ASSOCIATION BETWEEN WEED SEEDBANK SIZE, FARM CHARACTERISTICS AND IPM-RELATED FARMER BEHAVIOR. Edward C. Luschei and Clarissa M. Hammond, Assistant Professor and Graduate Student, Department of Agronomy, 1575 Linden Drive, Madison, WI 53706.

Pest science personnel generally recognize the benefits of integrated pest management (IPM), but in order to effectively target extension efforts and engage in research that addresses the real-world constraints of farmers, it is essential to gauge farmer behaviors and attitudes. To accomplish this goal, a corn pest management survey was sent to Wisconsin farmers in 2002. Our objectives were (1) to report benchmark pest management data and (2) to examine correlations between total farm size and type (cash-grain or dairy) and management behaviors. A total of 213 farmers were surveyed about the characteristics of their operations, weed, insect and disease pest management practices, use of crop consultants, interactions with their local agrichemical dealer and their attitudes regarding pest management decision-making. The responses between cash-grain and dairy farmers were compared and further categorized on the basis of farm size. The overall rate of IPM adoption, as reflected by a behavioral index calculated from survey responses, was moderate (overall mean index score of 10.4 of a maximum of 24). Large cash-grain farmers indicated rotating crops, rotating herbicide families and using a broadcast herbicide application more often in their weed management program than their small dairy farmers. Generally, both the cash-grain and large-size categories were related to considerations of the level of control, price, carryover potential, weed resistance management, environmental safety, and risk to the applicator when selecting herbicides than other operational categories. Cash grain operations had a (significant) higher mean IPM index score than dairy operations (11.1 compared to 9.2). Larger farms tended to involve management that was more integrated (i.e. had higher index scores) than smaller counterparts. The mean index scores for each progressively larger size class were 8.9, 10.6, 11.0, and 11.5 units. Our results provide a benchmark for future comparisons of IPM adoption rates in Wisconsin and highlight the association between IPM research/extension and farmer management behavior.

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