

ARTICLE REVIEW
REPORT



GOLDEN RESEARCH THOUGHTS

International Recognition Multidisciplinary Research Journal

ISSN: 2231-5063 Impact Factor:3.4052(UIF)

ORIGINAL ARTICLE

Published:
1st May, 2015

Vol. - IV,
Issue - XI, May, 2015

EFFECT OF MIXED BACTERIAL INFECTION ON MORTALITY AND PROTEIN CONTENT OF SILKWORM LARVAE (BOMBYX MORI L.)



Your Article
QR Code



See your article on Mobile



Bajare Jitendra
Shahaji

ABSTRACT

In our study day first 5th instar larvae of *Bombyx mori* (L.) multivoltine race Kolar Gold (PM X CSR2) cross breed were used for bacterial infection study. Mixed bacterial infection of *Escherichia coli* (NCIM 2137) and *Staphylococcus aureus* (NCIM 2672) were resulted into 28% mortality and protein content in hemolymph decreased from 39.3 ± 1.56 mg/ml (healthy larvae) to 26.8 ± 1.04 mg/ml (infected larvae). Biological stress due to mixed bacterial infection resulted in mortality and changed protein content of hemolymph.

Article Indexed in



Correspondence to **Bajare Jitendra Shahaji , Dulange Sanjay Mallikarjun and Thorat Prakash Ramrao**

Designation:-¹Assistant Professor, Department of Biotechnology, V. G. Shivdare College of Arts, Commerce and Science, Solapur.

²Assistant Professor, Department of Microbiology, Adarsh Mahavidyalaya, Umarga.

³P. G. Department of Microbiology and Research Centre, Shri Shivaji Mahavidyalaya, Barshi.

Introduction

Bombyx mori L. (Family: Bombycidae) are predominantly used for production of 90% of worldwide silk (Krishnaswami, 1990). Silkworm larvae are used as model organism in pathogenicity study due to its body size (5 cm), generation time (40-60 days), easy rearing, comfortable handling, low cost rearing, minor space required, outcome of results within a day, high throughput results and non-ethical issue (Evelina et al., 2013).

A Good Introduction :-

Depict the significance (importance) of the study - why was this value doing in any case? Give a wide connection. Extremely briefly depict the exploratory configuration and how it achieved the expressed destinations.

Materials

Type culture of Escherichia coli (NCIM 2137) and Staphylococcus aureus (NCIM 2672) were obtained from the Industrially Important Microorganisms Culture Collection unit of National Chemical Laboratory, Pune.

A Good Materials :-

Depict materials independently just if the study is complicated to the point that it spares space thusly. Incorporate specific chemicals, organic materials, and any gear or supplies that are not generally found in research centers.

Result

Fifty six larvae were died out of 200 initially taken larvae due to mixed bacterial infection of E. coli and S. aureus. Infection resulted into 28% mortality, whereas non-infected larvae remained healthy (Table 1).

A Good Result :-

Give a setting, for example, by depicting the inquiry that was tended to by mentioning a specific observable fact. Portray aftereffects of control investigations and incorporate perceptions that are not exhibited in a formal figure or table, if proper.

Conclusion

In our study biological stress given by mixed infection of E. coli and S. aureus were resulted into 28% mortality, while protein content was also decreased. These findings conclude that biological, physical, environmental and chemical stress to the larvae should affect the biochemical pathways and death of larvae.

A Good Conclusion :-

Choose if the trial outline satisfactorily tended to the speculation, and whether it was legitimately controlled. Attempt to offer option clarifications if sensible options exist.

References

- Aboul-Ela R., Kamel M.Y., Salama H.S., El-Moursy A. and Abdel-Razek A. (1991). Changes in the biochemistry of the hemolymph of Plodia interpunctella after treatment with Bacillus thuringiensis. Journal of Islamic Academy of Sciences. 4(1):29-35.
- Assem H. and Hanke W. (1983). The significance of the amino acid during osmotic adjustment in teleost fish- I. Changes in the Euryhaline Sarotherodon mossambicus. Comp. Biochem. Physiol. 74(A):531-536.
- Bradford M.M. (1976). A rapid and sensitive method for the quantitation of microgram quantities of protein utilizing the principle of protein-dye binding. Anal Biochem. 7(72):248-254.

