Arkansas flora, outside of cultivation (Arkansas Vascular Flora Committee 2006; Gentry et al. 2013; Bates 2015; Hill 2015).

A portion of the Two Rivers Park area consists of an expansive community garden that is a plausible source of propagules, most likely seeds from discards, compost, or abandoned plants, that could have facilitated establishment of the escaped plants. It is important to emphasize, however, that although the initial source pool is probably directly or indirectly attributable to human activities, the plants reported in this paper were escapes, and not planted, cultivated, or persisting as remnants of intentional agricultural or horticultural activities.

Abelmoschus esculentus is an annual species that is native to tropical Asia and Africa and is the okra of commerce grown both locally and commercially in the USA and elsewhere (Bailey & Bailey 1976; Bates 2015; Hanes 2015). Alcea rosea is a biennial species that is thought to have originated in southwestern China, but is now found in cultivation and naturalized throughout much of the world (Hill 2015). Both species are frequently cultivated in the eastern USA (Bailey & Bailey 1976; Bates 2015; Hill 2015; Weakley 2015), including Arkansas, and have been well–documented outside of cultivation in several states (Bates 2015; Weakley 2015; USDA, NRCS 2017).

Escaped/naturalized plants of these species typically are encountered in highly disturbed areas and waste places (Bates 2015; Hill 2015), similar to the environments in which the Arkansas plants were discovered. Based on frequency of cultivation and ability to self–seed, both A. esculentus and A. rosea should be expected as adventive or escaped elsewhere in Arkansas in low quality, highly disturbed environments, particularly in urban areas in proximity to where plants of these species occur in cultivation.
Alcea rosea is grown as an ornamental for its large, showy, and variously colored flowers, and A. esculentus is grown both as an ornamental for its showy flowers and foliage, and more commonly, for its edible fruits (Bailey & Bailey 1976).


Figure 2. Voucher specimen of escaped *Alcea rosea* from Pulaski County.
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LITERATURE CITED