

Since the early 1990s, it has been argued that man-made chemicals used for agricultural, industrial or domestic purposes can be released in the environment, enter the food chain, and produce a number of disorders in animals, and possibly in man (Rasier *et al.* 2006).

Hepatotoxic, genotoxic and neurotoxic effects of different pesticides have been evaluated in many *in vivo* as well as *in vitro* studies. Various types of pesticides such as insecticides, fungicides and herbicides were agrochemicals designed to combat the attacks of various pests on agricultural crops. Pesticides have been linked to a wide spectrum of human health hazards, ranging from short-term impacts, such as headaches and nausea, to chronic impacts, like cancer, reproductive harm, and endocrine disruption. Chronic health effects may occur years after even minimal exposure to pesticides in the environment, or result from their residues ingested through food and water (Berrada *et al.* 2010).

Pesticide exposure can lead to oxidative stress which is a process of through unregulated generation of reactive oxygen species (ROS), such as superoxide anion, hydrogen peroxide, hydroxyl radical, peroxy radicals and singlet oxygen. ROS are produced during normal processes in the cell. Under normal conditions antioxidant systems of the cell minimize damage caused by ROS. When ROS generation increases to an extent that it overcomes the cellular antioxidant systems, the result is oxidative stress (Tayeb *et al.* 2010).

Therefore, monitoring pesticides residues and how they affect the biological system, can be considered as one of the most important aspects in minimizing human health hazards resulting from such pollutants.