RICE WEEVIL (Sitophilus oryzae L.) FEEDING AND OVIPOSITION PREFERENCES ON SELECTED MALAYSIAN RICE

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ABSTRACT

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Sitophilus oryzae, also known as the rice weevil, is one of the most destructive and common major cereal pests that wreak havoc on stored grains like rice and other crops including wheat, split peas, and corn. This research was carried out to understand the rice feeding preference and also the oviposition distribution of S. oryzae to develop a more effective pest management technique. Nine different types of rice were prepared for this study by dividing the sample into nine compartments in a plastic container, with a tiny space connecting each compartment. Adult S. oryzae were randomly chosen, released in every compartment, and monitored for 7 weeks. The finding reveals that brown rice (Fiona) had the highest feeding and oviposition preference by S. oryzae followed by red rice (Jasmine Nutri Rice), local white rice (Cap Rambutan), imported white rice (Floral), japonica rice (Sumo Calrose Rice), fragrant rice (Jasmine Sunwhite), basmati rice (Moghul Faiza Brasmathi), ponni rice (Sunflower), glutinous rice (Beras Orkid Faiza). The pattern of distribution also had been identified towards the rice weevil for all of the replicates in 7 weeks which is clump distribution. Therefore, the knowledge based on research about the rice weevil population structuring, particularly by the preference for rice and oviposition is important for implementing more effective pest management techniques.

TABLE OF CONTENTS

		Page
ABS	TRACT	iii
ACF	KNOWLEDGEMENT	iv
TAB	BLE OF CONTENTS	V
LIST	Г OF TABLES	vii
LIST	Γ OF FIGURES	viii
LIST	ΓOF SYMBOLS	ix
LIST OF ABBREVIATIONS		Х
CHA	APTER 1 : INTRODUCTION	
1.1	Background of Study	1
1.2	Problem Statement	2
1.3	Significance of Study	3
1.4	Objectives of the Study	4
CHA	APTER 2 : LITERATURE REVIEW	
2.1	Introduction	5
2.2	Taxonomy of Sitophilus Oryzae	5
2.3	Identification of Sitophilus Oryzae	6
2.4	Distribution and Hosts	8
2.5	General Biology	9
2.6	What is Rice	11
	2.6.1 Rice	11
	2.6.2 Morphology	11
	2.6.3 Seeds	12
	2.6.4 Nutrient Content of Rice	12
2.7	Growth of Rice	13
2.8	Rice Variety	14
	2.8.1 Local White Rice	14
	2.8.2 Imported White Rice	15
	2.8.3 Brown Rice	16
	2.8.4 Fragrant Rice	16
	2.8.5 Brasmati Rice	17
	2.8.6 Ponni Rice	17
	2.8.7 Glutinous Rice	18
	2.8.8 Red Rice	18

	2.8.9 Japonica Rice	19
2.9	Price	19
2.10	Pest During and After Growth	20
2.11	Cost of damage	21

CHAPTER 3 : METHODOLOGY

3.1	Material	22
	3.1.1 Insect	22
	3.1.2 Rice	22
	3.1.3 Arena	24
3.2	Method	24
	3.2.1 Disinfect	24
	3.2.2 The Observation Field	25
3.3	Data Analysis	25
3.4	Experimental Design	26
	3.4.1 Preparation of the Experiment	26

CHAPTER 4 : RESULTS AND DISCUSSION

4.1	Introduction	27
4.2	Replicate Consistency	28
4.3	Plotting the Data	29
4.4	Distribution	31
4.5	Nutrition Facts	32
4.6	Colour of Rice	33

CHAPTER 5 : CONCLUSION AND RECOMMENDATION

5.1	Conclusions	34
5.2	Recommendations	35

36
40
43