



Taxonomy, lectotypification and rediscovery of *Gymnosporia bailadillana* (Celastraceae), a little known, critically endangered taxa of Chhattisgarh state, India

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Abstract

Gymnosporia bailadillana (Celastraceae) is lectotypified and its taxonomy and distribution is discussed. The species is rediscovered after 67 years from Koriya district, Chhattisgarh state, India. First photographs of the live plant and digital images of the selected lectotype, isolectotypes and paratypes are provided.

Key words: Dantewada, isolectotypes, Koriya, *Maytenus*, paratypes

Introduction

Gymnosporia (Wight & Arnott) Bentham & Hooker (1862: 359 & 365) nom. cons., an Old World genus of Celastraceae, is represented by c. 99 species (Mabberley 2008) distributed mainly in Afghanistan, Africa, Australia, China, India, Japan, Madagascar, Malaysia, Myanmar, Pakistan, Spain, Sri Lanka, Thailand and Vietnam. Lawson (1875) recognized 16 species from British India, of which 8 were described by him as novelties. Ramamurthy (2000) in Flora of India reported 17 species and 2 varieties from India, of which 7 species and 2 varieties are endemic. *Gymnosporia bailadillana* Narayanswami & Mooney (1941: 191) is a little known, critically endangered, large shrub species which is understood only by the type collections of 1939 from Bailadilla Hill, Bastar state, Orissa (now in Dantewada district of Chhattisgarh state). Later in 1947, Narayanswami again collected this species from an adjacent location near the type locality, Nilavaram Padu, Vizagapattam, Madras Presidency (now in Visakhapatnam district of Andhra Pradesh). Since then this species was never collected or reported from these locations, hence it is believed to have gone extinct from here. The specimens of *G. bailadillana* collected from the type locality and the adjacent locality in Visakhapatnam, at CAL, exist as the only available record of this species from India, either as herbarium specimens or in natural populations (Ahmedullah & Nayar 1986; Pullaiah & Chennaiah 1997; Khanna *et al.* 2005; Ramamurthy 2000; Rao & Kumari 2002). This paves way to acceptance that the species is lost in nature as its type locality got annihilated during iron ore mining operations and the Andhra Pradesh population perished during modernization activities.

Rediscovery

During botanical exploration of Chhattisgarh state, a miniature population of three large shrubs of *G. bailadillana* was spotted near waterfalls, within confines of a traditionally conserved primary forested enclosure, the Amritdhara sacred grove in Koriya district at 23° 17' 28.5" N, 82° 19' 45.8" E and 610 m. This resulted in rediscovery of this critically endangered species after a lapse of 67 years. First live photographs of the species were captured to substantiate its existence as this species was believed to have been lost since 1947 and all subsequent surveys of the states of Chhattisgarh and Andhra Pradesh made by earlier workers failed to report its existence in any part of these two states (Ahmedullah & Nayar 1986; Pullaiah & Chennaiah 1997; Khanna *et al.* 2005; Ramamurthy 2000; Rao & Kumari 2002). *G. bailadillana* is adapted to a very specific niche, in perpetually moisture laden environment and rocky soil enriched with iron traces, in dark glens, shady ravines, moist valleys and near waterfalls between 600–1200 m elevations.