

## ***EUPHORBIA GRAMINEA* JACQ. (EUPHORBIACEAE), NEW TO THE BAHAMAS**

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### **ABSTRACT**

*Euphorbia graminea* is reported as new to the Bahamas. It was discovered on both Eleuthera and New Providence islands as a weedy species. It appears to have been introduced through the horticultural trade.

**KEY WORDS:** *Euphorbia graminea*, Bahamas, Caribbean, Euphorbiaceae, invasive species

*Euphorbia graminea* Jacq. (Figure 1) was first described in 1763 from material collected in Cartagena, Columbia (Jacquin 1763); the epithet “graminea” refers to the grassland habitat of the species (Jacquin 1767; McVaugh 1993). The species has also been called *Agaloma graminea* (Jacq.) D.B. Ward (Ward & Housel 2007), but recent molecular studies support its placement within in *Euphorbia*, where *E. graminea* nests with other Mexican and Caribbean species (Yang & Berry 2011; Yang et al. 2012).

*Euphorbia graminea* is considered native to southern Mexico through northern South America (Webster & Bruch 1967) and is also found in Cuba, Lesser Antilles (St. Lucia), Aruba, Bonaire, and Curaçao (Acevedo-Rodríguez & Strong 2012). This species is considered invasive (Randall 2002) and has been found as a weedy species in at least Fiji (Smith 1991), the Galapagos (Charles Darwin Foundation 2008; Guézou et al. 2010), Hawaii (Wagner et al. 1999), Palau (Fosberg et al. 1980), India (Holm et al. 1979), and Taiwan (Yang et al. 2005). One cultivar of *E. graminea* is in the horticultural trade (Proven Winners 2013).

*Euphorbia graminea* was first collected in the USA in 1993 as a weed at several sites in Florida (Herndon 1994). Florida collections were later re-identified (incorrectly) as *E. oerstediana* J.F. Klotzsch & C.A. Garcke (Ward 2001), which was subsequently corrected by Ward and Housel (2007). The species is known as a greenhouse weed in California but has not yet been seen to spread beyond that setting (Rosatti 2011). The Bahamian collections were both made from disturbed sites where horticultural plants had recently been introduced from Florida nurseries. It was common at one site on Eleuthera and seen at four separate sites on New Providence, though only vouchered from one.

Vouchers: **BAHAMAS. Eleuthera.** Weedy near Governor’s Harbour, 5 Jan 2013, *Vincent 16016* (FTG, MU, Bahamas National Herbarium). **New Providence.** Weedy in Nassau, 5 Mar 2013, *Vincent 16185* (FTG, MU, Bahamas National Herbarium).

*Euphorbia graminea* is very morphologically variable, as discussed by McVaugh (1993). It is an annual plant, generally from 15–30 cm tall, sometimes taller, often branching from the base, and dichotomously branched distally. The leaves are alternate; those toward the base of the plant are ovate or oblong with a few large distantly-spaced teeth, while those toward the tops of the plants are elliptical to linear and entire. Cyathia are in short- to long-pedunculate cymes and have white petaloid appendages. The capsules are exserted from the cyathia, glabrous, and about 2 x 3 mm. The seeds are angular, ovoid, ca. 1.5 x 1.3 mm, gray or whitened, and rugose.



Figure 1. *Euphorbia graminea* Jacq. growing near Governor's Harbour, Eleuthera, in January 2013 (Vincent 16016). Photograph by Michael A. Vincent.

It is quite likely that this species will be found with greater frequency as horticultural plants continue to be brought to the Bahamas from Florida nurseries. It is uncertain at this point how invasive it will become and whether it will invade natural areas or remain a weed of disturbed sites.

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