RESISTANCE OF HAIRY FLEABANE TO AUXINIC HERBICIDES

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Destaque: It is important to know the herbicide resistance present in the area to do the right manage.

Resumo: Auxinic herbicides are important tools in the management of *Conyza* spp. Herbicide-resistant populations reduce the available options for chemical control. The objective of this work was to identify *Conyza* spp. biotypes resistant to auxinic herbicides and define their level of resistance. Five biotypes of *Conyza* spp. with suspected resistance and one susceptible were submitted to a dose-response experiment with the herbicides 2,4-D, dicamba, triclopyr and florpyrauxifen. The doses for each herbicide ranged from 0 to 8x the recommended label rate. The experiment was performed in the greenhouse using a completely randomized design with four replications. The herbicide doses were applied when the plants were 10-15 cm tall. Visual control and shoot dry mass were evaluated 45 days after application. Data were subjected to regression analysis. The biotype was considered resistant when it met the following criteria: Resistant factor (RF) significantly higher than 1, plants surviving at the recommended dose (1x) and if the herbicide ratio to control 90% of the plants (C90) or reduce 90% of shoot dry mass (GR90) were higher than the recommended dose. One biotype was susceptible to all herbicides. For the herbicides 2,4-D and florpyrauxifen, all other biotypes met the criteria and were considered resistant. For the herbicide dicamba, only two biotypes did not meet the criteria. For the herbicide triclopyr, three biotypes did not meet the criteria. Two biotypes showed resistance to the four herbicides studied. Complementary studies will be performed to understand the mechanism of resistance.

Palavras-chave: *Conyza* spp.; dicamba; triclopyr