

A naturalized population of *Cenchrus purpurascens* (Poaceae) in Boone County, Missouri

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ABSTRACT. – *Cenchrus purpurascens* is reported new to the Missouri flora in Boone and St. Louis counties; the Boone County population is discussed in detail.

Cenchrus purpurascens Thunb. (Chinese fountain grass or foxtail fountain grass) has been recently treated as *Pennisetum alopecuroides* (L.) Spreng. by various authors (e.g. Yatskievych 1999, Wipff 2003). Verloove (2012) noted that *Pennisetum* and *Cenchrus* were closely related and recommended that further genetic studies be conducted to clarify the taxonomic relationship between the two genera. Chemisquy et al. (2010) unified *Cenchrus* and *Pennisetum* along with *Odontelytrum* Hack., following a detailed nuclear, plastid, and morphological analysis and transferred members of the genus *Pennisetum* into *Cenchrus* as the latter has nomenclatural priority. However, in that publication, the authors listed *Cenchrus compressus* (R. Br.) Morrone as the correct name for *Pennisetum alopecuroides*. Verloove (2012), however, noted that the correct binomial should be *Cenchrus purpurascens* as noted by Alan Weakley in his *Flora of the Southern and Mid-Atlantic States* (2015) and confirmed by him through correspondence with Robert Soreng at the Smithsonian Institution (Weakley, pers. comm. Oct. 2016).

Cenchrus purpurascens is a commonly planted ornamental along with other members of the genus [treated as *Pennisetum* by Yatskievych (1999), Donadio et al. (2009), Chemisquy et al. (2010)]. In Missouri, Yatskievych (1999) noted that this taxon was planted to revegetate mine spoils in Boone County. Outside of garden plantings, the first record of this species escaping from captivity was apparently made by Douglas Ladd in St. Louis County in August 2000 (<http://www.tropicos.org/Specimen/2598432>). Ladd collected the specimen from along the edge of a small overgrown depression adjacent to Ruth Park. Justin Thomas has also reported this grass escaping from landscape plantings (Thomas, pers. comm. Oct. 2016).

On 24 September 2016, I discovered a naturalized population of *Cenchrus purpurascens* in Boone County near the intersection of Bearfield Rd. and Mace Dr. in southeast Columbia in a vacant lot (38.90138° N, 92.30437° W) (Figure 1). Vouchered specimens (*McKenzie 2610*) will be distributed to the Missouri Botanical Garden (MO) and other cooperating herbaria.

The population at the site is apparently well established as a few hundred inflorescences were estimated. The obvious source population for this escape was surely the ornamental planting

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directly on the opposite side of the street at 4304 S. Bearfield Rd. (Figure 1). When I returned to the site to collect mature seed on 14 October 2016, the field had been mowed.

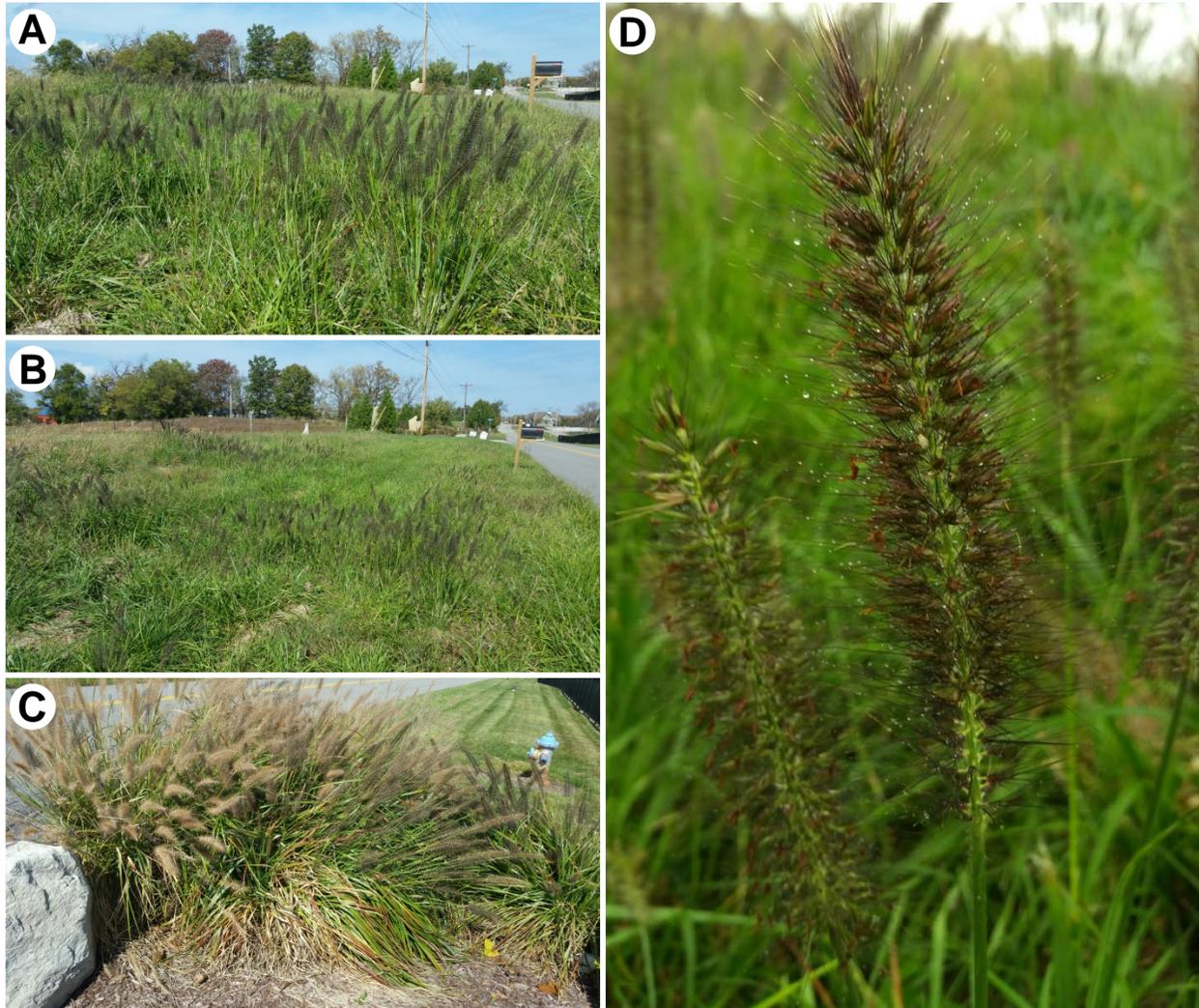


Figure 1. *Cenchrus purpurascens*, Columbia, Boone Co., Missouri. **A-B:** naturalized population, 4304 S. Bearfield Rd.; **C:** presumed source population in planting across street; **D:** close-up of inflorescence. All photos by the author.

It is likely that this species will continue to escape cultivation and undoubtedly additional records for this grass will be recorded. Ironically, a record of *Cenchrus purpurascens* was recently discovered in Tennessee following email correspondence regarding the Boone County discovery (Dwayne Estes, Austin Peay State University, pers. comm. Oct. 2016). However, given the mowed fate of the most recent discovery, one can only wonder what other interesting finds may be missed due to maintenance activities.

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