## Re: Submission of manuscript to Annals of Animal Science

Dari: Katarzyna Skupniewicz (k.skupniewicz@izoo.krakow.pl)

Kepada: sgh\_undip@yahoo.co.id

Tanggal: Rabu, 3 Maret 2021 17.36 WIB

Dear Sugiharto Sugiharto,

Thank you for your submission. Your manuscript entitled "EFFECT OF ENCAPSULATED COSMOS CAUDATUS LEAF EXTRACT ON PHYSIOLOGICAL CONDITIONS, IMMUNE COMPETENCES AND ANTIOXIDATIVE STATUS OF BROILERS AT HIGH STOCKING DENSITY" has been assigned the following number: 92/21 and has been sent for evaluation to the reviewers.

Sincerely,

Editorial Board of Annals of Animal Science

Katarzyna Skupniewicz

W dniu 26.02.2021 o 05:34, Sugi Harto pisze:

Dear Prof. Sylwester Świątkiewicz Editor-in-Chief Annals of Animal Science

Please find the attached files of our manuscript and submission form to be considered for publication at Annals of Animal Science. The paper aimed to to investigate the effect of encapsulated Cosmos caudatus leaf extract on physiological conditions, immune competences and antioxidative status of broiler chickens raised at high stocking density.

And, we found that dietary administration of encapsulated Cosmos caudatus leaf extract at 0.5-1.5~g/kg improved growth performance and immunological parameters of broilers raised at high stocking density.

The manuscript is not submitted or under consideration by other journals. We have no conflict of interest.

Thank you very much for your consideration. Sincerely,

Sugiharto Sugiharto, Ph.D. Faculty of Animal and Agricultural Sciences, Universitas Diponegoro Semarang, Central Java, Indonesia

## AAS reviews MS 92/21

Dari: katarzyna.skupniewicz@iz.edu.pl

Kepada: sgh\_undip@yahoo.co.id

Tanggal: Kamis, 22 April 2021 19.15 WIB

Dear Sugiharto Sugiharto,

Manuscript must be amended in accordance with our "Instructions for Authors" ( http://www.izoo.krakow.pl/czasopisma/annals/AAS\_instructions\_to\_authors\_2014-06-18.pdf ) and checked by a native speaker (please attach the signed certificate).

After making the corrections, please email the final version of your paper to <a href="mailto:katarzyna.skupniewicz@iz.edu.pl">katarzyna.skupniewicz@iz.edu.pl</a>

The Editors of the "Annals of Animal Science" send enclosed your paper and the reviews. Please address the Reviewers' comments and **respond to each of them**. Please, highlight the changes in revised manuscript by using track changes option in MS Word or by using colored text.

Best regards, Katarzyna Skupniewicz



I rev\_92\_21.doc 32kB



II rev\_92-21.doc 37kB



III rev\_92-21.doc 75.5kB

## Review of paper:

"Effect of encapsulated Cosmos caudatus leaf extract on physiological conditions, immune competences and antioxidative status of broilers at high stocking density."

In the present manuscript, the authors researched issues related to the high stocking density of poultry and minimizing its negative effects through the use of herbal feed additives. The influence of experimental factors on the body of broilers was investigated in detail. An additional advantage of the study is the consideration of encapsulation method to prevent loss of the bioactive components from herbs in feeding broiler chickens.

The section Introduction makes enough references to the latest literature on the subject. There are a few examples where literature is cited wrongly (see below).

The main goal of presented research was clearly stated in the manuscript.

Section Results needs to be corrected too (see below). Tables and figures are described properly, however in my opinion tables 2 and 3 need to be corrected (include changes in section Results).

The article contains interesting discussion of obtained results with reasonably well chosen published data. The discussion however, despite being very valuable and interesting, needs to be corrected (include changes in section Results). Conclusions being less clear, need to be corrected (see below).

The present paper has several flaws, however the manuscript can be published after completing the deficiencies and refining the details. For more details, see line remarks.

<u>Summary</u>: The presented manuscript is an interesting article, adding plenty of current and valuable information. The high stocking density affects a number of hormonal and metabolic processes, which directly translates into poultry production and thus into economic profitability of production. In-depth knowledge of these mechanisms and methods of counteracting their negative effects is one of the priorities of scientific research conducted in these regions of the world. Therefore, this work will allow us to deepen our knowledge of high stocking density in poultry and its impact on the mass of internal organs and the antioxidative stress.

