

## Summary

The effect of several intensities of soil preparation and herbicide application on the biomass of *Arachis pinto* BRA-031143 and on weed incidence in maize (*Zea mays*) established in a 3-yr-old *A. pinto* crop was determined in a red-yellow Latosol in Uberlândia (Minas Gerais, Brazil). Treatments consisted of soil preparation with a subsoiler, two passes of a plow-rake, and use of disc plow plus one pass with a soil grader. Glyphosate (1.08 kg/ha + 1% urea) was previously applied to *A. pinto* vegetation, 2 weeks before maize planting. Plots prepared using the subsoiler and plow also received an application of 20 g/ha of chlorimuron to control *A. pinto* regrowth. Results indicated that herbicide application was sufficient to temporarily control *A. pinto* (10.9 t/ha in the check versus 0.6 t/ha with the herbicide) during maize establishment by direct seeding. Good results were also obtained using a subsoiler without herbicide application.