ABSTRACT

Johnson, D. A., Cummings, T. R, and Hamm, P. B. 2000. Cost of fungicides used to manage potato late blight in the Columbia Basin: 1996 to 1998. Plant Dis. 84:399-402.

The cost of managing potato late blight with fungicides in the Columbia Basin of Washington and Oregon in 1996 to 1998 was documented and compared with the cost of managing the epidemic in 1995. Mean number of fungicide applications on late-season potatoes from 1996 to 1998 ranged from 5.3 to 8.8 in the north Columbia Basin of Washington and 8.5 to 12.3 in the southern basin of Washington and Oregon. Mean cost per hectare of fungicides and application on late-season potatoes in 1998 was $316 per hectare ($128 per acre) in Washington's north basin and $472 per hectare ($191 per acre) in Washington's south basin. Even though the price of most fungicides had increased since 1995, total cost of control per hectare over the season was less during 1996 to 1998 than in 1995 because of altered management practices. These included fewer fungicide applications, a shift toward lower cost fungicides, substitution of aerial application by chemigation, and a reduction in the number of fields chemically desiccated before harvest. Total cost of managing late blight and tuber rot loss was $22.3 million in 1998, whereas it was $30 million in 1995. The 1998 cost included $19.8 million for fungicide applications and materials, $1.1 million for canopy desiccation, and $1.4 million loss due to tuber rot in Storage.