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A new aporphine alkaloid from the leaves of *Alseodaphne corneri* Kosterm (Lauraceae)

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ABSTRACT

A new aporphine alkaloid, demethoxyglauvine (**1**), along with seven known isoquinoline alkaloids, were isolated from the alkaloid crude extract of the leaves of *Alseodaphne corneri*. Their structures were determined by extensive spectroscopic analysis including 1D- and 2D-NMR (^{1}H-^{1}H COSY, HSQC, and HMBC), mass spectrometry, and by comparison with published data. A possible biogenetic pathway for the formation of **1** was proposed.

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Plants of the Lauraceae family comprise of approximately 45 genera and 2000–2500 species distributed throughout tropical and subtropical regions, mostly in Southeast Asia and Tropical America,[1] with over 16 genera distributed across over 213 species in Malaysia.[2] The great diversity of the Lauraceae flowering plant species is an important component of both lowland forests and the mountains of tropical forests. It is also an important source of medicine, timber, nutritious fruits (e.g. *Persea americana*) and spices (e.g. *Cinnamomum cassia*, *C. subavenium*, *Laurus nobilis*). The presence of essential oils and camphor were also reported from *Cinnamomum camphora*, *C. glanduliferum*, and *C. parthenoxylon*, which are used in perfumes and medicines manufacturing.[1]

Alseodaphne corneri Kosterm, which is locally known as *Medang* or *Tejur*, is an evergreen plant belongings to the Lauraceae family.[3] Plants of the Lauraceae family genus *Alseodaphne* are a significant source of isoquinoline alkaloids (e.g. aporphines, bisbenzylisoquinolines), phenanthrenes, lactones and morphinandienones.[3-5] This plant continues to provide strong interest to the scientific community who explore its medicinal properties because of their diverse structural varieties.

We have previously reported the occurrence of isoquinoline type aporphine alkaloids in this plant.[3,6] In a continuation of our studies of alkaloidal components in *A. corneri* Kosterm, this report describes the structure of a new aporphine alkaloid (**1**).

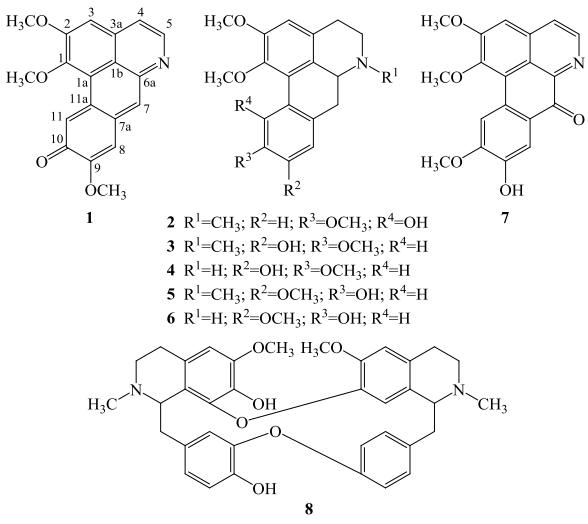

Figure 1. Structures of compounds **1–8**.

Results and Discussion

Eight isoquinoline alkaloids were isolated from the alkaloid crude extract of the leaves of *Alseodaphne corneri* Kosterm which were collected in Malaysia (Figure 1). The known compounds were identified and determined to be isocorydine (**2**), *N*-methyllaurotetanine (**3**), laurotetanine (**4**), lirioferine (**5**), norlirioferine (**6**), atheroline (**7**), and the bisbenzylisoquinoline: obamegine (**8**).[3,5,7-9]

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