

Sulfentrazone/Isoxaflutole Combinations for Broadleaved Weed Control in Chickpea

Holm, F.A.¹, Johnson, E.N.², Sapsford, K.L.¹ and Blackshaw, R.E.³

¹ *Dept. of Plant Sciences, Univ. of Saskatchewan, 51 Campus Dr., Saskatoon, SK. S7N 5A8
(Phone: 306-966-5009, Fax: 306-966-5015)*

^{2,3} *Agriculture and Agri-Food Canada, Scott, SK and Lethbridge, AB*

Metribuzin is the only herbicide registered for control of broad-leaved weeds in chickpea (*Cicer arietinum* L.) in western Canada but it controls only a limited number of weed species and can cause considerable crop injury. Chickpea has good tolerance to both sulfentrazone (SFT) and isoxaflutole (IFT) and these compounds control a complementary range of broad-leaved weeds that are common in chickpea producing areas. However, when applied at rates suggested for weed control in other crops, both compounds also leave soil residues that can restrict the choice of rotational crops in the year following their use. Field trials conducted in Saskatchewan and Alberta in 2005 and 2006 have demonstrated that a combination of reduced rates of SFT and IFT can provide excellent broad-leaved weed control and crop safety in chickpea and reduce the potential for damage to rotational crops.