The data itself and its right interpretation might be helpful in right management of broilers production, which is associated with high levels of welfare and health status as a result of supplementation of natural additives. In particular, the aspect of the use of encapsulating herbal additives is very interesting in this article.

After careful reading of the manuscript I believe that it can be published in the "Annals of Animal Science" after taking into account all comments in this review.

I suggest to improve the following formulations in the text.

#### Line remarks:

- 26: Abstract must be adapted to the comments in this review.
- 64: The study by Yin et al. (2017) was conducted on geese not chickens.
- 157: Based on current standards, stocking density is determined by a ratio between produced kilograms of live mass per m<sup>2</sup> of floor surface. Therefore, manuscript must include this parameter or chicken body weight at 42 days.
- 162: Manuscript must include feed conversion ratio. Feed conversion ratio (FCR) is one of the most widely used measures of feed efficiency (FE). The FCR as a measure of FE was proposed in 1941. This will allow for an objective assessment of changes in

- performance of broilers in different experimental conditions and make it easier for interpretation of results with other articles.
- 166: H/L ratio method: Blood smears should be scanned with a microscope and the first 100 leukocytes should be differentiated (heterophils, eosinophils, basophils, lymphocytes, monocytes). The H/L ratio should be calculated by dividing the number of heterophils in these 100 leucocytes by the number of lymphocytes. Use this method for correct results.
- 168: The Sahli method sensitivity and specificity are both reported to be 85%. This method is seen as subjective and involving errors. The disadvantages of this method are: the color of acid hematin fades with time; it is difficult to match perfectly with the glass comparator; carboxyhemoglobin, methemoglobin, and sulfhemoglobin are not converted to acid hematin; acid hematin solution is not stable and color formation is slow; source of light will influence the visual comparison of colors; color of standard brown glass fades with time and individual variation in matching of color can happen. In scientific research the standard of hemoglobin diagnosis relies on the conversion of hemoglobin to cyanmethemoglobin. The cyanmethemoglobin method is the internationally recommended method of hemoglobin estimation. Therefore, the hemoglobin values should be removed from this article (from section Results, Tables etc.).
- 228: Section Results must be adapted to the comments in this Review (see line remarks 157, 162, 166, and 168).
- 266: Section Discussion must be adapted to the comments in this Review (see line remarks 157, 162, 166, and 168).
- 268: The study by Lara and Rostagno (2013) was conducted in heat stress, not high stocking density.
- 268: See line remarks 64.
- 337: See line remarks 268.
- 337: See line remarks 64.
- 345-347: Lymphocytes only group T4 was comparable to T0 (see tab. 3)
- 375-377: This conclusion cannot be drawn from the data presented above. I think these conclusions are too general. Which extract improves performance and physiological parameters of broiler? What immunological parameters is it changing?
- 387: Abdullah et al.- no title. In J. App. Pharm. Sci. no. 5 on page: 82-88 publication does not belong to these authors.
- 426: Karimy et al. enter the language of the article
- 432: Kim et al. enter the language of the article
- 455: Nassar enter the journal
- 475: Prakash et al. not mentioned in the text
- 517: Yang et al. was not conducted in high stocking density
- 576: Tab 2 must include feed conversion ratio and comment from line remarks 157.

Manuscript AAS\_92-21, entitled "Effect of encapsulated Cosmos Caudatus leaf extract on physiological conditions, immune competences and antioxidative status of broilers at high stocking density"

Recommendation: The above paper is not suitable for publication in its present form.

#### General comment

The article provides useful information about the effects of encapsulated cosmos caudatus leaf extract on physiological conditions, immune competences and antioxidative status in broilers reared at high stocking density. Although the experiment is appropriately designed and implemented, references in introduction and discussion are up-to-date, data are properly analyzed and novel insights are provided, there are some points that should be corrected or clarified.

L35: "...and 42, blood samples from two chicks per pen were collected. At day..."

L36: "...slaughtered, blood samples and their..."

L38: "...T4 group. Daily..."

L39: "...T2 and T3 groups. The haemoglobin levels were..."

L40: "...T0 group. The erythrocytes content and haematocrit value were greater..."

