

Table I Changes of SOD1 (CuZn superoxide dismutase), CAT (catalase) and GST (glutathione-S-transferase) activities in erythrocyte lysate after treatment of erythrocytes with different pesticides *in vitro*.

Sample	Type of pesticides	Conditions of treatment	Dose range	Change of activity			References
				CAT	SOD1	GST	
Human erythrocytes	Clomazone Isoxazolidinone herbicide	1h, 37°C	0, 100, 250 and 500 µg/L	CAT activity decreased at all concentrations tested	Increased SOD1 activity at lower concentrations and a decrease at the highest concentration of insecticide	-	16
Human erythrocytes	Trichlorfon Organophosphorus insecticide	1h, 37°C	8, 12, 16, 20, 40, 60, 80 mg/L	CAT activity increased	SOD1 activity increased	-	19
Human erythrocytes	beta-Cyfluthrin Pyrethroid insecticide	4h, 37°C	43, 215, 1075 µg/L	CAT activity decreased	Increased SOD1 activity at lower concentrations and a decrease at the highest concentration of insecticide	-	20
Human erythrocytes	Chlorpyrifos-ethyl Organophosphate insecticide	0,30,60,120, 240 min; 4°C	0.4, 2, 10, 50, 100 g/L and 0.01, 0.1 g/L	CAT activity decreased at all incubation period	Decreased SOD1 activity at high dose range at all incubation periods and increased activity at low dose range	-	21
Human erythrocytes	Diazinon Organophosphate Insecticide	0,60,180 min; 4°C	0.0033, 0.033, 0.33, 3.3 and 33 mmol/L	CAT activity remained unchanged	SOD1 activity increased	-	22
Rabbit erythrocytes	Lambda-cyhalothrin Synthetic pyrethroids Insecticide	4 h, 37°C	0, 0.1, 0.5, 1, 2.5 and 5 mmol/L	Decrease in CAT activity	Decrease in SOD1 activity	Decrease in GST activity	11
Rats erythrocytes	Endosulfan - Organochlorine insecticide and acaricide Chlorpyrifos-organophosphorus insecticide	3h, 37°C	1 µg/L	CAT significantly decreased	SOD1 was significantly decreased	GST was increased in comparison to control values	12