

Evaluation of Weed Control Methods in Organic Barley and Spring Wheat

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One of the main concerns in an organic cereal production system is weed control. Four barley and four spring wheat cultivars were grown in 18.5 m x 3.7 m plots at the Harrington Research Farm in 2002 and 2003. Each year plots received 20 t ha⁻¹ of manure. Weed control treatments were: 1. Finger weeding at GS 8 (2002) and GS 11 (2003), 2. Finger weeding at GS 8, 12 (2002), GS 11, 14 (2003), 3. Herbicide application of Refine-Extra + MCPA at GS 21 (2002, 2003) and 4. Unweeded. Finger weeding twice increased grain yield for each crop in one of the two years in some experiments and reduced most weeds, such as corn spurry and lamb's quarters, to a level comparable to that achieved by herbicide application. However, finger weeding only once did not improve grain yield or reduce weeds significantly compared to the unweeded control. Effective weed control can be achieved mechanically in an organic cereal production system.

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