



**SDI Review Form 1.6**

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| Journal Name:            | <a href="#">American Journal of Experimental Agriculture</a>                                                        |
| Manuscript Number:       | 2014_AJEA_12445                                                                                                     |
| Title of the Manuscript: | Nutrients Metabolizability of Nectar for Long-Term Maintenance of Hummingbirds and Effect of a Dietary Fibre Source |
| 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.

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**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)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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| <b>Compulsory</b> REVISION comments | <p>This manuscript explores the metabolizability of the nutrients by two groups of hummingbird <i>Amazilia amazilia</i> i) feeding with artificial nectar and ii) feeding with artificial nectar containing inulin additive. The results of the study are of importance if we try to work out the nutritional protocols for captivited passerine birds. In my opinion the manuscript needs some corrections.</p> <p><b>Title</b> - The Authors declare to study huminberds (all??, which one?). From the text, I know it is only one species. Please add this to the title.</p> <p><b>Introduction</b><br/>Line 87- The Authors declare to study impact of the diet on the condition of hummingbirds and their impact on breeding. In fact, only the weight of individuals was measured. We do not know how the diet impacted the hummingbird health (blood parameters, for example), also any reproductive traits were not measured. If the author suggest the impact on breeding, why they did not considered the gender impact ?? Usually the diets differ between sexes, isn't ? Or, add that the nutritional parameters were measured indirectly. I suggest to constrain the aim of study to the measurements of metabolizability, only.</p> <p><b>Discussion</b> -<br/>In my opinion the section is too long, in many fragments</p> | <p><b>We thank you for your revisions.</b></p> <p>We modify Title according to the suggestion, adding: "<i>Amazilia amazilia</i>".</p> <p>Line 87 –We agree. Our work has the aim to study the metabolizability of the nutrients present in the nectar. We understand the comment, and we try to give a clearer view, as concise as possible, of what we did and why.</p> <ul style="list-style-type: none"> <li>- At the beginning were used commercial nectars or simple water solution (sucrose, soy hydrolyzate, vitamins, minerals, etc.) checking intakes, live weights and general behaviour.</li> <li>- Some health problems (e.g. candidosis)</li> </ul> |



