Antileukemic activity and chemical constituents of some Zingiberaceae species

ABSTRACT

Crude extracts of various solvents from six species (genus Alpinia, Zingiber, Kaempferia) of Zingiberaceae family have been chosen for the in vitro cytotoxic activity screening against the inhibition of HL-60 cell line (Human promyelocytic leukemia). Eight extracts (44 %) were found to have cytotoxic activity with IC50 values less than 30 μ g/mL, with Alpinia galanga showing the most prominent antileukemic activity. Further isolation work on Kaempferia galanga has yielded ethyl p-methoxy-trans-cinnamate (1), p-methoxy-trans-cinnamic acid (2) besides b-sitosterol.

Keyword: Zingiberaceae; Antileukemic; Alpinia; Zingiber; Kaempferia