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Pentacyclic triterpenes from the leaves extract of *Sandoricum koetjape*

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Abstract

Three new pentacyclic triterpenes, trivially named sandkoetjapic acids A-C (1-3), have been isolated from the leaves extract of *Sandoricum koetjape*, along with the known triterpenes 3-oxo-olean-12-en-29-oic (4), bryonolic (5), and bryononic (6) acids. The structures of the new triterpenes were determined mainly by NMR spectroscopic and mass spectroscopic data. The isolation of these pentacyclic triterpenes in the plant's leaves is for the first time. Preliminary biological evaluation of 1-6 was done against eight receptor tyrosine kinases (RTKs), including EGFR, HER2, HER4 (epidermal growth factor receptor), IGF1R, InsR (insulin receptor), KDR (kinase insert domain receptor), and PDGFR α / β (platelet-derived growth factor receptor), and their inhibitory properties against β -lactamase. The results showed that none of them were active both as the inhibitors of these RTKs and β -lactamase.

Keywords: Meliaceae; Pentacyclic triterpenes; Receptor tyrosine kinases (RTKs); Sandkoetjapics A-C; *Sandoricum koetjape*; β -lactamase.

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