Abstract

Pesticides are chemicals used in agriculture but are known to produce adverse effects on humans. In this study, blood activities of superoxide dismutase (SOD), catalase (CAT), aspartate transaminase (AST), alanine transaminase (ALT), gamma-glutamyl transaminase, lactate dehydrogenase (LDH), and levels of malondialdehyde (MDA) were determined in 44 greenhouse workers (24 tomato workers, 20 clove workers) and in tomato (24 samples) and clove (20 samples) products. At the end of this study, blood MDA levels and activities of ALT, AST, and LDH levels in greenhouse workers were significantly increased while SOD and CAT activity levels fell significantly. Pesticide residues were not found in agricultural worker blood. Malathion residues (average 0.8 ppm) were detected in tomatoes (8 samples) in these greenhouses. Data suggest that the health of the greenhouse workers may be adversely affected by pesticides.