

A new species of *Pericallis* (Senecioneae, Asteraceae) endemic to Porto Santo (Madeira, Portugal)

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Abstract

A new species, *Pericallis menezesii*, is described from the island of Porto Santo in the Madeiran archipelago. Morphological comparisons are made with its sister taxon, *P. aurita* which is now considered to be endemic to the island of Madeira.

Introduction

Pericallis Don (in Sweet 1835: 228) (Senecioneae, Asteraceae) is a monophyletic genus endemic to Macaronesia where it has a distribution spanning the oceanic archipelagos of the Canaries, Madeira and the Azores (Panero *et al.* 1999; Swenson & Manns 2003). Sixteen taxa are currently recognized: thirteen are endemic to the Canaries (Acebes Ginovés *et al.* 2010), one species (with two subspecies) is endemic to the Azores (Silva *et al.* 2010) and one species, *Pericallis aurita* (L'Héritier 1789: 26) Nordenstam (1978: 20) is endemic to the Madeiran archipelago (Jardim & Sequeira 2008).

Pericallis aurita is a woody chamaephyte occurring mainly in laurisilva and rocky in Madeira and Porto Santo. This species was first described by L'Héritier de Brutelle (1789) as *Cineraria aurita* (L'Héritier, 1789: 26), based on plants collect by Francis Masson in Madeira. Lowe (1857) was the first to record it from Porto Santo (as *Senecio maderensis* Candolle 1838: 409). He subsequently noted that it occurs “only on the summit of Pico Branco”, the highest point of the island, using the name *S. auritus* (L'Hér.) Lowe (1868: 449–450).

Porto Santo (60 km NE of Madeira Island) is a volcanic island with a central–western plain area of fossiliferous calcareous sediments located between the volcanic peaks. It is approximately 14 mya old, therefore it is older than Madeira Island which age is less than 6 million years (Geldmacher *et al.* 2006). With a maximum length of 11 km and width of 5 km, the total area is close to 43 km². It has a smooth orography as a result of intense erosion and the maximum elevation at Pico do Facho is 517 m a.s.l. The island has a low annual rainfall (less than 400 mm) and a mean annual temperature of 18°C, with a yearly range from 13°C to 25°C. Its bioclimate is classified as Mediterranean xeric oceanic (Rivas-Martínez 2009).

Recent analyses of chloroplast and ITS sequence data revealed consistent differences between populations of *P. aurita* from Madeira and Porto Santo (Jones *et al.* 2014). Furthermore, field observations in Porto Santo and Madeira, together with the examination of herbarium specimens (MADJ, MADM, MADS, BM and K) revealed clear morphological differences between populations of *P. aurita* from the two islands. In this study we describe *P. menezesii* as a new species endemic to the island of Porto Santo and closely related to *P. aurita* that is now recognized as endemic to Madeira.

Pericallis menezesii R. Jardim, K. E. Jones, M. Carine & M. Sequeira, *sp. nov.* (Plates 1–3)

Type:—PORTUGAL. Madeira, Porto Santo: Pico Branco, on North facing slopes, alt. 440 m, 33° 05' 37.49" N, 16° 18' 09.44" W, 21 May 2011, R. Jardim RJ 1596 (holotype BM000833061!, isotype Universidade da Madeira!).

Diagnosis :—*Species nova a Pericalli aurita tota planta indumento densiore, foliis utrinque pilis crassis conicis multicellularibusque opertis, auriculis (quas semper praesens sunt immo in primis interdum absunt) saltem dimidio longitudine petiolo pervenientibus, capitulis paucioribus (9–30) grandioribusque (7.5–9.5 × 9–12.5 mm), bracteis involucris pilis densioribus purpureis (nec albis), cypselis disci pilis crassis inter costis densisque (nec tenuis sparsis) differt.*

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