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**EFFECT OF SELECTED RICE VARIETIES AND
OF SOME SELECTED BOTANICALS ON THE
DEVELOPMENT AND BEHAVIOUR OF
Sitophilus oryzae (L.)**

BY

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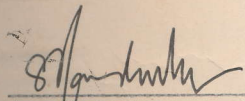
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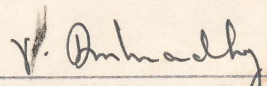
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ABSTRACT

This study was carried out to evaluate the effect of selected rice varieties and of some selected botanicals on the development and behaviour of *Sitophilus oryzae*.

All the varieties were preferred by *S. oryzae*. However, the degree of preference was varied significantly ($P < 0.01$) within the ten rice varieties. Moreover, the new improved varieties were least preferred than the old varieties. Among the new improved varieties, small and round grain variety, BG₁₁₋₁₁ was least preferred by this insect pest.

Dark red colour grain old variety, suthuheenati was most preferred. Using this variety alone, the effect of the forms (brown, broken, parboiled and rough rice) of rice on *Sitophilus oryzae* was studied. It was found that brown and broken rice were significantly ($P < 0.05$) preferred by *Sitophilus oryzae* to parboiled and rough rice. The number of adults emerged from rough rice was nil. This result revealed that rough and parboiled rice were not significantly ($P > 0.05$) damaged by *S. oryzae*.

As the finding from above experiment indicated that broken rice was the most preferred form of rice to *Sitophilus oryzae* further, study was carried out to determine the efficacy of some selected botanicals on *Sitophilus oryzae*. It was observed that the pest population was significantly reduced by the botanicals compared to control. Therefore, the botanicals used in this experiment have repellent effect on *S. oryzae*. Neem leaf would appear to be more effective in suppressing the *S. oryzae* than lakada bud and citrus peel.

CONTENTS

	Page
ABSTRACT	i
ACKNOWLEDGEMENT	ii
LIST OF FIGURES	iii
LIST OF PLATES	iv
LIST OF TABLES	v
1. INTRODUCTION	1
2. REVIEW OF LITERATURE	7
2.1 Classification	7
2.2 Origin and distribution	7
2.3 Morphology	9
2.4 Life history and variation in development	11
2.5 Host range of <i>S. oryzae</i>	12
2.6 Damage	16
2.7 Control	18
2.7.1 Chemical	18
2.7.2 Non chemical	20
3. MATERIALS AND METHODS	25
3.1 Collection of materials	25
3.1.1 Insect	25
3.1.2 Rice varieties	25
3.1.3 Botanicals	25
3.2 Preparation of rice grains	27
3.3 Disinfection of rice grains	27

3.4 Mass culture of <i>S. oryzae</i>	27
3.5 Collection of one day old weevil	29
3.6 Preliminary experiment	29
3.7 Experiment 1	29
3.7.1 Method 1	31
3.7.2 Method 2	31
3.8 Forms of rice	32
3.8.1 Rough rice	32
3.8.2 Brown rice	32
3.8.3 Broken rice	33
3.8.4 Parboiled rice	33
3.9 Experiment 2	33
3.10 Botanicals	34
3.11 Broken rice	34
3.12 Experiment 3	35
3.13 Physical environment of the laboratory during experiments	35
3.14 Analysis of data	35
4. RESULTS AND DISCUSSION	36
4.1 Preliminary experiment	37
4.2 Experiment 1	37
4.3 Experiment 2	42
4.4 Experiment 3	44
5. CONCLUSION	48
BIBLIOGRAPHY	49
APPENDIX	59