Bioconversion of Artemisinin to its Nonperoxidic Derivative Deoxyartemisinin through Suspension Cultures of *Withania somnifera* Dunal

Farzana Sabir[a], Anil Kumar[a], Pragya Tiwari[a], Neelam Pathak[b], Rajender S. Sangwan[a], Rajendra S. Bhakuni[a], and Neelam S. Sangwan[a,*]

[a] Central Institute of Medicinal and Aromatic Plants (CIMAP-CSIR), PO CIMAP, Lucknow-226015, UP, India. E-mail: sangwan.neelam@gmail.com
[b] Integral University, Kursi Road, Lucknow, UP, India

* Author for correspondence and reprint requests

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Biotransformation of artemisinin was investigated with two different cell lines of suspension cultures of *Withania somnifera*. Both cell lines exhibited potential to transform artemisinin into its nonperoxidic analogue, deoxyartemisinin, by eliminating the peroxo bridge of artemisinin. The enzyme involved in the reaction is assumed to be artemisinin peroxidase, and its activity in extracts of *W. somnifera* leaves was detected. Thus, the non-native cell-free extract of *W. somnifera* and suspension culture-mediated bioconversion can be a promising tool for further manipulation of pharmaceutical compounds.

Key words: Artemisinin, Deoxyartemisinin, *Withania somnifera*