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New Secondary Metabolites, Kaempulchraols A-J from Rhizomes of *Kaempferia pulchra* and Their Antiproliferative Activity

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[Purpose] Myanmar is a tropical country with a rich source of medicinal plants and local people have been used them in the traditional medicine since time immemorial. Although rhizomes of *Kaempferia pulchra* have been used for the treatment of cancer, diabetes and AIDS in Myanmar for a long time, the chemical constituents and biological activity has not been explored yet. This study focused on the isolation of secondary metabolites and evaluation of their cytotoxicity.

[Methods] The phytoconstituents were isolated from chloroform extract of rhizomes of *K. pulchra* using combination of various chromatographic methods. The structures of all the isolates were elucidated on the basis of spectroscopic analyses and the absolute stereochemistry was determined by XRD. The antiproliferative activity was performed by CCK-8 assay.

[Results] The isolation of chloroform soluble extract of rhizomes of *K. pulchra* afforded ten new diterpenoids, kaempulchraols A–J, together with five known ones. All the isolates were tested for their antiproliferative activity against different cancer cell lines. All exhibited varying degree of antiproliferative activity.