
Broadleaf Weed Control in Chickpea (*Cicer arietinum*) and Lentil (*Lens culinaris*) with Fall Application of Pursuit.

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Abstract

Broadleaf weed control options in chickpea and lentil are very limited. Preliminary trials found that spring applied Pursuit at rates from 0.25X to 0.5X resulted in severe injury to chickpea in some years. The objective of these trials was to evaluate fall application of Pursuit in chickpea and lentil, at rates from 0.25X to 0.5X, for both crop tolerance and weed control efficacy. A 4-replicate trial was set up at Saskatoon, Sask. in 2000, 2001 and 2002 and at Scott, Sask. and Swift Current, Sask. in 2002. Pursuit was surface applied, with no incorporation, in the fall, at rates of 0.25X, 0.33X, 0.4X and 0.5X. Edge (2000) or Poast Ultra (2001, 2002) were applied to improve grassy weed control. The trials were direct seeded with low disturbance openers. There was excellent crop tolerance to fall applications of Pursuit in both chickpea and lentil at all location-years. Some visual crop injury was evident at the higher rates of Pursuit; however, yield was not reduced. Broadleaf weed control was inconsistent at the 0.25X rate. Rates higher than 0.33X resulted in excellent control of stinkweed (*Thlaspi arvense* L.), wild mustard (*Sinapsis arvensis* L.), wild buckwheat (*Polygonum convolvulus* L.), lamb's-quarters (*Chenopodium album* L.), redroot pigweed (*Amaranthus retroflexus* L.), russian thistle (*Salsola kali* L.) and cleavers (*Galium aparine* L.) at all location-years. When compared to a post-emergence application of Sencor, fall applied Pursuit at 0.33X to 0.4X rates resulted in similar to 20% higher seed yields in lentil and chickpea, respectively. Fall applied Pursuit at 0.33X to 0.4X rate resulted in consistent broadleaf weed control, low crop injury, and high crop yield.