



SDI Review Form 1.6

Journal Name:	Journal of Experimental Agriculture International
Manuscript Number:	Ms_JEAI_43649
Title of the Manuscript:	Bluprins® as Alternative Bud Break Promoter for 'Maxi Gala' and 'Fuji Suprema' apple trees
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)

PART 1: Review Comments

	Reviewer's comment	Author's comment (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)
Compulsory REVISION comments	<p>The authors accentuated the results to show off mediocre improvements as breakthrough improvements. The truth is that there was substantial variation from year to year and hydrogen cyanamide + mineral oil was most of the times and for most parameters better than the Bluprins plus nitrogen fertilizers treatments.</p> <p>As an example, see fruit production per tree in tables 7 and 8, where the 3% + 3% + 3% treatment was great for Gala the 2 out of 3 years, but nothing for Fuji for 3 years.</p> <p>I believe that the authors must not give this clear conclusion but give more attention to variations from year to year (why did these happen? Where are the meteo data per year? Where is the discussion for the yearly variation?) and what is the difference from cultivar to cultivar? No discussion was present on these. And at the end you recommend its use.</p>	<p>Hydrogen cyanamide is the standard treatment used by Brazilian apple producers, and yet no product has been able to overcome this treatment. However, hydrogen cyanamide is highly toxic to applicators and environment. Due to this fact, this product is about to be banned for the use in apple tree orchards from Brazil, which would leave no alternatives for the fruit producers. In some European countries, the use of hydrogen cyanamide for this purpose is no longer allowed. Bluprins emerges as an alternative, as it proved superior in relation to the control treatment. The text was modified, highlighting that plants treated with Bluprins showed improvements in relation to the plants without application of bud break promoters, however, Bluprins does not have the same effectiveness as the hydrogen cyanamide. Nevertheless, it is a product with less toxicity and better acceptance by environmental agencies than hydrogen cyanamide.</p> <p>In the Brazilian apple orchards, 'Fuji' cultivars have the problem of alternation of production: in one growing season, the production is quite high, and in the next, low. This pattern is verified in practically all the treatments for this cultivar. However, the evaluation of production was not the main focus of this study, but the bud break.</p> <p>Climate data were included in the material and methods section. Discussions about variations from year to year and from cultivar to cultivar were included in the results section, however, it was not the objective of the work to compare different growing seasons or cultivars, but to verify, individually, the effect of treatments on the main cultivars used in Brazil, in growing seasons with different chilling accumulation.</p>
Minor REVISION comments	<p>L24 break</p> <p>L79-80 how do you set 'dormancy breaking'?</p>	<p>Agreed.</p> <p>The dormancy breaking (induction of sprouting) is performed when the plant is</p>



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	<p>L86 correct the '... analysis were ...' L119 remove 'in' from 'in a few days' L127 ... provided ..., but better '... resulted in ...'. Also, L130 needs improvement L148 improve the sentence L199, 206 DADB L226-231 which is the parameter discussed? You have many points in the results section that the parameter compared is not present, which makes the sentences vague. L232 where are the results for fruit set? L243-244 what does the sentence mean? There is partial comparison. L250-251 there is no comment for 2016-17 data from table 7 L281 'e' to 'and' L284 What is the meaning of the sentence? L296 no capitals in the words of title</p>	<p>still dormant, before starts sprouting. The moment of the treatment application depends on several factors. Among these factors, we can mention chilling accumulation in the winter period in the orchard region, cultivar (chilling requirement) and even orchard management conditions, since by means of the dormancy breaking it is possible to modified the bud sprouting, flowering and fruit ripening. In countries with high chilling accumulation in the winter period, there is no need to perform the dormancy breaking treatment. However, in the conditions of cultivation in southern Brazil, there is this need, and the timing of the application and even the dose should be determined according to the growing season (chilling accumulation), cultivar and the producer's need.</p> <p>Agreed. Agreed. Agreed. Agreed. Agreed.</p> <p>Agreed.</p> <p>Agreed. Agreed. Agreed. Agreed. Agreed. Agreed.</p>
Optional/General comments		

PART 2:

	Reviewer's comment	Author's comment (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)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	