Robiquetia gracilis (Lindl.) Garay—a new record to the flora of Anamalai Hills, Tamil Nadu, India

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Robiquetia, an indispensable genus of the family Orchidaceae, was first described by Gaudichaud-Beaupréin, 1829 in his work "Voyage autour du monde"; it belongs to the tribe Vandaeae. It encompasses about 70 species which are distributed from India and Sri Lanka to Samoa (Cootes 2011; Ormerod 2017). In India, the genus is represented by four species (Robiquetia gracilis, R. jossephiana, R. spathulata, and R. succisa), of which Robiquetia jossephiana is known to be endemic to Kerala (Kumar & Manilal 1992, 1994; Jalal & Jayanthi 2012).

Anamalai Tiger Reserve (ATR) is carved out of the Tamil Nadu portion of the Anamalais. It lies south of the Palakkad gap in the southern Western Ghats mountain chain. Geographically, it is located between the longitudes 76.821–77.356E and latitudes 10.220–10.555N. The two important UNESCO World Heritage Sites of Western Ghats such as the Karian Shola and the Grass hills are located within the ATR.

Frequent field surveys by the authors (2017–2019) in Anamalai hills has resulted in locating a number of rare and unknown species of plants which included a specimen of an interesting orchid species of the genus Robiquetia. Specimens were collected from two localities in Valparai plateau and were kept at Anamalai orchidarium for monitoring, on initiation of the inflorescence, the authors visited the site and observed the flowering and fruiting and recorded the same. A detailed taxonomic study with perusal of relevant literature (Kumar & Manilal 1994; Sasidharan 2013) and consultation with experts confirmed its identity as Robiquetia gracilis, a rare species, till now not reported from the Anamalai hills. In Tamil Nadu this species was reported in Kakachi-Kodayar, Kalakkad-Mundathurai Tiger Reserve (KMTR; Ganesan & Livingstone 2001) and Athirumala and Agasthyamala of Kerala (Sasidharan 2013). Based on scrutiny of the specimen, it was confirmed that the species exists in the Anamalais ranging 1,100–1,400 m altitude. It is a new record to the flora of Anamalai hills. Robiquetia gracilis can be distinguished from other species by the zig-zag and sheathed stem character. Meanwhile, tiny white flowers with red dots confirm its identification in the wild. Ganesan & Livingston (2001) reported the habitat of Robiquetia gracilis as mid-elevation evergreen forest (1,200–1,550 m) areas of KMTR.
Robiquetia gracilis (Lindl.) Garay


Monopodial, pendulous, epiphyte. Roots: branched, terete, elongate, emerging from nodes up to 25 cm long. Stems 10–15 cm long, semi hard, zigzag, green sheathed. Leaves alternate 6–12 x 0.5–0.7 cm, linear-lanceolate, acuminate at apex, sheathed at base. Inflorescence leaf opposed, drooping raceme, 8–12 cm long. Peduncles filiform, 12–16 flowered. Flowers, white, 0.4–0.5 cm across. Sepals and petals 0.15–0.2 cm long, linear,
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Habit: Grows as epiphytic herbs in association with *Garcinia morella* (Gaertn.) Desr.

Habitat: Evergreen forests between 1,100–1,400 m.

Specimens examined: India, Tamil Nadu, Coimbatore district, Anamalai Tiger Reserve, 2018, Ganesan & Subbaiyan (0055; Image 2) Anamalai Herbarium, Pollachi.

Distribution: Southern India (Kerala, Tamil Nadu) and Sri Lanka.

Flowering & Fruiting: August–January.

Notes: A very few individuals of this species were identified in the collection locality. The species has not been recorded earlier in any localities of the reserve so far. Therefore, it is suggested that an exploration in other possible localities is essential to assess its exact conservation status. Two live specimens are deposited in Anamalai Orchidarium at Attakatti for conservation purpose.

References


subulate. Lip 0.3–0.4 cm long, spurred, lateral lobes; mid-lobe small. Column 0.1–0.15 cm long; foot 0. Pollinia 2, globose, attached to long slender caudicle. Pedicels and ovary 0.3–0.35 cm long. Capsules subglobose, 0.5 × 0.4 cm.

NAAS rating (India) 5.64
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