Public Abstract

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The use of GIS in PA technology helps manage the information intensive environment in production agriculture by intertwining site-specific (within field) management with computer software modeling for analyses and interpretation of varying inputs and outputs (Melakeberhan, 2002). Specifically, the definition of Precision Agriculture are the technologies that include global positioning systems (GPS), geographic information systems (GIS), yield monitoring sensors, and computer controlled systems that manage with-in field variable rate application (VRA) equipment (Bullock et al., 2002). At the University of Missouri (MU), undergraduate agriculture students explore GIS in PA applications through the Geography and Agricultural Systems Management curriculums. Many classroom opportunities are provided that expose students to GIS examples from the industry and through "hands-on" experiences in classroom exercises. Although clas enrollment gives an indication of how many students participate in such opportunities, the intensity or frequency usage of GIS in PA and why students either do or do not adopt GIS applications in their occupation (farm or off-farm management) is not well documented. Therefore, MU agricultural student's comprehension of GIS in PA is important in understanding their motivations to learn and use GIS in PA applications.