New York State Integrated Pest Management Program

Combining Cultivation and Interseeded Cover Crops for Weed Control in Transplanted Cabbage

Research Report for 1997
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New York State Integrated Pest Management Grants Program

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Introduction: Research conducted in 1995 and 1996 has shown that cultivation with or without interseeded cover crops can control weeds and maintain yields in transplanted cabbage. Specifically, either two or three cultivations with an interseeding of vetch at 20 to 30 days after planting provided weed control equivalent to post-transplant applications of Dual (metolachlor) and Lentagran (pyridate). These results were obtained, however, when water (1995) and nitrogen (1995, 1996) were limiting factors. If the techniques of cultivation and interseeding prove effective under conditions of adequate moisture and fertility, it will be possible for growers to eliminate preventive herbicide applications in transplanted cabbage with little risk; the availability of registered postemergence herbicides will allow "rescue" treatments should cultivation or interseeding fail to control weeds. Therefore, additional research was conducted to determine the effectiveness of cultivation and interseeding when water and nitrogen are not limiting factors.

Objective: To examine the effect of sidedressing nitrogen (with adequate moisture provided by irrigation, if necessary) on weed and cover crop growth and cabbage yield when interseeded with hairy vetch or spring oats.

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