

Herbicides Keep Processed Green Peas Free of Poisonous Contaminants

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Weed control in processing peas is crucial because weed competition reduces yields of shelled peas and weeds contaminate harvested peas with seeds or fragments that reduce the quality and market value of the peas [1]. Canada thistle buds and nightshade berries are similar in size and shape to peas and are difficult to remove from harvested peas. Growers can have pea loads discounted or entire fields left unharvested due to Canada thistle contamination. Removing nightshade is particularly important because the berries are poisonous [2]. It is essential to keep pea fields relatively weed-free, ensuring high quality green peas [2].

Weeds reduce the yields and the quality of peas when soil moisture is limited. Weed competition under these conditions causes the typically tender, high-quality peas to become hard. These small, hard peas are difficult to separate. Therefore, they reduce the grade of the processed product [3]. Since growers plant green peas in narrow rows, it is difficult to use cultivators without severely injuring the pea plants [2]. Prior to the development of herbicides, growers frequently found it necessary to go through pea fields with a scythe and cut the thistle plants [4]. Early experiments with herbicides showed a reduction of 90% in Canada thistle development in treated pea fields [4]. Herbicide use in peas expanded rapidly due to excellent control of Canada thistle, nightshades and annual broadleaf and grassy weeds, which had been reducing yields by up to 64% in some fields [5].



Green peas



Nightshade

References

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