A Good References :-

There are Places where the Author Bajare Jitendra Shahaji , Dulange Sanjay Mallikarjun and Thorat Prakash Ramrao Need to Cite a Reference, but Have Not

SUMMARY OF ARTICLE

No.		Very High	High	Average	Low	Very Low
1.	Interest of the topic to the readers	✓				
2.	Originally & Novelty of the ideas		✓			
3.	Importance of the proposed ideas	✓				
4.	Timelines			✓		
5.	Sufficient information to support the assertions made & conclusion drawn	✓				
6.	Quality of writing (Organization, Clarity, Accuracy Grammer)		✓			
7.	References & Citation (Up-to-date, Appropriate Sufficient)		✓			

FUTURE RESEARCH PLANNING:

1. Career For Faculty (<http://academicprofile.org/Professor/CareerForFaculty.aspx>)
2. Academic Plan (<http://academicprofile.org/Professor/AcademicPlan.aspx>)
3. Regarding Professor Promotion (<http://academicprofile.org/Professor/regardingPromotion.aspx>)
4. Fellowship for Post Doctoral (<http://academicprofile.org/Professor/FellowshipForPD.aspx>)
5. Online Course on Research (<http://onlineresearch.in/Default.aspx>)

HOW TO INCREASE API

Services for Associate Professor to Professor

- ★ Thesis convert into book.Publish in USA - 50 API Marks
- ★ 15 Articles from your Ph.D thesis - 150 API Marks
- ★ UGC Minor Research Project - 10 API Marks
- ★ UGC Major Research Project - 15 API Marks
- ★ Call for Book Chapter - 25 API Marks
- ★ 5 Seminar Paper presentation - 50 API Marks
(we organize)

CERTIFICATE OF PUBLICATION

This is to certify our Editorial, Advisory and Review Board accepted research paper of **Bajare Jitendra Shahaji , Dulange Sanjay Mallikarjun and Thorat Prakash Ramrao** Topic:- **Effect Of Mixed Bacterial Infection On Mortality And Protein Content Of Silkworm Larvae (bombyx Mori L.)** College:- **Assistant Professor, Department of Biotechnology, V. G. Shivdare College of Arts, Commerce and Science, Solapur.** The research paper is Original & Innovation it is done Double Blind Peer Reviewed. Your article is published in the month of **May** Year 2015.



**LAXMI
BOOK PUBLICATION**
Ph.: 0217-2372010 / +91-9595-359-435
Email.: ayisrj2011@gmail.com
Website.: www.isrj.org

Authorized Signature

T. N. Shinde

T. N. Shinde
Editor-in-Chief

CERTIFICATE OF EXCELLENCE IN REVIEWING

This is to certify our Editorial, Advisory and Review Board accepted research paper of **Bajare Jitendra Shahaji , Dulange Sanjay Mallikarjun and Thorat Prakash Ramrao** Topic:- **Effect Of Mixed Bacterial Infection On Mortality And Protein Content Of Silkworm Larvae (bombyx Mori L.)** College:- **Assistant Professor, Department of Biotechnology, V. G. Shivdare College of Arts, Commerce and Science, Solapur.** The research paper is Original & Innovation it is done Double Blind Peer Reviewed. Your article is published in the month of **May** Year 2015.



**LAXMI
BOOK PUBLICATION**
Ph.: 0217-2372010 / +91-9595-359-435
Email.: ayisrj2011@gmail.com
Website.: www.isrj.org

Authorized Signature

T. N. Shinde

T. N. Shinde
Editor-in-Chief

REVIEWER COMMENTS

- I discover no shortcoming at all with the routines, information examination, or conclusions.
- The work, as with all work advancing from this specific gathering, is generally sound.
- My remarks here are concerned singularly with the association of the composition.
- Thought of these focuses will, I accept, lead to an enhanced report that better shows the key ideas and conclusions.

Authorized Signature

Dr. Ashok Yakkaldevi

Dr. Ashok Yakkaldevi
Review Editor

**LAXMI BOOK
PUBLICATION**

Ph.: 0217-2372010 /
+91-9595-359-435
Email.: ayisrj2011@gmail.com
Website.: www.isrj.org