L42: "...T2 groups. Leukocytes and lymphocytes levels were..."

L46: "...T4 groups."

L48: "...and T1 groups. The..." "the" instead of "in"

L59-60: "should" instead of "are required to"

L60-62: "...broiler farming. One possible way is by applying higher stocking densities in broiler production (Abudabos et al., 2013). Apart from the acquired benefits, high..."

L67: "IgG"

L68: Please delete the second "et al."

L76-77: "...may pose a risk to consumers' health (Taghvaei..."

L78-79: "...in broiler chickens, natural antioxidants are alternatively used."

L80: "Recent literature..."

L85-86: "...components including (per 100 mg) 51.28, 4.54 and 3.64 mg of quercetin, chlorogenic acid and caffeic acid, respectively. The leaves..."

L86-87: "...anthocyanins at 108.8 and 0.78 mg..." Please check and correct 108.8 mg/100mg.

L94-95: "...products using coating materials that improve shelf life through the prevention of the bioactive components' degradation. Furthermore..."

L105: "commenced" instead of "began"

L107: "The leaves were weighed, washed, cleaned and..."

L108: "performed" instead of "done"

L110, 111, 112: "Simplicia"?

L117: "...through a freeze..."

L119: "...water and the ratio..."

L120-121: "...leaf extract at a ratio of 5:1. After the..."

L131: "provided with" instead of "given"

L132-133: "...was ad libitum offered from..."

L140: "From day 15 onwards...", "allocated" instead of "divided"

L141: "...replication pens in each..."

L142-143: "...density), while the stocking density in T1, T2, T3, and T4 groups was 16..."

L144: "were nor provided with encapsulated Cosmos caudatus leaf extract neither with other supplements."

L147: "Feed intake and..."

L148: "...pen were randomly selected for blood sampling through the..."

L153: "...from each pen (10 chicks per group) that had..."

L158: "Assessment" instead of "Observation"

L160: "...the chickens at 42 days and subtracting the initial..."

L161: "experimental period" instead of "day of treatment"

L161-162: "...the total feed intake by the experimental period (28 days)."

L163: "intake" instead of "consumed"

L167-171: Please provide references

L221: "To detect differences among..."

L222: "used" instead of "the executed"

L223: "are" instead of "were"

L236: "illustrated" instead of "listed"

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L237: "...in T0 group. The..."
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L238: "The mean corpuscular haemoglobin concentration (MCHC)..."

L242-243: "...reared at high than that at normal..."

L244: "stocking density or Cosmos Caudatus leaf extract supplementation" instead of "treatments"

L248: "...on titer antibodies against ND and AI vaccines in broilers. At..."

L261: "presented" instead of "listed"

L262-263: "...in T0 group. No significant difference..."

L267: Please delete "the"

L268: "...in broilers..."

L269: Please delete "result in"

L270: "...Abo-Alqassem et al..."

L271: "find" instead of "see"

L274: "Parameters" instead of "The condition"

L277: "with" instead of "of"

L278-280: "To date, there is no study available in the literature elucidating..."

L281: "positively affected" instead of "were fruitful for"

L285: "This result was in contrast with that of Park et al. (2018) who noticed a decrease..."

L286-287: "...in broilers at high stocking density. The exact reason for this decrease was not known..."

L292-293: "supplemented with 1.5 g of the encapsulated Cosmos caudatus leaf extract per kg of feed decreased..."

L293: "A previous..."

L296: "Taking this study into consideration, we may suggest that dietary..."

L297: "...supplementation with...". Please delete "of diet"

L303: "Literature..."

L302: "...in poultry..."

L303: Please delete "the"

L304: "In line with our findings, Nwaigwe et al. (2020) showed an..."

L305: "researchers" instead of "investigators"

L326: "...in experimental parameters, such as differences..."

L328: "discrepancies" instead of "conditions"

L330: "...than those raised..."

L331: "This finding was in..."

L344: "An interesting finding that was found..."

L345-346: "... of diets is the less intense cortical and lymphocyte..."

L351: "...supplementation with plant extracts containing flavonoids such that of Cosmos..."

L352: Please delete "extract"

L357: "...not imply an increase..."

L361: "findings" instead of "inference"

L363: "It is noteworthy that" instead of "Note"

L363-364: What do you mean? Please rephrase

L365: "...supplementation with..."

