Xanthanolides with Antitumour Activity from *Xanthium italicum*

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Bioassay-guided fractionation of a CHCl\(_3\) extract of the leaves of *Xanthium italicum* Moretti led to the isolation of four xanthanolides: xanthatin (1), 4-epixanthanol (2), 4-epi-isoxanthanol (3), and 2-hydroxyxanthinosin (4). Their structures were determined by means of 1D and 2D NMR spectroscopy, including \(^1\)H–\(^1\)H COSY, NOESY, HSQC and HMBC experiments, which resulted in complete and unambiguous \(^1\)H and \(^13\)C NMR chemical shift assignments. The isolated compounds 1–4 were evaluated for their antiproliferative activities, and were demonstrated to exert significant cell growth inhibitory activity against human cervix adenocarcinoma (HeLa), skin carcinoma (A431), and breast adenocarcinoma (MCF7) cells.

**Key words:** *Xanthium italicum*, Xanthanolides, Antitumour Activity