



## ***Manilkara dardanoi* (Sapotaceae): the rediscovery of an endemic and threatened species in northeastern Brazil**

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### **Abstract**

The present study reports the rediscovery of *Manilkara dardanoi* in the Atlantic Forest, which complements the original description of this species. As the only previous reports of *M. dardanoi* date from 1950 and 1952, excursions were made to various municipalities in Pernambuco, and collections housed in Brazilian herbaria were consulted. The rediscovery of this species occurred in a secondary forest fragment in Pernambuco State. The species *M. dardanoi* is endemic to northeastern Brazil, and its rediscovery demonstrates the value of intensive collection during floristic studies, with four samples collected.

**Keywords:** Atlantic Forest, conservation status, distribution, extinction

### **Introduction**

Many species of *Manilkara* Adanson (1763: 166), popularly known as "maçaranduba", are harvested for their wood or are tapped for latex (Corrêa 1978). This genus has a pantropical distribution, with species in Africa, India, and the Pacific region (Pennington 1991, Armstrong 2010). In Brazil, it is found in the Amazon and the Atlantic Forest; both of these regions are important centres of diversity (Pennington 1990, Almeida Jr. 2010).

Nine species of *Manilkara* have been reported from northeastern Brazil (Almeida Jr. *et al.* 2009), including four species from Pernambuco State: *Manilkara dardanoi* Ducke (1950: 243), *M. rufula* (Miquel 1863: 44) Lam (1941: 356), *M. salzmannii* (Candolle 1844: 205) Lam (1941: 356) and *M. zapota* (Linnaeus 1753: 1190) Royen (1953: 410), found in the Atlantic Forest *s.s.*, Restinga (sandy coastal areas), and Caatinga (dry land) vegetation areas. *M. dardanoi* is endemic to this State and is considered to be threatened with extinction (IUCN 2013).

The International Union for Conservation of Nature and Natural Resources—IUCN (2004, 2013) annually compiles red lists of plant species that face extinction to various degrees. The uncertain conservation status of many plant species in Pernambuco State is due to, among other factors, the relative lack of studies focussing on the flora of this area and the even greater lack of taxonomic studies of the species found there. Despite the valuable contribution to the family Sapotaceae, presented by Pennington (1990), this study cited only five records of *M. dardanoi* in Pernambuco State. These records were specimens collected in 1950, 1951, and 1952 (Ducke 1950, 1957, Pennington 1990), and there has been no record of the species since that period.

The accelerated destruction of many Brazilian ecosystems, in particular the Atlantic (Almeida Jr. 2010) and Amazon Forests, and the low collection effort spent in many floristic studies, may hinder the discovery of new species. It is therefore important to perform intensive studies of the flora, amplify our knowledge of as many species as possible in order to determine the known areas of occurrence of these species and to identify priority areas for conservation (Lobão 2007).

The only earlier collections of *M. dardanoi* in Pernambuco State were made in 1950, 1951, and 1952. The lack of more extensive records may reflect the difficulty of identifying this species, its endemic (and therefore rare) status, or the widespread extinctions of its populations. In light of this situation, the present study reports the

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According to Tabarelli *et al.* (2005), the decrease in habitat areas available for this species will naturally reduce its populations (only 3% of the Atlantic Forest in Pernambuco State remains). *Manilkara dardanoi* may also be a naturally rare species and characteristic of forests showing only low levels of disturbance. Thus, the decrease in habitat would explain the absence of more records of this plant, and areas of the Atlantic forest in Pernambuco State are the most deforested, the most unknown and the least protected (Lima & Capobianco 1997).

In light of these facts, the rediscovery of *M. dardanoi* demonstrates the necessity of intensifying floristic studies in poorly collected areas of the Atlantic Forest and the importance of protecting this forest fragment in the Municipality of Barreiros, as it harbours a small population of an endemic species at a high risk of extinction.

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