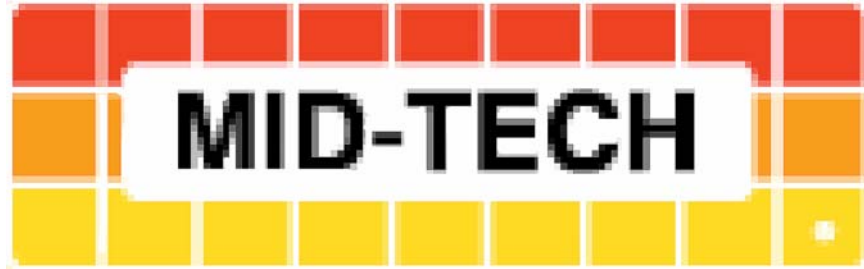# Midtech- GPS Variable Rate Sprayer
Advisor: Dr. Gaines Miles
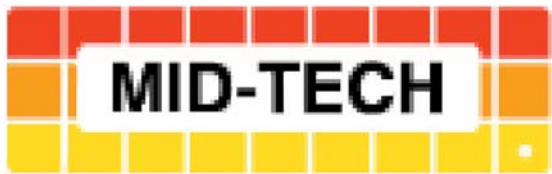
Tim Kilmer

April 2004

Objectives:

Evaluate, unite software, and test a variable speed sprayer stand using Midtech Fieldware software incorporating GPS.

1. Set up computer with operating sprayer unit to demonstrate variable spray rates.

2. Display the full potential of the Midtech technology by giving ability to import a file.

3. Test the learning tool to ensure consistency with chemical prescription file
Write up the results of this project

Equipment

➢ Ravenliquid 440

➢ Midtech Software

➢ 2 IBM Laptop computers

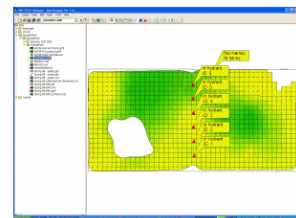➢ NMEA simulation signal

➢ Midtech Software

Purpose for Project

Safety
  ➢ High liability training with real equipment in the field

➢ Class room tool to train and simulate calibration as if in real field situation.

➢ GPS training tool for Variable rate spraying

Possible Demonstrations

1. Calibration

2. Adding GPS Prescription File made by students

3. Run prescription file

➢ Get measurable results for location in field.

➢ Very safe and practical demonstration of variable chemical application today.

Expandable

➢Great possibilities of adding new technologies as developed

➢Updated software may expand uses of unit

Portable

➢Easy loaded into car or van

➢Possibilities for uses in trade and equipment shows

➢Great representation of Purdue's higher level education in Agriculture

Prepare for the Future

➢ Better understanding of variable rate spray industry

➢Graduates of ASM will have the experience needed to start in today's Precision Agricultural field