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**CHEMICAL CONSTITUENTS OF *Phoebe grandis* (NEES)  
MERR. (LAURACEAE) AND *Goniothalamus tortilipetalus*  
HEND. (ANNONACEAE).**

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## Abstract

Two plants, *Phoebe grandis* (Nees) Merr. (Lauraceae) and *Goniothalamus tortilipetalus* Hend. (Annonaceae) were studied. Four aporphine alkaloids were isolated from *Phoebe grandis* i.e boldine (70), norboldine (laurolitsine) (75), laurotetenine (2), and lindcarpine (77). The bark of *Goniothalamus tortilipetalus* produced protoberberine; discretamine (76) and oxoaporphine; liriodenine (22). In addition, non alkaloidal aromatic compounds were also isolated from the petroleum ether extract *G. tortilipetalus*, i.e goniothalamine (33) and 6-styryl-2-pyrone (81). Three other alkaloids namely liriodenine (22), asimilobine (86) and lanuginosine (87) were isolated from the leaves of *G. tortilipetalus*. 6-styryl-2-pyrone was found active on smooth muscle relaxant. Liriodenine (22) and 6-styryl-2-pyrone (81) were found to be cytotoxic to KB cell.

## Abstrak

Dua spesies tumbuhan yaitu *Phoebe grandis* (Nees) Merr. (Lauraceae) dan *Goniothalamus tortilipetalus* Hend., (Annonaceae) telah dikaji. Empat alkaloid aporfina telah diasingkan daripada *Phoebe grandis* yaitu boldina (70), norboldina (laurolitsina) (75), laurotetanina (2), dan lindkarpina (77). Dari kulit batang *Goniothalamus tortilipetalus* terdapat protoberberina, diskretamina (76), dan oksoaporfina, liriodenina (22). Sebagai tambahan, sebatian aromatik bukan alkaloid telah dituliskan daripada ekstrak petroleum eter dari *G. tortilipetalus* yaitu goniothalamina (33) dan 6-stiril-2-piron (81). Tiga alkaloid yaitu liriodenina (22), asimilobina (86), dan lanuginosina (87) telah dipisahkan daripada daun *G. tortilipetalus*. 6-stiril-2-piron adalah aktif terhadap pengenduran otot licin manakala 6-stiril-2-Piron (81) dan liriodenina (22) adalah sitotoksik kepada KB sel.