Year	Num	Title	Author
2009	115	Lolium perene management in wheat crop with clodinafop and iodosulfuron+mesosulfuron in Brazil.	R. A. Vidal*, A. Kalsing; UFRGS, Porto Alegre, Brazil

Ryegrass management in wheat crop in Brazil with clodinafop and iodosulfuron+mesosulfuron. . The expenditure with wheat imports in Brazil exceeds 1.2 billion dollars annually. There is a limited area planted with the crop and the crop yield is very low, in part, due to weed competition. The objective of this work were: a) to evaluate the efficacy of two herbicides on the control of ryegrass (Lolium spp), and b) to estimate the impact of ryegrass competition on the crop yield. The herbicides tested on spring wheat variety 'Nova Era' were clodinafop-propargyl at 120 g/ha and the formulated mixture of mesosulfuron-methyl and iodosulfuron-methyl-sodium (+ the safener mefenpyr-diethyl) at 12 + 2.4 g/ha, respectively; when applied in ryegrass at two growth stages: beginning of tillers and beginning of stem elongation. Herbicides were applied using a C02-pressurized backpack sprayer with four 80.02VS nozzle calibrated to deliver 150 L/ha solution. Adequate (>90%) ryegrass control was observed when both herbicides were used at the beginning of the tillering stage. But, when applied at the beginning of the stem elongation ryegrass stage, only mesosulfuron-methyl + iodosulfuron-methyl-sodium maintained adequate weed control. Considering a ramet to be either the ryegrass mother-plant or a tiller, the wheat grain was reduced 60 g for each ramet per square meter competing with the crop up to the crop first tiller stage. When both herbicides were sprayed on ryegrass at the first growth stage, the crop grain yield was not reduced when compared to the weed-free plots. When sprayed at the second growth stage, the wheat grain yield did not differ from the untreated, independent of the level of the herbicide efficacy. This work has demonstrated early herbicide spray is crucial to avoid weed competition.