

Anti-leukemia Activity of Methanolic Extracts of *Lantana camara*

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ABSTRACT

Anticancer effect of *Lantana camara*'s root and leaf extracts against Jurkat leukemia cell line was investigated by MTT assay. These extracts had statistically similar antineoplastic property (root IC₅₀, 328.36 $\pm$ 53.08 μ g/ml; leaf, 394.41 $\pm$ 99.73 μ g/ml; $p > 0.1$, $n = 3$), averagely 1/10 times as activity as carboplatin (IC₅₀ 34.83 $\pm$ 3.60 μ g/ml; $p < 0.05$, $n = 3$). Decreasing cytotoxicity at higher concentrations implied the existence of cytoprotective compounds. Morphological examinations indicated apoptosis induction as the mechanism of activity on Jurkat cells. In conclusion, *L. camara*'s root and leaf extracts might be subjects for further fractionation and identification to find new anticancer agents.

KEYWORDS

Anticancer . Cell Culture . Jurkat Cell Line . *Lantana camara* . MTT Assay

REFERENCES

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