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Cytotoxic and antiproliferative evaluations of a novel diterpenoid from *Euphorbia graminea*

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Bioassay guided fractionation of the methanol extract of *Euphorbia graminea* against breast cancer (MCF-7), lung cancer (NCI-H460) and NIH 3T3 (mouse embryonic fibroblast normal cell line) at 1-250 µg/mL was carried out. Extracts of *E. graminea* was partitioned into aqueous and chloroform fractions and both fractions were tested for their effects on MCF-7 and NCI-H460. Further chromatographic and biological studies of the active chloroform fraction yielded a compound whose identity was revealed as Abietane-11, 23 diene-16-oic-14-ones through NMR and MS studies. This compound was observed to give -3.3 ± 1.4 and $5.30 \pm 3.75\%$ cytotoxicity against MCF-7 and NCI-H460 at 100 µM with GI_{50} and TGI of $+38 \pm 0.74$, 96.94 ± 6.95 µM and 53.70 ± 9.30 and 93.88 ± 11.70 µM respectively. The result has established the rationale for the use in ethnomedicinal practice.

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