FIRST RECORD OF IRIS PSEUDACORIS (IRIDACEAE) FROM COLORADO

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ABSTRACT

Iris pseudacorus L. (Iridaceae) is reported for the first time for Colorado.

KEY WORDS: Iris pseudacorus, Colorado, non-native

RESUMEN

Iris pseudacorus L. (Iridaceae) se cita por primera vez para Colorado.

INTRODUCTION

Iris pseudacorus L. (Iridaceae) is a non-native obligate wetland perennial that is widely established across the United States and Canada (Henderson 2002; USDA, NRCS 2011). It is native to Eurasia and northern Africa (Sutherland 1990). The earliest records of this plant in North America appear to be from the northeastern United States and Canada. Cody (1961) cites a Fernald & Wiegand collection from 1911 as being the first record from Canada. The plant was listed as a rare escape from gardens in Connecticut by Graves et al. (1910). This Iris species is widely cultivated and has been in use in North American gardens since as early as the 18th century (L.H. Bailey Hortorium 1976; Wells & Brown 2000). Iris pseudacorus is listed on the Noxious Weed list in 5 states, with some states listing it as banned (i.e., importation, sale, and trade are prohibited) (USDA, NRCS 2011). However, there have been few studies conducted to quantify its threats (but see Thomas 1980).

NEW RECORDS FOR COLORADO

Iris pseudacorus has not been previously reported for Colorado in floristic treatments covering the state (Harrington 1964; Weber & Wittmann 2000; Hartman & Nelson 2001; Snow 2009) or Boulder County specifically (Hogan 1993; Weber 1995). In addition, no Colorado specimens were located in a search of COLO and KHD or through an online database search of CS and RM (Southwest Environmental Information Network 2011).

Voucher Specimens: COLORADO. Boulder Co: S of Lyons near, in irrigation ditch between open field and houses, 40.215722 N -105.266522 W, elev. 1626 m, locally common, 28 Jun 2010, M.W. Denslow & M.L. Denslow 2675 (BOON, duplicates to be distributed); Park S of Lyons, along banks of St. Vrain River, 40.219675 N -105.265481 W, elev. 1627 m, uncommon at rivers edge, 29 Jun 2010, M.W. Denslow 2676 (BOON, duplicates to be distributed); SE of Boulder along Bobolink Trail on E side of Boulder Creek, wet depression, 39.999015 N -105.215029 W, elev. 1614 m, locally abundant, 2 Jul 2010, M.W. Denslow, G.L. Katz & M.L. Denslow 2677 (BOON, duplicates to be distributed).

DISCUSSION

The three specimens cited represent two distinct populations, each with several individuals of this species. This species is an established part of the Colorado flora. Extensive surveys for this plant have not been conducted, so its range in Colorado is not clear at this time. However, additional populations have been observed along Boulder Creek. It is also unclear how long this species has been established in the wild, since the vouchered populations do not appear to be newly established. This species has been cultivated on the campus of The University of Colorado, Boulder since at least the 1970s.
The only other documented species of Iris present in Colorado is the native *I. missouriensis* Nutt. (Hartman & Nelson 2001). *Iris missouriensis* is unlikely to be confused with *I. pseudacorus* because the former has a blue to lavender perianth as opposed to a yellow perianth in the latter. We have also observed *I. germanica* L. persisting in areas where gardeners have discarded rhizomes. This widely cultivated species can have a broad range of perianth pigmentation from blue-violet to white, including yellow. However, *I. germanica* differs most notably from both *I. missouriensis* and *I. pseudacorus* by the presence of multicellular hairs on the sepals (Henderson 2002).

These records of *I. pseudacorus* are significant for two reasons. First, this is the first report of this species from the state of Colorado outside of cultivation. Further, there are currently no records from the neighboring states of Wyoming, New Mexico or Arizona (USDA, NRCS 2011). Second, this species is a listed Noxious Weed and is regulated in some states (USDA, NRCS 2011). Therefore this species may require management action in Colorado. Sources of information on the control of *I. pseudacorus* mention mechanical removal and chemical application as the main methods of control (e.g., Stone 2009). However, it should be noted that these methods may be problematic in the habitats typical of this species. Research is needed to assess the effects of control measures on wetland and aquatic communities. The best way to stop *I. pseudacorus* from entering new watersheds may be to limit its use in horticulture (Reichard & White 2001).

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REFERENCES


