

## Phytoconstituents from *Alpinia purpurata* and their in vitro inhibitory activity against *Mycobacterium tuberculosis*

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### ABSTRACT

*Alpinia purpurata* or red ginger was studied for its phytochemical constituents as part of our growing interest on Philippine Zingiberaceae plants that may exhibit antimycobacterial activity. The hexane and dichloromethane subextracts of the leaves were fractionated and purified using silica gel chromatography to afford a mixture of C28 to C32 fatty alcohols, a 3-methoxyflavone and two steroidal glycosides. The two latter metabolites were spectroscopically identified as kumatakenin (1), sitosteryl-3-O-6- palmitoyl-beta-D-glucoside (2) and beta-sitosteryl galactoside (3) using UV, IR, EIMS and NMR experiments, and by comparison with literature data. This study demonstrates for the first time the isolation of these constituents from *A. purpurata*. In addition to the purported anti-inflammatory activity, its phytomedicinal potential to treat tuberculosis is also described.

### KEYWORDS

*Alpinia purpurata* . fatty alcohols . kumatakenin . *Mycobacterium tuberculosis* . sitosteryl glycosides

### REFERENCES

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