METABOLISM OF PESTICIDES UPDATE III

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UNITED STATES DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
Special Scientific Report—Wildlife No. 232
Washington, D.C. • 1980

Menzie, CM (1981) Metabolioni (1980)

METRIFONATE (Trichlorfon, Trichorphon, Chlorophos, TCF) [0,0-Dimethyll-hydroxy-2,2,2-trichloroethylphosphonate]

Releasable

 $\frac{\text{TCF-12}}{2,2,2-\text{trichloroethylphosphonate}} (\text{Lauroyl trichloroethylphosphonate}) - \frac{[0,0-\text{Dimethyl}] - (\underline{n}-\text{dodecanoyloxy}) - [0,0-\text{Dimethylphosphonate}]}{[0,0-\text{Dimethylphosphonate}]}$

When applied to foliage of Douglas fir, TCF residues declined rapidly. Residues on grass and willow were greater than on Douglas fir. While TCF-12 residues on foliage declined at the same rate as TCF, TCF-12 disappeared more slowly from water than did TCF (Pieper and Richmond, 1976).

Studies indicated that, after i.p. injection of metrifonate in mice, chemical formation of DDVP occurred in the brain (Nordgren et al., 1978).