

# **Mariah Bock, Plant Sciences**

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## **Controlling cabbage pests in Missouri**

Mariah Bock & Tom Clark

Missouri's fall presents an ideal growing environment for cabbage. However, many farmers do not consider cabbage as a main or in between season crop. Lack of knowledge, economical feasibility, or fear of pests could all cause reason to avoid planting cabbage. My research focuses on the insect pests cabbage farmers in Missouri face, and the different methods of insecticide control that can be implemented. My research took place September 27 through November 8 of 2005. Golden Acre Variety cabbage was pre planted on August 26, 2005. The field in which it was planted measured 75 by 34 feet. The field was divided equally into twelve plots of about 8.5 by 25 feet. Ten plants from each plot were marked at the beginning of the growing season with bright orange wooden stakes, these plants would be compared during and at the end of the growing season. Three of the plots received Warrior insecticide, three received Sevin insecticide, three received Dipel insecticide, and three acted as controls receiving no insecticide. Over the duration of the experiment insect monitoring took place on Tuesday and Friday each week. The number and type of insect was recorded. Four types of insect traps were also set up and monitored during the experiment. The traps consisted of yellow sticky traps, Diamond Back Moth pheromone traps, a windowpane trap, and a pitfall trap. Some of the primary cabbage pest insects that were found were aphids, flea beetles, and the cabbage looper. The results of the experiment showed that the Warrior insecticide controlled cabbage pests the best. Only one of the ten cabbages had signs of insect damage, and the cabbages that received Warrior had the highest overall weight.