Insufficiency of Kerosine as Solvent to Pyrethroids (Tetramethrin and Permethrin) in the Formulation of Insecticides and its Influence on Blood Parameter in Adult Albino Rats

Maysa M. Thakeb*, Esmat Seif El-Nasr**, N. A. Hemeda**, Nadia A. Taha**, Y. L. Awad* and Omyma M. Kandeel***

*Animal Health Research Institute, **Faculty of Veterinary Medicine, Cairo University and ***Animal Reproduction Department, National Research Centre, Cairo, Egypt.

> T HIS INVESTIGATION involved the effect of Kerosine for long time (288 days in these concentrations) as a stress hazardous influence that caused unfavorable manifestations. The direct effect was on hemobiotic system which was concluded from the MCHC and was more indicated in the females than males and that was more clear in the Neutrophiles / lymphocytic ratios.

> This investigation showed also the hormonal affection as for the cortisol, testosterone leading to a more hazard insufficiency of the testicular functions.

Thus it is clear that this formulation has a damaging effect on the productive system as well as the haemopoetic system affecting the blood initiating cells as revealed from the peripheral blood studies.

Thus it is necessary to avoid the production of this formulation due to its direct effect on the blood forming system as well as the hormonal profiles in both male and female in individual animals.

Many factors coincide with our environmental derangement that coaless together for the introduction of many pharmaceutical preparations that are needed to combat unacceptable and uneasy invadors which may carry or are the cause of unexpected diseases.

Several components as pyrethroids could be used as being of low toxicity hazards while they could be used to control arthropods.

Kerosine has been reported to control arthropod agricultural pests in 1983, as reported by Teli *et al.* (1983), Kushwaha (1983) in India respectively and Bhowmik, *et al.*(1985) in USA and Arkhipov (1984) in USSR .Also Hofue *et al.* (1987) in Bangladesh in tobacco agriculture.