

Bukti Komunikasi

: Dengan Editor (Prof. Pascal Constantine)

Judul Artikel:

: A CHARACTERIZATION OF PROPORTION OF ORGANIC MATTER LEVEL OF TENEBRIO MOLITOR LARVA REARED IN TWO DIFFERENT MEDIA CONDITIONS

The screenshot displays an Outlook email interface. On the left, a sidebar shows the 'Folders' pane with 'Inbox' (4237), 'Junk Email' (87), 'Drafts' (17), 'Sent Items', 'Deleted Items', 'Archive', 'Notes', and 'Conversation History'. Below this is a 'Groups' section with a 'New group' link. At the bottom left, there is a notification: 'Upgrade to Microsoft 365 with premium Outlook features'. The main pane shows an email titled 'Re: OK- Certificate' from 'pascalc@uaiasi.ro' to 'You'. The email body contains the following text: '> Dear author, > Your article will be published next week. > Best regards > Prof Pascal Constantine, > > Please inform me about this article publication. It is important to us as > the authors. > > Warm regards, > Wisje Toar et al > > From: wisje toar <wisje\_toar@live.com> > Sent: Saturday, April 30, 2022 1:14 PM > To: pascalc@uaiasi.ro <pascalc@uaiasi.ro> > Subject: Re: OK- Certificate > > Dear Prof Pascal, > We could not find yet the article concerned in your journal of volume 76. > How could we find it in this journal? > > Thanks, > Wisje > > From: pascalc@uaiasi.ro <pascalc@uaiasi.ro> > Sent: Wednesday, January 26, 2022 8:03 PM > To: wisje toar <wisje\_toar@live.com> > Subject: OK- Certificate'.

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 >  
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 > Sent: Saturday, April 30, 2022 1:14 PM  
 > To: pascalc@uaiasi.ro <pascalc@uaiasi.ro>  
 > Subject: Re: OK- Certificate  
 >  
 > Dear Prof Pascal,  
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 > Thanks,  
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 > Sent: Wednesday, January 26, 2022 8:03 PM  
 > To: wisje toar <wisje\_toar@live.com>  
 > Subject: OK- Certificate  
 >  
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 >> MOLITOR LARVA REARED IN TWO DIFFERENT MEDIA CONDITIONS, ( Wisje Lusia  
 >> Toar, Santie H. Turangan, Laurentius J.M. Rumokoy)  
 >>  
 >> Thanks,  
 >> Wisje  
 >> \_\_\_\_\_

- ▼ Folders
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    - Junk Email 87
    - Drafts 17
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 wisje toar  
To: pascalc@uaiasi.ro; Facultatea de Zootehnie  
Cc: laurentius rumokoy  
Tue 5/3/2022 10:07 PM

Dear Prof Pascal Constantine,  
Please inform me about this article publication. It is important to us as the authors.

Warm regards,  
Wisje Toar et al

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**From:** wisje toar <wisje\_toar@live.com>  
**Sent:** Saturday, April 30, 2022 1:14 PM  
**To:** pascalc@uaiasi.ro <pascalc@uaiasi.ro>  
**Subject:** Re: OK- Certificate

Dear Prof Pascal,  
We could not find yet the article concerned in your journal of volume 76. How could we find it in this journal?

Thanks,  
Wisie

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Lucrări Științifice-Seria Zootehnie, 2021

## A CHARACTERIZATION OF PROPORTION OF ORGANIC MATTER LEVEL OF TENEBRIO MOLITOR LARVA REARED IN TWO DIFFERENT MEDIA CONDITIONS

Wisje Lusja Toar<sup>1</sup>, Santie H. Turangan<sup>1</sup>, Laurentius J.M. Rumokoy<sup>1,2</sup>

<sup>1</sup>Faculty of Animal Husbandry, Sam Ratulangi University, Manado Indonesia

<sup>2</sup>Entomology Studies, Postgraduate School, Sam Ratulangi University, Manado Indonesia  
e-mail address: rumokoy@msn.com

### Abstract

The aim of this research was to observe the proportion of organic matter (MO) levels of *T. molitor* serum reared in two different conditions: lightening restriction (M1) and natural lightening (M2) detected in 10<sup>th</sup> and 20<sup>th</sup> days old of larva, beside to evaluate the its body weight. The MO was realized by using a field method of semi-quantitative technique with a portable-refractometer. Secondly was to evaluate the body weight of larva at 20<sup>th</sup> day old. The insects were reared in two lighting condition namely light and dark. The quantification was made in 10<sup>th</sup> and 20<sup>th</sup> day old. The results showed that there has no interaction ( $P > 0,05$ ) of treatment on proportion of organic compound level of *T. molitor* experimental but the treatment gave a significant effect ( $P < 0,05$ ) on body weight at 20<sup>th</sup> day old.

**Key words:** Insect, *Tenebrio molitor*, media, lightening, organic matter

### INTRODUCTION

The production of *T. molitor* insects could be developed and directed as animal feed ingredient, and therefore a good rearing management is needed to be improve. This insect contained nutrient important for livestock (Rumokoy et al., 2021; Stull et al., 2019).

One of the most influential factors in rearing is the environment, including lighting. Sunlight exposure correlated with temperature, but for insects as poikilothermic animals it has a physiological role in adjusting body temperature according to environmental temperature.

Based on the conditions as stated above, we have conducted a study that aims to characterize the proportion of organic matter levels of *T. molitor* reared in two different media conditions.

### MATERIAL AND METHOD

New born larva of *T. molitor* were placed in two cylindrical glass containers having a diameter of 13 cm and a high of 17 cm, and then two boxes were used to keep each

dimension of (60\*35\*15) cm. The first box was conditioned under a lightening restriction by using a porous nylon sack wrapped around the wall of box. The rearing media placed in this dark box called M1, while the second one was conditioned without a restriction lightening the rearing media in this light box was M2. All larva were fed with a same feed: wheat flour, carrot and banana.

The data of serum organic matter level were observed at 10<sup>th</sup> day old (H10) and at 20<sup>th</sup> day old of larva as H20. Randomize Complete Design arranged with two factors (time of observation and lightening conditions). The serum was isolated after dissection and separation the interior mass of body, brewing and filtering the substances adapted to the procedure of Toar et al. (2019). Ten replications of each treatment were done, five individuals per replication were used. Body weight was measured at 20<sup>th</sup> day old. The data of organic matter level were statistically analysed by using two ways anova, to detect the influence of treatment on serum organic level proportion using a portable refractometer, expressed in %Brix value. The

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wisje toar

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Wisje Toar

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Dear authors,

Your abstracts have been accepted. Please send us your full paper.

Please comply with 5 October as deadline to submit the full paper, edited in accordance with the Authors guidelines.

**Best regards,**  
**Prof. univ. PASCAL Constantin, Ph.D.**  
Iasi University of Life Sciences  
Faculty of Food and Animal Sciences  
Tel +40 0232407593

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**Subject:** Re: Information letter on the paper acceptance

Dear Prof PASCAL Constantin,  
Please accept our full-paper concerned as attached.

Best regards,  
Wisje Toar

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**Prof. univ. PASCAL Constantin, Ph.D.**  
Iasi University of Life Sciences  
Faculty of Food and Animal Sciences  
Tel. +40 0232407593  
3rd, Mihail Sadoveanu Alley, Iasi, 700490, Romania  
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