



Davao del Sur State College
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Insect Physiology and Toxicology





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PREFACE

This course pack was developed to support students in understanding the fundamental principles of insect physiology and toxicology and their application in pest management. It presents essential topics on insect growth, development, reproduction, metabolism, coordination, and responses to toxic substances. It also covers pesticide research and development, biosafety, economic, environmental, and legal considerations, bioefficacy testing, and probit analysis.

The lessons are presented in a concise and learner-friendly manner, supported by activities, analysis questions, and practical applications. These components are designed to strengthen students' scientific knowledge, critical-thinking skills, and ability to apply concepts to actual agricultural and pest-management situations.

It is hoped that this course pack will help students appreciate the relationship between insect biological processes and the effects of pesticides. More importantly, it aims to promote the safe, effective, responsible, and environmentally sound use of pest-management methods.

The author acknowledges the valuable contributions of researchers, educators, and institutions whose works provided the scientific foundation for this learning material. May this course pack serve as a meaningful guide for students as they develop the knowledge and skills necessary for responsible crop protection and sustainable agriculture.



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