

MILIKIN, CORINTH, Ph.D. Determination of Pesticide Levels as the Result of Cross-Contamination During Laundering. (1989) Dr. Billie G. Oakland. 60 pp.

This study investigated the pesticide cross-contamination that occurs during laundering. The effect of pesticide, water temperature, and fabric combination were examined. Three pesticides--atrazine, Diazinon, and metolachlor--were chosen along with two water temperatures 27°C and 60°C, and in conjunction with eight fabric combinations.

The four fabrics tested were two top weight fabrics and two bottom weight fabrics common in pesticide worker clothing. Field strength (1.25% a.i.) pesticides were used to contaminate the fabrics. Pesticide soiled fabric samples were individually laundered along with the same weight fabric that had not been exposed to pesticides in an Atlas Launder-Ometer in a method to represent one home laundry cycle. Samples were individually extracted and analyzed using gas chromatographic techniques. Residues extracted from fabrics range from 0.0 ug to 350.2 ug with a mean level of 60.0 ug.

An analysis of variance procedure was used to test for the main effects (temperature, pesticide, and fabric combination) and interactions of the main effects. All main effects were significant at the .0001 level. Further examination of all possible pair-wise comparisons of treatment means was carried out with a Duncan's multiple