

KNOWLEDGE, PERCEPTIONS AND ATTITUDES OF ORGANIC FARMERS ABOUT WEED CONTROL. Elizabeth Canales, Jason Parker, Robyn Wilson, Mark Tucker and Doug Doohan, Research Assistant, Post Doctoral Associate, Assistant Professor, and Associate Professor, The Ohio State University, Columbus, OH 44691, Associate Professor, Purdue University, West Lafayette, IN 47907.

Previous research has shown that organic farmers rely on non-traditional sources of agricultural production knowledge. Networks of like-minded individuals willing to share knowledge are preferred over programming provided by land grant universities. Moreover a strong emphasis upon heuristic approaches has been identified. A predictable outcome of such preferences is belief in concepts not yet supported by scientific evidence. The objective of this research was to identify key concepts and attitudes held by organic farmers about weeds and weed control and determine how they differed from those held by conventional farmers. Methodology included development of an expert model that described key concepts about how weeds are introduced and spread in the agro-ecosystem, management strategies and techniques, and their positive and negative impacts. Fourteen organic farmers from central and northern Ohio were selected for interviews using an open-ended survey instrument that was based on the expert model. Most interviews were conducted in-person and lasted approximately 90 minutes. Interviews were transcribed and key concepts were coded and mapped into an influence diagram. This process provided for the development of a mental model (i.e., conceptual map) describing the deeply held knowledge, perceptions and attitudes of this cohort. Similarities and contrasts with a mental model previously completed for conventional farmers were identified and characterized. The long-term goal of this research is to identify and develop new education and research opportunities that are more appropriate to the needs of organic farming.