## Buchanania barberi: a story of a rare tree survival from the brink of extinction

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Buchanania barberi is a small tree endemic to the South Western Ghats of Kerala, India. It is found in the tropical moist lowland region at an altitude of 74 m above sea level. J.S. Gamble first described the species in 1916 based on a single collection from Nadarai, Thiruvananthapuram, Kerala. However, the species remained an enigma for over a century after this initial collection. It was rediscovered in 2002 with the finding of two mature individuals in the Palode region in Thiruvananthapuram. Unfortunately, human activities pose threats to this species, placing it at risk of extinction. It is classified as Critically Endangered on the IUCN Red List and is included in the national priority list of endangered plants in India. Our team conducted field surveys to locate more individuals, assessed conservation status, identified major threats, developed propagation methods, raised seedlings, and transplanted them with the assistance of the local community and stakeholders. We also organized community awareness programs in schools and the forest department. During surveys, we found two new mature individuals approximately 4 km south-east of the current location. Currently, the species survives with only four mature individuals and has an Area of Occupancy of 5 km<sup>2</sup>. Our surveys and observations revealed additional threats, such as low fruit production, lack of seedling establishment, poor seed germination, and road expansion. Germination experiments showed that over 80% of seeds germinated within two weeks of incubation at 30°C. Additionally, these seedlings reached an average height of 12 cm in six months in the garden nursery. After transplantation, approximately 55% of these seedlings survived in the field after two years, and the species is now successfully conserved at the Jawaharlal Nehru Tropical Botanic Garden and Research Institute. Our conservation awareness program reached over 500 people and raised awareness of protecting threatened plants.

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