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|  | <p>do not explain the obtained results, but shows the results of other study, only. Therefore, I recommend the substantial revision of this chapter.<br/>I put details in General comments<br/><b>Conclusions</b> – are too long, and the Authors missed the point.</p> | <p>and some deaths occurred. The necropsy gave evidence of some possible pathological (e.g. respiratory infections) or possible physio-pathological, as liver steatosis.</p> <ul style="list-style-type: none"><li>- Some additives were added.</li><li>- The situation improved, but reproduction was still poor.</li><li>- So we decide to more precisely ascertain from the existing literature feeding habits, mainly in the wild, and nutritional requirements and on these basis we reformulated the nectar using also different ingredients and as previously we checked intakes, live weights, behaviour and health conditions.</li><li>- It was confirmed that intakes essentially depends upon energy demand and sugar concentration, other nutrient contents do not seem to affect the intake.</li><li>- So the consequence is that the availability of these and then the fulfilment of the requirements depends upon the ratio with sugars and their metabolizability.</li><li>- So to have an indication of effective requirements and the metabolizability of each nutrient in a complete nectar</li></ul> |
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|  |  | could help in formulating a diet according to species and aviary conditions. |
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| <p><b>Minor</b> REVISION comments</p>   | <p>Table 1- line 4- should be inulin,<br/>Line 43- give the citation to the statement, please<br/>Line 55 – give spacia Zanettoand – should be Zanetto and<br/>....</p> <p>Line 88 - give the citation to the statement, please<br/>Line 141 – give spacias (i) Delzenneand – should be<br/>Delzenne and... (ii) Roberfroidand Slavin – Roberfroid<br/>and</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <p>Table 1 - correct ad request;<br/>Line 43 - we have added the statement as<br/>request;<br/>Line 55 - correct as request;<br/>Line 88 – Sorry, we don’t understand the<br/>reviewer, because the line is empty.<br/>Line 141 - correct as request.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <p><b>Optional/General</b> comments</p> | <p><b>Material and Method</b> – Give more detaled description of<br/>Amazilia amazilia (family, environment, niche requirements,<br/>origin).How was the age of experimental individuals ? And<br/>the sex ?<br/><b>Tables 1,2,3,4</b> – The caption should be self-descriptive.<br/>Therefore, specify (i) the study object, (ii) the experimental<br/>groups treated, (iii)explain the abbreviations used, and (iv)<br/>add the statistical test name. Now the reader needs to go to<br/>Method section to imagine the experiment and understand<br/>the data meaning.<br/><b>Results –</b><br/>Line 173- the Authors used the CV coefficient – it was not<br/>mantioned in the Method section (how it was measured?).<br/>Was it applied to all the data, or to the particular<br/>measurements, and if to particular , why only to the chosen<br/>one?. Please explain.<br/><b>Discussion-</b><br/>Lines 209-227 – the description has the form of<br/>literature revision and did not corespond to the<br/>discussion.<br/>Lines 228-245 – please synthetise<br/><b>Conclusions</b><br/>Line –573-575 – ‘For effective use in metabolism<br/>and production, essential nutrients need to be<br/>contained in the bird’s diet in proportions more - or -</p> | <p><b>Material and Method -</b> We have given more<br/>indications about many biological and<br/>environmental aspects of <i>Amazilia amazilia</i>. The<br/>age of experimental individuals was between 1-3<br/>years, however they were adults. There were 4<br/>males and 3 females per group..<br/><b>Tables 1,2,3,4</b> - below the tables, we adding the<br/>descriptions of the items present in the tables;<br/><b>Results –</b> we agree. Now, in the paper, we have<br/>explained the significance of CV and when we<br/>have used this parameter to evaluation some<br/>experimental data.<br/><b>Discussion –</b><br/>Lines 209-227 - We have modify as required,<br/>summarizing the description;<br/>Lines 228-245 – as required, we have<br/>synthetized the statements.<br/><b>Conclusions</b><br/>The conclusions have been modified</p> |



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|  | <p>less parallel to its needs and must be available for the digestion and the transport.’ –It is very common statment. It is generally accepted that the diet should contain essential nutrients, isn’t it ?</p> <p>Line 578 ‘offered some indications’ - as above – to general statement. What kind of indicators ? Specify, please.</p> <p><b><u>Conclusions</u></b></p> <p>- ‘not different from the values reported by many other Authors’ avoid such statement in Conclusion chapter, please. It corresponds to Discussion</p> <p>Line 589 - From the results of available experiments, it comes out that .... – avoid such statement in conclusion chapter. A priori the conclusions are based on experiments</p> <p>Line 598 - On the basis of existing knowledge and on the result of this trial,- comment as above</p> <p>Lines 596-601- avoid comparison with other Author’s results in Conclusion chapter. It referes to Discussion.</p> <p><b>ethical issues:-</b></p> <p>In my opinion the Authors should declare that thay have the permission to make experiments on the living organisms.</p> | <p>Line 578- see the previous comment concerning line 87</p> <p><b><u>Conclusions</u></b></p> <p>We agree. We have deleted the indications of other Authors.</p> <p>Line 589 – we have modified as required, deleting the results of experiment of other Authors, already cited in the Discussion section.</p> <p>Line 598 - we have modified as required;</p> <p>Lines 596-601 – We modified avoiding the comparisons with other Authors.</p> <p><b>ethical issues:</b></p> <p>We agree: at the end of the manuscript we added suggested declaration about the permission to make experimental on the living organism, according the “Directive. 86/609/EEC concerning the protection of animals used for experimental and other scientific purposes”.</p> |
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