

## LETTER TO THE EDITOR

The Editor  
Medical Journal of Malaysia  
Malaysian Medical Association  
4th Floor, MMA House  
124 Jalan Pahang  
53000 Kuala Lumpur

Dear Sir,

### ***TYPHONIUM DIVARICATUM* (RODENT TUBER): A PROMISING LOCAL PLANT IN THE FIGHT AGAINST CANCER**

I wish to bring to the attention of readers that there may be some justification in the widespread lay belief that a certain common local plant possesses anti-cancer properties. Known by the lay name of Rodent Tuber (literally translated from Chinese), *Typhonium divaricatum* has been used in this country for many years to treat various types of malignancy. Many patients who have been medically considered hopeless and incurable have tried such alternative therapy and some have claimed success.

Recently the plant was sent to different centres for study and analysis. Preliminary results obtained at National University of Singapore are encouraging, and studies are still going on (See Table).

*Typhonium divaricatum* is a green plant about one foot tall. Its flower ends in a long filament resembling the tail of a mouse, hence its popular lay name. The plant grows readily in soft, damp, shady areas. It is now grown in many Malaysian and Singaporean household gardens for its medicinal value. The plant is highly irritant to skin and mucous membrane, thus care should be taken during its preparation for use.

About 50 gram of whole plant, including the root and tuber, is pounded and the liquid extracted through cloth. The operator should be wearing gloves! The extract is mixed with honey and drunk immediately. Initially it is taken three times a day. If improvement is seen, the dose is reduced gradually to maintenance dose of twice a week for an indefinite period. The extract may be taken as single therapy or taken during the course of radiotherapy or chemotherapy.

Side-effects are only temporary. Intense pruritis and dermatitis occur when the extract comes in contact with skin and mucous membrane. This is treated by rinsing the affected parts with ordinary cane-sugar cubes. Irritation to mouth and throat during drinking is prevented by prior mixing of the extract with honey. The irritant side-effect tends to diminish in time with continued exposure. There are apparently no serious long-term side-effects.

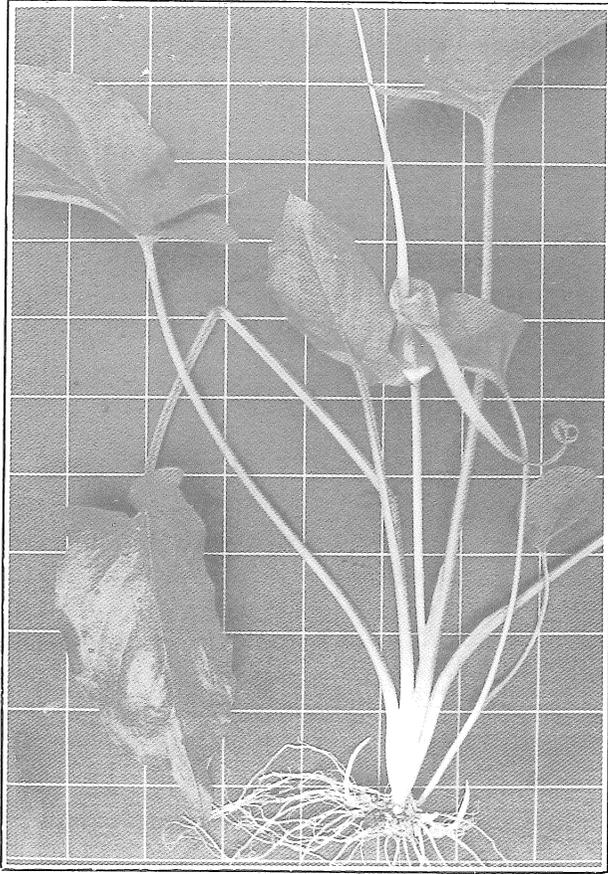
So that more people can recognise the plant, a picture is provided here.

**Table I**  
**Tests on extracts of *Typhonium divaricatum* using a lymphoid cell line**

<b>A</b>		
<b>3.5 Hour treatment</b>	<b>cpm/well</b>	<b>Mean</b>
Control cells	22140	23859
	23538	
	25900	
Leaf extract	689	901 (3.8% of control)
	907	
	1106	
Root/tuber extract	5291	5146 (21.6% of control)
	5433	
	4713	
<b>21 Hour treatment</b>		
	<b>cpm/well</b>	<b>Mean</b>
Control cells	35875	46347
	54332	
	48833	
Leaf extract	951	1332 (2.9% of control)
	1896	
	1150	
Root/tuber extract	3799	3533 (7.6% of control)
	4509	
	2290	
<b>B</b>		
	<b>mean thymidine incorporation</b>	<b>% control*</b>
Control (no extract)	29,748 cpm	100%
Root extract	17,400 cpm	58%
Seed extract	19,311 cpm	65%
Leaf (chloroform)	2,336 cpm	8%
Leaf (hexane)	873 cpm	3%
Leaf (ethyl acetate)	2,027 cpm	7%

\*100% is the uninhibited value. The lower the counts relative to control the greater is the anti-proliferative effect.

*Studies conducted by O.L. Kon, Department of Biochemistry, Faculty of Medicine, National University of Singapore, July – October 1991.*



**Fig. 1**  
***Typhonium divaricatum* (Rodent**  
**tuber) shown against 2.54 cm**  
**(1 inch) grid. Note the flower**  
**ending in a long filament**  
**resembling the tail of a mouse,**  
**hence the lay name of the plant**

### **Acknowledgements**

I wish to acknowledge with gratitude the participation of the following, without whom this study will not be possible: Mr. Tan Dek of Agricultural Department, Alor Setar; Prof. Goh Swee Hock and Prof. Soepadmo both of University of Malaya; Prof. O. L. Kon of National University of Singapore and her assistant Ms. Seck Chung Sze; Prof. Soejarto of University of Illinois at Chicago; Dr. Gordon Cragg of National Cancer Institute, U.S.A.; and Mrs. Siew Yong Gnanalingam of Malaysian Airline System for volunteering to fly fresh plant specimens to the U.S.A.

C. K. Neoh  
Neoh Clinic  
G.05 Kompleks MPKS  
Jalan Kolam air  
05000 Alor Setar  
Kedah.