



Rediscovery of *Eugenia fajardensis* (Myrtaceae), a rare tree from the Puerto Rican Bank

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Abstract

Eugenia fragrans var.? *fajardensis* was described in 1895 and raised to species status in 1923 as *E. fajardensis*. In 1925, it was relegated to the synonymy of *Ananomis fragrans* (*Myrcianthes fragrans*). Since 2001, we have re-discovered wild plants and herbarium specimens, including a previously unidentified isotype of *E. fajardensis*, supporting the validity of this species. Here we designate a lectotype and an epitype for *E. fajardensis*. In addition, we provide: 1) an extended description for the species including the previously unknown flowers and fruits, an illustration, and photographs of live plants, 2) a key for the 24 taxa of *Eugenia* reported for Puerto Rico and the Virgin Islands, and 3) descriptions of the three known populations. These populations collectively hold 182 plants in the islands of Puerto Rico, Culebra, and Vieques. Based on the IUCN Red List Criteria, *E. fajardensis* meets the requirements to be considered a Critically Endangered species.

Resumen

Eugenia fragrans var.? *fajardensis* fue descrita en 1895 y elevada al estatus de especie en 1923 como *E. fajardensis*. En 1925, esta especie fue relegada como un sinónimo de *Ananomis fragrans* (*Myrcianthes fragrans*). Desde el 2001, hemos redescubierto poblaciones silvestres y especímenes de herbario, incluyendo un isotipo previamente desconocido de *E. fajardensis*, los cuales apoyan la validez de la especie. En este artículo designamos un lectotipo y un epitipo para *E. fajardensis*. Además, proveemos: 1) una descripción extendida de la especie incluyendo flores y frutos, anteriormente desconocidos, una ilustración, y fotografías de plantas vivas, 2) una clave para distinguir los 24 taxones del género *Eugenia* reportadas para Puerto Rico e Islas Vírgenes, y 3) descripciones de las tres poblaciones conocidas. Estas poblaciones en conjunto contienen 182 plantas en las islas de Puerto Rico, Culebra y Vieques. De acuerdo con los Criterios de la Lista Roja del UICN, *E. fajardensis* cumple con los requisitos para ser considerada una especie en Peligro Crítico de Extinción.

Key words: Antilles, Caribbean, Culebra, Fajardo's big guava, "guayabota de Fajardo", Puerto Rico, Vieques, West Indies.

Introduction

In 1885 Paul Ernst Emil Sintenis collected a new species of *Eugenia* Linnaeus (1753: 470) during his three-year expedition documenting the flora of Puerto Rico. The specimen was then sent to Berlin and described by Leopold Krug and Ignatz Urban as *Eugenia fragrans* (Swartz 1788: 79) Willdenow (1799: 964) var.? *fajardensis* Krug & Urban

17.	Leaves elliptic or obovate; fruits rounded, ripening red	<i>E. cordata</i> var. <i>sintensis</i>
-	Leaves elliptic-ovate; fruits oblong, ripening black	<i>E. glabrata</i> (Swartz) De Candolle
18.	Leaves oblanceolate; leaf blade strongly revolute	<i>E. foetida</i>
-	Leaves ovate to narrowly ovate; leaf blade flat or revolute only at the base	<i>E. monticola</i> (Swartz) De Candolle
19.	Inflorescences fasciculate, or with few flowers (≤ 5), or flowers solitary	20.
-	Inflorescences of numerous flowers (>5) in racemes or panicles	26.
20.	Inflorescences fasciculate	21.
-	Inflorescences of few flowers (≤ 5), or flowers solitary	23.
21.	Leaf blade strongly coriaceous and stiff; apex bent downward; petioles > 0.5 cm long	<i>E. confusa</i> De Candolle
-	Leaf blade slightly coriaceous; apex not bent; petiole ≤ 0.5 cm long	22.
22.	Fruits 0.6 cm in diameter	<i>E. procera</i> (Swartz) Poirlet
-	Fruits 0.9–1.5 cm in diameter	<i>E. rhombea</i> (O. Berg) Krug & Urban
23.	Twigs with lanceolate or linear bracts	<i>E. ligustrina</i> (Swartz) Willdenow
-	Twigs without lanceolate or linear bracts	24.
24.	Petiole > 0.6 cm; inflorescence cauliflorous	<i>E. laevis</i> O. Berg
-	Petiole ≤ 0.6 cm; inflorescence axillary or terminal	25.
25.	Twigs pubescent; petioles often reddish or purple	<i>E. axillaris</i> (Swartz) Willdenow
-	Twigs glabrous; petioles green	<i>E. pseudopsidium</i> Jacquin
26.	Leaves > 6 cm long	27.
-	Leaves ≤ 6 cm long	<i>E. biflora</i>
27.	Fruits smooth	<i>E. domingensis</i> O. Berg
-	Fruits verrucose; PR	<i>E. eggersii</i> Kiaerskov

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