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LABORATORY MANUAL FOR INTRODUCTION TO ORGANIC AGRICULTURE



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PREFACE

This laboratory manual is designed to support the course on Organic Agriculture and Sustainable Food Systems, providing students—particularly Agro-Forestry and Agriculture learners—with practical and foundational knowledge of organic farming principles and practices. It aims to bridge theoretical concepts with hands-on learning experiences, enabling students to better understand the standards, systems, and applications of organic agriculture.

The manual covers key topics such as organic crop production, animal production, aquaculture, food processing, quality control standards, product value chain, and food safety concerns, including chemical and microbial contaminants. It also highlights important regulatory frameworks such as the Philippine National Standards (PNS) and the National List of Permitted Substances, ensuring that learners are guided by locally relevant and internationally aligned standards.

Each laboratory activity is carefully structured to promote active learning, critical thinking, and real-world application, while emphasizing safety, sustainability, and ethical practices. The activities are designed to be accessible, practical, and adaptable, using locally available materials and simple methodologies appropriate for classroom and field settings.

This manual also aims to instill in students an appreciation for the role of organic agriculture in promoting environmental conservation, food safety, animal welfare, and sustainable livelihoods. By engaging in these laboratory exercises, students are expected to develop not only technical skills but also a deeper understanding of their role as future professionals in supporting safe, sustainable, and responsible agricultural systems.

It is hoped that this laboratory manual will serve as a valuable guide in developing competent, ethical, and environmentally conscious practitioners in the field of agriculture and allied sciences.

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