

MULTIPLE RESISTANCE TO 2,4-D, DICAMBA AND GLYPHOSATE IN *Amaranthus hybridus*

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In many countries *Amaranthus hybridus* is a widespread weed in agricultural systems, among the complications in its handling can be cited high prolificacy, invasive capacity, as well as the resistance of some biotypes to herbicides. This manuscript reports of first *A. hybridus* biotypes with resistance to auxinic herbicides and multiple resistance to auxinic herbicides and EPSPs inhibitors. Several dose response assays was carried out to determine and compare sensibility of six population of *A. hybridus* to glyphosate, 2,4-D and Dicamba, also, Shikimic acid accumulation and Piperonil butoxide effects on herbicide action of 2,4-D and Dicamba were tested in same populations. Three populations were resistant to 2,4-D four populations shows dicamba resistance While only one population was resistant to glyphosate. In addition a population showed multiple resistance to auxinic herbicides tested and glyphosate. Pre-treatment with PBO followed by 2,4-D or dicamba results in the dead of all individuals independent of herbicide or populations.

Palavras-chave: **Amarantaceae; pigweed; Herbicide resistance**

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