

Isomeric phenylpropanoid from
Stereospermum suaveolens (Roxb.) DC
growing in Bangladesh

Md Moniruzzaman^a, A M Sarwaruddin Chowdhury^a, Sania Ashrafi^b, Choudhury Mahmood Hasan^b, M Aftab Uddin^c, Mohammad Sharifur Rahman^b & Mohammad A Rashid^{*b}

^aDepartment of Applied Chemistry & Chemical Engineering,
Faculty of Engineering and Technology,
University of Dhaka, Dhaka-1000, Bangladesh

^bDepartment of Pharmaceutical Chemistry,
Faculty of Pharmacy, University of Dhaka,
Dhaka-1000, Bangladesh

^cDepartment of Genetic Engineering and Biotechnology,
Faculty of Biological Sciences,
University of Dhaka, Dhaka-1000, Bangladesh

E-mail: monirjaman32@gmail.com, sarwar@du.ac.bd,
sania.ashrafi@du.ac.bd, cmhasan@gmail.com, aftabu@du.ac.bd,
msr@du.ac.bd, arpharm64@du.ac.bd

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Plants have long been a crucial source of bioactive compounds for developing innovative therapeutics against various diseases. The research aimed to explore the natural compound composition of methanol extracts from the leaves and stem bark of *Stereospermum suaveolens* (Roxb.) DC (Family: Bignoniaceae) through repeated chromatographic separation and purification processes using silica gel. The phytochemical investigation led to the identification of two isomeric phenylpropanoids, namely 4-methoxy-*cis*-cinnamic acid (1) and 4-methoxy-*trans*-cinnamic acid (2). The chemical structures of these isolated compounds have been determined by using the data obtained from ¹H and ¹³C NMR, COSY, HSQC and HRMS, and have been confirmed by comparing the results with published reports. Notably, this marks the first reported instance of the isolation of the isomeric 4-methoxycinnamic acids from any plant species so far.

Keywords: *Stereospermum suaveolens*, Phenylpropanoid, Cinnamic acid derivatives, Secondary metabolites