



RESEARCH ARTICLE

# Note on the status of *Buchanania lanzan* var. *palodensis* (Anacardiaceae)

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## Abstract

The paper proposes elevating *Buchanania lanzan* var. *palodensis* to the species level.

## Keywords

Endemic; Western Ghats; nomenclature; variety; species

## Introduction

As part of revisionary studies on the genus *Buchanania* Sprengel (Anacardiaceae) in India, Kumar et al., 2020 (1) described a new variety of *Buchanania lanzan* from Palode in the Thiruvananthapuram district, Kerala (SW India). Subsequently, Kumar and Shareef, 2020 (2) identified another unique species from the same site, naming it *Buchanania abrahamiana*. While defining *Buchanania abrahamiana*, the authors critically examined several herbarium and live specimens of *B.lanzan* var. *palodensis* collected from its type locality. This research revealed that some key qualitative and quantitative morphological features were unintentionally overlooked during its original description. A thorough evaluation of these traits provided deeper insight into the taxonomy and nomenclature of *B.lanzan* var. *palodensis*. The findings indicate that this variety possesses sufficient morphological traits to warrant elevation to species rank. *Buchanania palodensis* closely resembles *Buchanania abrahamiana* and *B. cochinchinensis* in its broadly ovate bracts, suborbicular bracteoles, flowers with fairly long pedicels, deltoid calyx lobes, and flowers containing 5-7 carpels. However, *Buchanania palodensis* can be further distinguished from these allied species by the characteristics listed in Table 1.

***Buchanania palodensis*** (E.S.S.Kumar, Shareef et Raj Vikr.) E.S.S. Kumar et Shareef, **comb. et stat. nov.**

*Buchanania lanzan* var. *palodensis* E.S.S.Kumar, Shareef et Raj Vikr., I3 Biodivers. 8-801: 3. 2020.

Type: **INDIA**, Kerala, Thiruvananthapuram District, Palode, 80 m., 20.11.2019, E.S.Santhoshkumar & S.M.Shareef 79289 (holotype TBGT!)

Additional specimens examined: **INDIA**, Kerala, Thiruvananthapuram District, Peringamala, elevation 80 m., collected on 19.11.2021 by E.S.Santhoshkumar & S.M.Shareef 85824 (TBGT!); *ibid.*, collected on 06.12.2021 by E.S.Santhoshkumar & S.M.Shareef 85825 (TBGT!)

**Table 1.** Morphological differences between *Buchanania cochinchinensis*, *B. palodensis* and *B. abrahamiana*

Characters	<i>B. cochinchinensis</i>	<i>B. palodensis</i>	<i>B. abrahamiana</i>
Habit	Deciduous trees	Semi-evergreen trees	Semi-evergreen trees
Bark	Rough, tessellate, cracks deep and narrow, resembling crocodile's hides	Smooth or slightly fissured.	Smooth or slightly fissured
Lamina texture	Thick coriaceous	Thin coriaceous	Thick coriaceous
Lamina	Broadly oblong	Obovate or narrowly obovate	Broadly elliptic-oblong
Lamina base	Rounded	Cuneate or obliquely cuneate	Cuneate or obliquely cuneate
Lamina apex	Obtuse or emarginate	Obtuse or retuse or emarginate	Obtuse or emarginate
Secondary and tertiary nerves	Very prominent	Obscure	Prominent
Petioles	12-22mm long, glabrous	25-35mm long, tomentose	18-35mm long, densely tomentose adaxially, glabrous abaxially
Bracts	Ovate-deltoid, 2mm long	Broadly ovate, 0.8mm long	Ovate-deltoid, 0.5-1mm long
Bracteoles	Deltoid	Suborbicular	Ovate-deltoid
Pedicels	0-0.5mm long	1-2mm long	1-1.5mm long
Calyx lobes	Broadly ovate, ciliate on margins	Deltoid, hairy without, glabrous within	Ovate, villous without, glabrous within
Petals	Oblong or ovate-oblong, 2mm long	Broadly ovate-deltoid, 2-2.5mm long	Broadly ovate-oblong, 3mm long
Anthers	More or less equal to staminal filaments	Distinctly shorter than the staminal filaments	Distinctly shorter than the staminal filaments
Disc	Pilose	Pilose	Glabrous
Carpels	5	5-7	4-5
Fruits	Black when ripe	Pink when ripe	Pink when ripe

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## Authors' contributions

SMS prepared the draft version of the manuscript, which SKES corrected. All authors read and approved the final manuscript.

## Compliance with ethical standards

**Conflict of interest:** Authors do not have any conflict of interest to declare.

**Ethical issues:** "None".

## References

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2. Santhosh Kumar ES, Shareef SM. *Buchanania abrahamiana* (Anacardiaceae), a new species from Kerala, India. *Ann Bot*