I3-naringenin-II8-4’-OMe-eriodictyol: a New Potential Analgesic Agent Isolated from Rheedia gardneriana Leaves

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This paper describes the isolation, identification and analgesic activity of a new biflavonoid from Rheedia gardneriana leaves, which correspond to I3-naringenin-II8-4’-OMe-eriodictyol (GB-2a-II-4’-OMe) (1), with a methoxyl group in position 4 of ring-II. Its structure was determined by spectroscopic data and confirmed by an alkaline hydrolysis. Its analgesic effect was evaluated in a writhing test and a formalin test in mice. It was found that this compound exhibits potent and dose-related analgesic action in both experimental models, with ID50’s values of 4.5 µmol/kg against the writhing test and 8.2 and 6.8 µmol/kg against the first and second phase of the formalin test, respectively. It was several times more potent than some well-known analgesic drugs used as reference.