L366: "study" instead of "investigation"

L367: "...however, a study..."

L369: "...administration at 100 and 500 mg/kg..."

L372: "act" instead of "function"

L384-386: Please delete. It is not cited in text

L424-425: Please delete. It is not cited in text

L475-478: Please delete. It is not cited in text



# INSTYTUT ZOOTECHNIKI PAŃSTWOWY INSTYTUT BADAWCZY

NATIONAL RESEARCH INSTITUTE OF ANIMAL PRODUCTION

# **Editors of "Annals of Animal Science"**

ul. Sarego 2, 31-047 Kraków, Poland; tel ++48-12-422-73-33, w. 23 fax ++48-12-422-80-65

e-mail: katarzyna.skupniewicz@izoo.krakow.pl, Internet: http://www.izoo.krakow.pl

Regarding the paper no. 92/21, entitled "EFFECT OF ENCAPSULATED COSMOS CAUDATUS LEAF EXTRACT ON PHYSIOLOGICAL CONDITIONS, IMMUNE COMPETENCES AND ANTIOXIDATIVE STATUS OF BROILERS AT HIGH STOCKING DENSITY.", the authors aimed to investigate the effect of encapsulated Cosmos *caudatus* leaf extract on physiological conditions, immune competences and antioxidative status of broiler chickens raised at high stocking density.

The study is interesting and well designed. However, minor revision is needed before its acceptance.

Please add clear hypothesis of your study in the introduction section before the aim of the work.

Please define all abbreviations in its first appearance in the manuscript. For example, NDV and AIV Please define all abbreviations in tables and figures. For example, Table 5. Titers antibodies against Newcastle Disease (ND) and Avian Influenza (AI) vaccines

In conclusion, dietary administration of encapsulated Cosmos caudatus leaf extract at 0.5-1.5 g/kg improved growth performance. There is no significant improvement in the group T4 (chicks received encapsulated Cosmos caudatus leaf extract at 1.5 g/kg).

Please find below my address for the following points:

- 1) does the INTRODUCTION make enough references to the **latest** literature on the subject?
- 2) does the study bring **new insights** into the relevant field of knowledge?
  Yes
- 3) does the RESULTS section provide adequate presentation of the authors' own results? Yes
- 4) were appropriate methods used for statistical verification of the results and were they properly interpreted?

Yes

5) are the tables correctly presented and do they contain enough data reflecting the research results?

Yes

6) does the DISCUSSION provide proper interpretation of the research in the context of the literature and are the conclusions justified by the results obtained? Yes

Adres do korespondencji: 32-083 BALICE, ul. Krakowska 1 tel. 12-3572500 - Centrala tel. 12-3572700, 12-3572800 - Sekretariat fax 12-2856733 www.izoo.krakow.pl

e-mail: izooinfo@izoo.krakow.pl

Adres siedziby: 31-047 KRAKÓW, ul. Sarego 2 tel. 12-4228852 fax 12-4228065

KRS 0000125481 NIP 675-000-21-30 REGON 000079728

#### Re: AAS reviews MS 92/21

Dari: katarzyna.skupniewicz@iz.edu.pl

Kepada: sgh\_undip@yahoo.co.id

Tanggal: Kamis, 20 Mei 2021 15.56 WIB

Dear S. Sugiharto,

Thank you for the revised manuscript. Your paper was sent to reviewers for re-review. Please wait for the further information.

Sincerely,

Katarzyna Skupniewicz

Od: Sugi Harto <sgh undip@yahoo.co.id>

Data: 9 maj 2021 06:56:57

Do: "katarzyna.skupniewicz@iz.edu.pl" <katarzyna.skupniewicz@iz.edu.pl>

Temat: Re: AAS\_reviews MS 92/21

Dear Dr. Katarzyna Skupniewicz,

Thank you very much for the opportunity given to us to revise our submitted manuscript to Annals of Animal Science. We have revised the manuscript according to the reviewer comments. We also have sent the manuscript to the native speakers to be corrected in term of the language (certificate attached).

Please therefore find the revised manuscript, response letter and the certificate of proof reading from the native speaker.

