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NOVITATES GABONENSES 61. A NEW RARE ENDEMIC CALVOA (MELASTOMATACEAE) FROM MBE NATIONAL PARK, GABON

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SUMMARY

A new species of *Calvoa* from the Mbe National Park, Monts de Cristal is described.

Key words: *Calvoa*, Melastomataceae, Africa, Gabon, taxonomy.

In August 2004, during the delimitation of the southern part of the Mbe National Park in the Monts de Cristal on the summit of a table mountain, a hairy species of *Calvoa* with white-spotted leaves was encountered. Such distinctive individuals were not described in the regional floras (Jacques-Félix, 1983a, b), the recent checklist of the Melastomataceae (Parmentier & Geernik, 2003), nor in the recent revision of the genus (Figueiredo, 2001). This new species is obviously distinctive from all the other *Calvoa* species by the white spots on its leaves; hence its name *maculata*. In its hairiness it is closest to *C. hirsuta* Hook.f., but in its heart-shaped leaves closest to *C. pulcherrima* Gilg ex Engl. The distribution of the new species is exclusively restricted to a table mountain called Mont Mbilan Plateau.

Calvoa maculata M.E. Leal, *spec. nov.* — Fig. 1

Haec species pulcher ab *Calvoa hirsuta* differt foliis leucomaculatis etiam lobi coronans capsulam frimbriati sunt. — Typus: *M.E. Leal 212* (holo MO; iso LBV, WAG), Gabon, Monts de Cristal, 24 August 2004.

Small herb, 2–3 cm high, terrestrial, dark green, hirsute with 1 mm long white hairs; branches slightly angular. Petiole 7–10 mm. Lamina ovate truncate to cuneate, 1.1–2 (–3.8) by 1.5–2.5 cm, margin serrulate ciliate, apex acute, three main veins, sparse slender hairs surrounded by a white dot (0.2 mm diameter) above, below whitish green with hairs on the veins. Inflorescence a terminal single-branched cyme, sessile or with a 0.5 cm long peduncle, with 1–6 sessile flowers. Hypanthium 1.5–2.5 mm long, densely hirsute. Calyx lobes 1.5–2 by 0.1–0.3 mm triangular with a truncate apex. Petals 4–5 by 3–4 mm white. Anthers 1 mm long. Style 1–2 mm long, stigma capitate. Capsule 3–4 by 5–6 mm hirsute; with a 5-lobed crown exerted for 1.5 mm and frimbricate. Seeds 0.5 mm.

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Calvoa maculata M.E. Leal (*M.E. Leal 212*, MO).

Distribution — Gabon, Monts de Cristal, Mont Mbilan Plateau, 0° 51' 4" N, 10° 26' 0" E.

Habitat — Terrestrial on forest floor of semi-elfin cloud forest; altitude 500–700 m.

Notes — Some *Calvoa* species are very rare, known from one locality by a few specimens and not recorded since, e.g., *C. leonardii* and *C. stenophylla* (Figueiredo, 2001). This new species *C. maculata* is probably also going to remain rare, as this is a small population isolated on a mountain top. Its rareness has implications for conservation. The plateau is situated partially in the Mbe National Park, but there is economical pressure to exploit the area for iron. Such activities will lead to its extinction. *Calvoa maculata* is not the only rare endemic taxon in this part of the Monts de Cristal. The high number of endemic taxa was a reason to conserve this area as a national park.

The reason why there are so many endemic taxa in the Monts de Cristal has to do with forest history. The Monts de Cristal is considered a former forest refugium, an area where the forest persisted during the Last Glacial Maximum, 18,000 years ago, when due to a drier climate much of the rain forest had disappeared (Maley, 1989). Forest refugia are characteristically rich in slowly dispersing species (Sosef, 1994; Leal, 2004) and this is confirmed by botanical data from mega-transects (50 km <) through the Monts de Cristal (Leal et al., in prep.). This new *Calvoa* species is another indication how botanically rich and valuable the area is.

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