Establishing Alfalfa As a Cover Crop in Corn

Project Leader: Russ Hahn

Objectives:
1. Assess tolerances of a variety of grass and legume cover crop species, as well as alfalfa, to various imidazolinone and sulfonylurea herbicides.
2. Determine optimum planting time and weed control choices for establishing an alfalfa cover crop in corn.

Results:
Corn yields were highly variable, and there were no statistically significant yield differences among herbicide treatments. Alfalfa stands, however, were generally greater for later herbicide applications in Imidazolinone-resistant (IR) corn, and there were significant differences among herbicide treatments. Though glufosinate-resistant (GR) corn yields were higher than most IR or SR (sethoxydim-resistant) corn treatments, alfalfa stands were not adequate in any GR corn herbicide treatments. We plan to further explore alfalfa tolerance to glufosinate timing in greenhouse experiments in the winter of 1998. Poast Plus and Buctril (applied either mid- or late postemergence) is the most promising SR treatment.