

Organochlorine Residuals in Groundwater of Pondicherry Region

M. A. SIVASANKARAN*, S. SIVAMURTHY REDDY*,
S. GOVINDARADJANE* AND R. RAMESH**

Nineteen representative water samples were collected from surface and ground water sources, covering urban, rural area, shallow and deep aquifers in Pondicherry region. The samples were analysed for various pesticide residues such as HCH, Aldrin and DDT. Both surface and ground water sources found to exhibit the residuals of various pesticides. The residual levels of organochlorine pesticides were found to be three to four times more in ground water sources of agricultural areas than in urban areas, indicating the impact of usage of pesticides for agriculture. It is evident that total residuals of organochlorine pesticides are more in tanks followed by shallow wells and deep wells. However, the residual levels of pesticides were found well below the maximum acceptable level of 100 ng/L for individual pesticides for drinking purpose in the study area. Though the residual levels of pesticides in the study area were well below the acute toxicological problems, the major concern is for long term, chronic exposure from compounds that may be carcinogenic.