



**SDI Review Form 1.6**

**PART 1:**

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| Journal Name:            | <a href="#"><u>American Journal of Experimental Agriculture</u></a>                                                   |
| Manuscript Number:       | 2013_AJEA_5322                                                                                                        |
| Title of the Manuscript: | <b>Synergistic interaction of sublethal doses of 2,4-D and glufosinate on glyphosate-resistant Amaranthus palmeri</b> |
| Type of the Article      | <b>Research Paper</b>                                                                                                 |

**General guideline for Peer Review process is available in this link:**

**[\(http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline\)](http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline)**

- This form has total 7 parts. Kindly note that you should use all the parts of this review form.



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### **PART 2: Review Comments**

|                                                                                                                                                                                                                                                                                                                                                                     | <b>Reviewer's comment</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>Author's comment</b> (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
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| <p><b>Compulsory</b> REVISION comments</p> <p>Title</p> <p>P1,L21,23,24</p> <p>P2,L27-28</p> <p>L42-43</p> <p>P3,L61</p> <p>L73</p> <p>P4,L83</p> <p>L91 [8,18,19,20]</p> <p>P7,L152</p> <p>L173</p> <p>P8,L176</p><br><p>L178</p> <p>L180</p> <p>L188-189</p> <p>L198-205</p> <p>P9,L200-205</p><br><p>L211, here and throughout manuscript</p><br><p>L212,214</p> | <p>Doesn't reflect that tembotrione and dicamba were also evaluated. Reword title</p> <p>list rates of tembotrione/glufosinate/2,4-D, not just a range</p> <p>Field use doses of tembotrione (0.094 kg/ha) and dicamba....</p> <p>citation for A. palmeri being the most prolific, competitive, and common?</p> <p>delete ','</p> <p>replace 'crop growers' with 'producers'</p> <p>'..other species'. Be specific and list some examples</p> <p>list citations in numerical order</p> <p>where was Pra-C obtained? Explain</p> <p>RH? See statement below</p> <p>RCBD? at 1<sup>st</sup> mention give complete wording and the abbreviation in ( )</p> <p>DAT, see above statement</p> <p>Colby citation [26]</p> <p>Why change citation methods? [27,28]</p> <p>Where is this information coming from? Table1??</p> <p>This section needs more discussion. Any citations to back up these statements especially supplementary control measures?</p> <p>The author's discuss 0.25X, 0.5X, and 1X doses but tables do not reflect those values. I suggest that doses be listed as 0.25X, 0.5X, and 1X in tables but footnoted at the bottom of each table with actual doses.</p> <p>Two Table 1's</p> | <p><b>Title</b> was changed to reflect all herbicides involved in the experiment.</p><br><p>P1: The specific rates used for each herbicide were indicated.</p><br><p>P2: The statement was revised to contain more specific data.</p><br><p>References for A. Palmeri being a problem are added.</p><br><p>P3:<br/>L61 Comma is deleted<br/>L73 Replaced</p><br><p>P4:<br/>L83 Listed one example<br/>L91 Done</p><br><p>P7:<br/>L152 Field information was added<br/>L173 definition of RH added</p><br><p>P8:<br/>L176 RCBD already defined<br/>L178 DAT already defined<br/>L180 Colby citation added<br/>L188-189 Citation numbers added</p> |



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| <p>L211,217,218,221</p> <p>P10,L227,231<br/>L238<br/>L244-246<br/>L249-250</p> <p>L258,259<br/>P12,L280<br/>L289-290<br/>L290<br/>L293-295<br/>P13,L298-299</p> <p>L320<br/>L321<br/>All Tables</p> | <p>'Injury' is used interchangeably with 'control or mortality'. I would use 'control or mortality' since 'injury' is more associated with a crop and not a weed that you are trying to eliminate.</p> <p>Lally<sup>[29]</sup><br/>ANOVA should be used with NS (not significant).<br/>In their experiments, 2,4-D controlled <i>A. palmeri</i> better...<br/>Explain control vs mortality. Since emphasis is being placed on mortality then how was mortality determined? Plant counts, visual ratings? Need to be explained in M&amp;M section</p> <p>Doherty et al. <sup>[35]</sup>;Johnson <sup>[36]</sup><br/>See above for Anderson citation<br/>Table 4?<br/>Glufosinate alone at the 1X dose controlled 99%<br/>This is not reflected in Table 4<br/>2,4-D at the 1X dose alone and all combinations with glufosinate provided 100% control. OK, looked at green house studies to see these results but this is not mentioned in the discussion. Need to better separate field vs greenhouse work in discussion.</p> <p>See L258,259 comments<br/>at least 52% when mixed...<br/>Round all values to nearest whole number and this needs to be reflected in the discussion. How can you have 98.9% control. What is the 0.1%?<br/>Also, see comments P9,L211.</p> | <p>P9:<br/>L198-205 This paragraph was revised to show some background information of the populations used in the experiment and provide an overview of this first section of the Results and Discussion.</p> <p>L211 Table rate indicators changed and footnoted.</p> <p>L212,214 Table number 2 – indicated.</p> <p>L211, 217, 218, 221 We need to keep the distinction between injury and mortality in the differential response experiment. There is no crop involved in these experiments so there would not be a conflict with terminology pertaining to crop response. A full explanation is written in our response to Reviewer #3.</p> <p>P10<br/>L227,231 Citation form revised<br/>L238 ANOVA was used. Adding NS is not necessary because it was already stated that there was hardly any variation in the data set.<br/>L244-246 Revised<br/>L249-250 Mortality was specified, instead of the number of survivors, and was stated as being totally desiccated without any signs of regrowth in the methodology section.</p> <p>P12:<br/>L280 changed<br/>L289-290 data source indicated<br/>L290 This was referring to Table 3 (field data) and was clarified.</p> |
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|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <p>L293-295 Still pertains to the field data (Table 3)</p> <p>P13:<br/>L298-299 Results from greenhouse experiments specified.<br/>L320 Tembotrione results are already specified whether field or greenhouse.<br/>L 321 changed as suggested</p> <p>Tables – values are rounded to whole numbers; rates are indicated as XX doses and the 1X dose of each herbicide is indicated in the footnote.</p> |
| <b><u>Minor</u></b> REVISION comments   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b><u>Optional/General</u></b> comments | <p>This manuscript contains excellent information but needs revisions before it can be accepted. Mortality is mentioned frequently in the Results and Discussion Section but no mention in the M&amp;M section of how mortality was determined separate from control. Also, discussion is hard to follow from greenhouse to field studies in some parts of the discussion (3.2.1) and this needs to be better explained in the text. These issues and those mentioned above need to be addressed before this manuscript can be accepted.</p> |                                                                                                                                                                                                                                                                                                                                                                                                        |