

## **Anticancerous effect of *Typhonium flagelliforme* on human T4-lymphoblastoid cell line CEM-ss**

### **ABSTRACT**

*Typhonium flagelliforme* (Lodd.) Blume, commonly known as rodent tuber in Malaysia, is one of the widely used alternative medicines in cancer therapy by South East Asian population. Intake of this plant is common among patients with malignancies especially Leukaemia, breast and cervical cancer; however no data available regarding the possible direct effect of *T. flagelliforme* in these cancers. The purpose of the present study was to investigate the potential *in vitro* cytotoxic effect of leaves and tubers of *T. flagelliforme* extracts against human T4-lymphoblastoid cell line CEM-ss. Among the 8 extracts Dichloromethane and Ethyl acetate extracts of *T. flagelliforme* demonstrated significant anti proliferative effect with a marked level for both leaves (10.8 and 5.8  $\hat{\mu}$ g mL<sup>-1</sup>) and tuber (6.5 and 8.2  $\hat{\mu}$ g mL<sup>-1</sup>), against CEM-ss cells. Considering all the results collectively *T. flagelliforme* appears to be a promising plant demonstrating anti cancer activity, that requires further investigation.

**Keyword:** *Typhonium flagelliforme*; Cancer; Apoptosis; Leukaemia; CEM-ss