

## *HIPPEASTRUM PUNICEUM* (AMARYLLIDACEAE), A NEW NATURALIZED SPECIES IN THE FLORA OF ANGOLA

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*Hippeastrum puniceum* (Lam.) Voss. (Amaryllidaceae) is a herbaceous species native to the Caribbean and to South America (Glen 2002). It is a bulbous perennial producing strap-shaped basal leaves and a scape (up to 1 m high) with a terminal umbel containing few flowers. The flowers are funnel-shaped, slightly zygomorphic, with six bright red tepals, turning greenish towards their base (Fig. 1).

During a botanical excursion to the province of Malanje, Angola, we recorded the occurrence of several populations of wild-growing *H. puniceum*. The plant was observed in full blossom on October 13<sup>th</sup>, 2014, just at the beginning of the rainy season, when most vegetation was only beginning to resprout. Populations of *H. puniceum* were observed in five different uninhabited sites in the province of Malanje, along the 50 km long road from Lucala to Cacuso. The species grows at elevations from 800 to 1060 m a.s.l. on the North Angolan Plateau in tropical savanna climate (Peel *et al.* 2007). The plant appears in recently burned grass savanna, probably as a result of fire set for the purpose of hunting and clearing. We observed that the plant appears solitary or in small clusters not exceeding 0.5 m in diameter. *Hippeastrum puniceum* appears to be associated with *Lippia* sp.

Living plant samples were collected and transplanted as reference in the Kilombo Botanical

Garden in N'dalatando, Kwanza Norte, Angola, in the research station plot for cryptophytes.

*Hippeastrum puniceum* is highly valued as an ornamental plant worldwide. In some countries it is cultivated for medicinal purposes (Hanelt 2001). Probably by escape from cultivation, the species



**Fig. 1.** *Hippeastrum puniceum* (Lam.) Voss. in burned savanna, Malanje, Angola, taken on October 13<sup>th</sup>, 2014. Photo J. Ziffer-Berger

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has been naturalized outside its natural range, mainly in the tropics and subtropics, including Africa (Wester 1992; Hosking *et al.* 2003; Velayos *et al.* 2013).

Friedrich Welwitsch made the first African record of *H. puniceum* (Welwitsch *F.M.J.* # 4023, BM 000911844!) in 1853 on Príncipe Island, Gulf of Guinea [Baker 1898; Rendle 1899 (misidentified as *H. reginae* Herb.)], during his expedition to Angola, supported by the Portuguese government (Dolezal 1974). In a review of Welwitsch's collection, Baker (1898) expressed reservations about Friedrich Welwitsch's inference, from the spontaneous nature of the plant's occurrence in 'primitive woods', that the species be indigenous (Rendle 1899). The plant is not mentioned in the flora of Angola (Figueiredo & Smith 2008). Presumably due to the extreme scarcity of floristic studies in Angola in the past 40 years, this neophyte has not been documented.

Angolan agronomists communicated they had seen *H. puniceum* cultivated in northern Angola. According to a local herbalist, no medicinal use for the plant is known for the region (personal communications). It is not likely that the populations found had been planted, due to their considerable distance from villages. It can be inferred that the populations are a result of spontaneous propagation.

The frequency of *H. puniceum* in the burned savannas of the region raises concerns that frequent induced fires may encourage exotic herbaceous species to colonize an area originally occupied by indigenous woody vegetation. The underground bulbs seem to be unaffected by the fire, ensuring rapid growth in the beginning of the rainy season. Although apparently not an aggressive invader, the distribution of the species should be monitored for possible future action.

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