

Organochlorine Pesticides in Swine Tissues from Abattoir Material Collected in Nairobi, Kenya

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Abstract

Subsequent to the discovery of DDT in the early 40's, other organ chlorine pesticides have been introduced. These compounds generally resist microbial and chemical degradation and therefore persist in the environment. Despite the fact that the use of organ chlorine pesticides has been banned or restricted, environmental contamination remains the main source of organ chlorine pesticides in food animals (Raisbeck et al. 1989). Studies on organochlorine pesticide residues carried out on different tissues of various animal species in Kenya have indicated varying levels of environmental contamination. (Kanja et al.; 1992, Mitema and Gitau 1990; Mugachia 1992 a; b). Organ chlorine pesticides found in follicular fluid of infertile women have been implicated as the cause of infertility (Bauklouh et al. 1985). Due to the fact that swine are polytocous, the large number of follicles and corpora lutea available makes it a suitable animal model for the study of the possible effects of organ chlorine pesticides on reproduction. In this study, swine fat, muscle, liver, corpus luteum and follicular fluid samples from abattoirs were analysed for organ chlorine pesticide residues. The tissues were obtained from two groups of gilts; one group came from farms that used only commercial feed; the other originated from farms that used commercial feed and swill interchangeably. The objectives of this study were to establish the levels of organ chlorine pesticide levels in various swine tissues and to compare the levels of the pesticides found in swine tissues from two slaughter houses obtaining pigs from different backgrounds.