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STUDY ON CYTOTOXIC ACTIVITY OF SOME EXTRACTS OF *VINCA ROSEA L.* INTRODUCED TO WESTERN GEORGIA

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Malignant cancer belongs to the number of the most widespread diseases in the world. As WHO forecast notifies number of victims of malignant cancer will be 2015 will die 9 million, 11,4 million in 2030. So mortality caused by the malignant tumors is presented disturbing statistical data.

The object of our research were the alkaloids extracts obtained from aerial parts of *Vinca rosea L.* Cytotoxicity was assessed against A-549 (lung cancer cell line), DLD-1 (colon adenocarcinoma cell line) and WS-1 (normal skin fibroblast cell line) cytotoxic activity was expressed inhibiting cell growth by 50% (IC50). Etoposide was used as positive control.

Results: *In vitro* cytotoxic activities of extracts 1,2 were assessed against using resasurin reduction test, but extract 3 Hoechs test.

Table *in vitro* cytotoxic activities of extracts 1,2,3

Compounds	Resasurin			Hoechs		
	Cell lines			Cell lines		
	A-549 mg/ml	DLD-1 mg/ml	WS-1 mg/ml	A-549 mg/ml	DLD-1 mg/ml	WS-1 mg/ml
extracts 1	1,563	1,563	8±3			
extracts 2	3,7±0,2	3,8±0,4	1±2			
etoposide	2,3±0, 2µM	2,8±0, 04µM	19± 3µM			
extracts 3	4,6±0,22	3,57±0,08	2,3±0,1	0,45±0,4	2,7±0,1	2±0,2
etoposide				1,5±0,1 µM	3,0±0,3 µM	3,1±0,5 µM

Biological activities of extracts 1, 2, 3 which were obtained from *Vinca rosea L.* introduced to Western Georgia. The results showed that the extracts 1, 2, 3 presented strong cytotoxic activities on A-549, DLD-1 and WS-1.

BIOGRAPHY

Vachnadze N has completed her PhD at the age of 45 years from Tbilisi State Technical University, Georgia. She is a principal scientist of TSMU Iovel Kutateladze Institute of Pharmacochimistry. She has published more than 60 publications in reputed journals. She is a member of organizing committee of several international conferences and meetings.

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