

META-ANALYTIC ANALYSIS OF THE COTMAN PROGRAM

Terry Griffin

University of Arkansas Division of Agriculture

Little Rock, AR

Diana Danforth

University of Arkansas Division of Agriculture

Fayetteville, AR

Abstract

Instead of performing a primary analysis on newly acquired data, we use meta-analysis as a technique to summarize previously published results from studies on the relationship between NAWF5, DD60's and termination of insecticides. Meta-analysis can be thought of as a quantitative literature review or more specifically as a statistical approach to reviewing and summarizing quantitative empirical results of previous studies. Although not formally referred to as meta-analysis until the mid 1970's, the general thought of combining estimates from several small sample studies was discussed in an agricultural setting over 70 years ago by Tippet.

Publicly available papers from journals and conferences comprise the meta-database for this preliminary study into the impact of the COTMAN system. Variables recorded include DD60s beyond NAWF5 for late economic application of pesticide or irrigation application and number of pesticide applications reduced compared to farmer status quo practice. Preliminary results indicate whether convergence of the data exists in the literature and if publication bias impacts which results make it to print.