

### **Paxeo™: a new burndown herbicide to *Conyza* spp. control**

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New herbicide options are needed to control *Conyza* species. The aim of this study was to evaluate the efficiency of Paxeo™ (halauxifen-methyl + diclosulam) to control *Conyza* to determine the response of soybean to this herbicide. Three trials were installed in Parana. Experiments were designed as randomized complete blocks, with eleven treatments (T1 – Untreated; T2 – Handweeded; T3 - glyphosate + saflufenacil (24.5 g a.i. ha<sup>-1</sup>); T4 - glyphosate + diclosulam (29 g a.i. ha<sup>-1</sup>); T5 - glyphosate + chlorimuron-ethyl (20 g a.i. ha<sup>-1</sup>); T6 - glyphosate + 2,4 D (1005 g a.i. ha<sup>-1</sup>); T7 - glyphosate + 2,4 D (1005 g a.i. ha<sup>-1</sup>) + saflufenacil (24.5 g a.i. ha<sup>-1</sup>); T8 - glyphosate + 2,4 D (1440+1005 g a.e. ha<sup>-1</sup>) + diclosulam (29 g a.i. ha<sup>-1</sup>); T9 - glyphosate + 2,4 D (1440+1005 g a.e. ha<sup>-1</sup>) + chlorimuron-ethyl (20 g a.i. ha<sup>-1</sup>); T10 - glyphosate + Paxeo at 44 g p.c ha<sup>-1</sup> [Halauxifen-methyl (25.52 g a.i. ha<sup>-1</sup>) + diclosulam (5.06 g a.i. ha<sup>-1</sup>)] and T11 - glyphosate + Paxeo at 55 g p.c. ha<sup>-1</sup> [halauxifen-methyl (31.90 g a.i. ha<sup>-1</sup>) + diclosulam (6.32 g a.i. ha<sup>-1</sup>)] with four repetitions. Adjuvants used with saflufenacil was Dash and with Paxeo was MSO. Burndown treatments were applied 15 days before planting. *Conyza* were 20 to 35 cm in height. When the soybean crop reached V4 growth stage, glyphosate at 1440 g a.e. ha<sup>-1</sup> was applied to entire research trial area except, untreated and handweeded areas. *Conyza* control at V1, V3, V6 and R1 growth stages, and *Conyza* dry weight was determined at V3. In the final evaluation at R8 soybean yield were determined. No treatment provided acceptable (>90%) *Conyza* control at V1 growth stage, although Paxeo provided better control than the other standard treatments. Only glyphosate + Paxeo (T10 and T11) provided the acceptable *Conyza* control. T10 and T11 decreased *Conyza* dry weight. When the soybean growth was at R1, only the handweeded (T2) and the treatments with Paxeo (T10 and T11), provided acceptable control across experiments. All managements with herbicides were higher yield per hectare than the untreated check.

**Palavras-chave:** Buva, Glycine max, mimetic auxin