Flavonoids and 3-Arylcoumarin from Pterocarpus soyauxii (Abstract)

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Abstract

Phytochemical study on the constituents of the heartwood of Pterocarpus soyauxii led to the isolation of five new isoflavonoids and one new 3-arylcoumarin, pterosonins A–F (1–6), together with 17 known analogues, among which 8, 9, and 18 were reported as natural products for the first time. Structure elucidation was achieved by way of spectroscopic measurements as well as by comparison with literature data. Only Compound 6 showed potent cytotoxicity against human non-small cell lung cancer (A549), pancreatic cancer (Panc-28), and colon carcinoma (HCT-116) cells with GI₅₀ values at 7.39, 25, and 19.17 µM, respectively; the other isolates showed no cytotoxicity against the above tested cell lines with GI₅₀ values > 50 µM.