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Status of Medicinal Plants Diversity and Distribution at Rehabilitated Yamuna and Chambal Ravine land Ecosystems in India

S. Kala¹*, H.R. Meena², I. Rashmi³, M. Prabavathi⁴, A.K. Singh⁵ and R.K. Singh⁶

¹Scientist (Forestry), ICAR-IISWC-Research Centre, Kota-324 002, Rajasthan, India ²Scientist (Horticulture), ICAR-IISWC-Research Centre, Kota-324 002, Rajasthan, India ³Scientist (Soils), ICAR-IISWC-Research Centre, Kota-324 002, Rajasthan, India ⁴Scientist (soils), ICAR-IISWC-Research Centre, Bellary-583101, Karnataka, India ⁵Principal Scientist (SWC Engg), ICAR-IISWC-Research Centre, Agra-282002, Uttar Pradesh, India

⁶Principal Scientist (Soils), ICAR-IISWC-Research Centre, Kota-324 002, Rajasthan, India *Corresponding author

ABSTRACT

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Ravine ecosystems are highly dynamic and completely deformatted terrain landscape. In these regions, Indigenous plant species are playing significant role in environmental rehabilitation because of their exultant survival and high adaptation to local conditions. Despite this, very little information's available about existence of medicinal plants on the typical ravine flora. The present study attempted to explore the diversity and distribution of medicinal plant flora in the Yamuna ravines of Agra (U.P) and Chambal ravines of Kota district (Rajasthan). An account of 63 species belongs to 37 families were observed in the rehabilitated ravine areas at Agra. The documented plants were categorized according to their life form viz., trees (34.92%), shrubs (26.98%), herbs (23.8%), climbers (11.15%) and grasses (3.18%) were found in the representative blocks. The present study reveals that the distributions of species were mainly belong to the families of Euphorbiaceae, Apocynaceae, Solanaceae and Caesalpiniaceae. At Chambal ravines, 106 species observed and it represents 54 families of plant kingdom with dominant families of Euphorbiaceae, Fabaceae, Asteraceae, Solanaceae and Amaranthaceae. Documented plants were categorized according to their life form viz., herbs (42.5%), trees (23.6%), shrubs (21.6%), climbers (10.4%) and grasses (2%) were found in the representative blocks. It directly indicates rich plant biodiversity of Chambal ravines over Yamuna ravines. The documented indigenous plant species naturally have high drought tolerance capacity and ability to grow under harsh environment. The maximum revival of native flora in these rehabilitated ravines through rehabilitation, protection and other soil conservation measures. Urgent attention towards documentation, conservation, sustainable utilization and awareness creation are needed to protect indigenous medicinal flora by appropriate insitu and ex-situ conservation measures.