With best wishes,

S Sugiharto

Faculty of Animal and Agricultural Sciences, Universitas Diponegoro

Semarang, Central Java Indonesia

#### Re: AAS reviews MS 92/21

Dari: katarzyna.skupniewicz@iz.edu.pl

Kepada: sgh\_undip@yahoo.co.id

Tanggal: Jumat, 28 Mei 2021 16.28 WIB

Dear S. Sugiharto,

The Editors of the Annals of Animal Science kindly inform you that the paper by Ikania Agusetyaningsih, Endang Widiastuti, Hanny Indrat Wahyuni, Turrini Yudiarti, Retno Murwani, Tri Agus Sartono, Sugiharto Sugiharto, entitled "EFFECT OF ENCAPSULATED COSMOS CAUDATUS LEAF EXTRACT ON PHYSIOLOGICAL CONDITIONS, IMMUNE COMPETENCES AND ANTIOXIDATIVE STATUS OF BROILERS AT HIGH STOCKING DENSITY" was approved on 28 May 2021 to print in the Annals of Animal Science.

Please send me the final clean version of the manuscript.

Best regards,

Katarzyna Skupniewicz

Od: Sugi Harto <sqh undip@yahoo.co.id>

Data: 9 maj 2021 06:56:57

Do: "katarzyna.skupniewicz@iz.edu.pl" <katarzyna.skupniewicz@iz.edu.pl>

Temat: Re: AAS reviews MS 92/21

Dear Dr. Katarzyna Skupniewicz,

Thank you very much for the opportunity given to us to revise our submitted manuscript to Annals of Animal Science. We have revised the manuscript according to the reviewer comments. We also have sent the manuscript to the native speakers to be corrected in term of the language (certificate attached).

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With best wishes,

S Sugiharto

Faculty of Animal and Agricultural Sciences, Universitas Diponegoro

Semarang, Central Java Indonesia

# Re: AAS\_reviews MS 92/21

Dari: katarzyna.skupniewicz@iz.edu.pl

Kepada: sgh\_undip@yahoo.co.id

Tanggal: Rabu, 2 Juni 2021 16.18 WIB

Dear S. Sugiharto,

I received your manuscript. Thank you.

Best regards,

Katarzyna Skupniewicz

Od: Sugi Harto <sgh\_undip@yahoo.co.id>

Data: 29 maj 2021 00:37:06

Do: "katarzyna.skupniewicz@iz.edu.pl" <katarzyna.skupniewicz@iz.edu.pl>

Temat: Re: AAS reviews MS 92/21

Dear Dr. Katarzyna Skupniewicz,

Thank you very much for accepting our article to be printed at Annals of Animal Science. Please find the clean final version of the manuscript.

Once again, thank you very much Best regards,

S Sugiharto

Faculty of Animal and Agricultural Sciences, Universitas Diponegoro

Semarang, Central Java, Indonesia

# Re: AAS\_reviews MS 92/21

Dari: Sugi Harto (sgh\_undip@yahoo.co.id)

Kepada: katarzyna.skupniewicz@iz.edu.pl

Tanggal: Sabtu, 29 Mei 2021 05.37 WIB

#### Dear Dr. Katarzyna Skupniewicz,

Thank you very much for accepting our article to be printed at Annals of Animal Science. Please find the clean final version of the manuscript.

Once again, thank you very much

Best regards,

S Sugiharto

Faculty of Animal and Agricultural Sciences, Universitas Diponegoro Semarang, Central Java, Indonesia



Accepted Manuscript - AOAS - Final.docx

1.8MB

## Re: AAS reviews MS 92/21

Dari: Sugi Harto (sgh\_undip@yahoo.co.id)

Kepada: katarzyna.skupniewicz@iz.edu.pl

Tanggal: Minggu, 9 Mei 2021 11.56 WIB

#### Dear Dr. Katarzyna Skupniewicz,

Thank you very much for the opportunity given to us to revise our submitted manuscript to Annals of Animal Science. We have revised the manuscript according to the reviewer comments. We also have sent the manuscript to the native speakers to be corrected in term of the language (certificate attached).

Please therefore find the revised manuscript, response letter and the certificate of proof reading from the native speaker.

With best wishes,

#### S Sugiharto

Faculty of Animal and Agricultural Sciences, Universitas Diponegoro Semarang, Central Java Indonesia



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Response letter - Ann Anim Sci.docx

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