

**TAXONOMY AND DISTRIBUTION OF GENUS
OPHIORRHIZA L. (RUBIACEAE) OCCURRING IN ASSAM**

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THE DEPARTMENT OF BOTANY, BODOLAND UNIVERSITY
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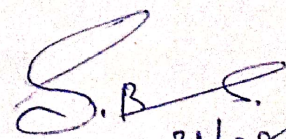
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CERTIFICATE

I am pleased to forward this Ph.D. thesis entitled "**TAXONOMY AND DISTRIBUTION OF GENUS *OPHIORRHIZA* L. (RUBIACEAE) OCCURRING IN ASSAM**" by Miss Birina Bhuyan, submitted for the award of the degree of Doctor of Philosophy (Ph.D.) in Botany in the faculty of Science and Technology.

Miss Birina Bhuyan has carried out this work under my supervision and fulfills all the requirements under the Ph.D. Regulations of Bodoland University. She has been registered under Bodoland University with Registration No. 00353/ 2014-15 and Ph.D. Final Registration No. FINAL.BOT0002 of 2017-2018.

I further attest that the thesis is entirely original and her own investigation and no part of this thesis have been submitted to any other university or anywhere for the award of any degree.


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DECLARATION

I, Birina Bhuyan, declare that the thesis entitled “**TAXONOMY AND DISTRIBUTION OF GENUS *OPHIORRHIZA* L. (RUBIACEAE) OCCURRING IN ASSAM**” work done by me under the supervision of Dr. Sanjib Baruah, Assistant Professor, Department of Botany, Bodoland University. This thesis is submitted to the Bodoland University for the award of a degree for Doctor of Philosophy at Bodoland University bearing Ph.D. Enrollment No. BOT PHD-02 and Final Registration No. FINAL.BOT0002 of 2017-2018. The thesis is the result of my own investigation and is original, and has not been previously submitted for the award of any degree or other research works.

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Abbreviation Used

ARUN: Botanical Survey of India, Itanagar

ASSAM: BSI, Eastern Regional Centre Herbarium, Shillong

Ab: Absent

B: Breadth

ca.: circa

cm: Centimeter

CAL: Central National Herbarium, Calcutta

ECL: Epidermal cell length

ECW: Epidermal cell width

et al.: et alia (and others)

elev.: elevation

Fls.: Flowers

Frs.: Fruits

Fl.: Flora

G.P.S.: Global positioning system

l: Length

b: Breadth

NDVI: Normalized difference vegetation index

Pr: Present

Ab: Absent

SCL: Subsidiary cell length

SCW: Subsidiary cell width

SL: Stomatal length

SPL: Stomatal pore length

SPW: Stomatal pore breadth

SW: Stomatal width

TL: Trichome length

TW: Trichome width

syn.: synonym