

# Two Atropisomeric *N*-Methyldioncophyllines A and *N*-Methylphylline, their Naphthalene-Free Heterocyclic Moiety, from *Ancistrocladus barteri*<sup>\*</sup>

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Z. Naturforsch. **58b**, 577 – 584 (2003); received January 7, 2003

The West African plant *Ancistrocladus barteri* (Ancistrocladaceae) was investigated chemically for the first time. Besides the known naphthylisoquinoline alkaloids *N*-methyldioncophylline A and 7-*epi-N*-methyldioncophylline A (*i.e.* its atropo-diastereomer), a new naphthalene-free alkaloid, belonging to the ‘Dioncophyllaceae type’, was isolated. Its structure was elucidated by spectroscopic and degradative methods and confirmed by total synthesis. The new compound, named *N*-methylphylline, is exactly the isoquinoline “half” of both, *N*-methyldioncophylline A and its atropisomer. Furthermore, the related tetrahydroisoquinoline *O,N*-dimethylphylline, an intermediate in the chemical synthesis of *N*-methylphylline, was detected as a new natural product in crude extracts of *A. barteri*.

**Key words:** Structural Elucidation, Naphthylisoquinoline Alkaloids, Ancistrocladaceae, Crystal Structure