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POLLEN FORAGING BEHAVIOR OF NATIVE HONEYBEES,
Apis cerana F. IN THE VICINITY OF CAVITE STATE
UNIVERSITY, INDANG, CAVITE

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October 1999

**POLLEN FORAGING BEHAVIOR OF NATIVE HONEYBEES,
Apis cerana F. IN THE VICINITY OF CAVITE STATE
UNIVERSITY, INDANG, CAVITE**

**An Undergraduate Thesis
Submitted to the Faculty
of the Cavite State University
Indang, Cavite**

**In Partial Fulfillment
of the Requirements for the Degree
of Bachelor of Science in Biology
(Major in General Biology)**



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honeybees in the vicinity of Cavite State
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ABSTRACT

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The pollen foraging behavior of *Apis cerana* Fab. was investigated. Two wild colonies of the native honeybees were used in the experiment. The colonies were located inside a septic tank and in a wall cavity of the Physical Science Building of Cavite State University.

The flowering plants found in the vicinity and around the site of the study were identified and listed.

Pollen samples were collected twice a month. Thirty foragers were netted from each colony. Pollen pellets were collected from their corbiculae and acetolysed. Sample pollens were identified, photographed and catalogued.

Apis cerana foraged on 27 different pollen sources. *Cocos nucifera* L. and *Mimosa invisa* L. pollen were the predominant pollen foraged by the bees with a occurrence frequency of 80%. The secondary sources were *Leucaena leucocephala* (Lam.) De Wit, *Coffea* sp., *Helianthus annuus* L. and two unknown species.

Apis cerana exhibits pollen preference behavior. Its preferred pollen source is *Cocos nucifera* L. *Cocos* type pollen constitutes 40.70% of the total pollen load.

TABLE OF CONTENTS

	Page
BIOGRAPHICAL DATA.....	iii
ACKNOWLEDGEMENT.....	iv
ABSTRACT.....	vi
LIST OF TABLES.....	ix
LIST OF FIGURES.....	xi
LIST OF APPENDICES.....	xii
INTRODUCTION.....	1
Significance of the Study.....	2
Objectives of the Study.....	3
Time and Place of the Study.....	3
Scope and Delimitation of the Study.....	3
REVIEW OF RELATED LITERATURE.....	4
Importance of Pollen.....	4
Factors influencing pollen collection.....	5
Foraging behavior.....	6
METHODOLOGY.....	8
Sampling Site and Colonies Used.....	8
Reconnaissance Survey of Flowering Plants and their Flowering Sequence.....	8
Pollen Collection.....	8
Analysis of Pollen Loads of Native Bees.....	10
Identification of Forage Plants Using the Mounted Slides.....	12

Pollen Dominance Determination.....	12
Pollen Counting and Percent Composition Determination.....	13
Determination of Similarity Coefficient.....	14
RESULTS AND DISCUSSION.....	15
Pollen Types Foraged by <i>A. cerana</i>	15
Pollen Type Categories.....	33
Pollen Preference of <i>A. cerana</i>	39
Pollen Preference Behavior.....	41
SUMMARY AND CONCLUSION	50
RECOMMENDATION	51
BIBLIOGRAPHY.....	52
APPENDICES.....	56

LIST OF TABLES

Table	Title	Page
1	Pollen spectra of <i>Apis cerana</i> Fab. from June 1998 to August 1998	16
2	Pollen foraged by <i>Apis cerana</i> Fab. honeybees during the first sampling period	23
3	Pollen foraged by <i>Apis cerana</i> Fab. honeybees during the second sampling period	25
4	Pollen foraged by <i>Apis cerana</i> Fab. honeybees during the third sampling period (Colony 1)	26
5	Pollen foraged by <i>Apis cerana</i> Fab. honeybees during the fourth sampling period	29
6	Pollen foraged by <i>Apis cerana</i> Fab. honeybees during the fifth sampling period	32
7	Pollen foraged by <i>Apis cerana</i>	40

LIST OF FIGURES

Figure	Title	Page
1	Entrance to nest of Colony 1	9
2	Entrance to nest of Colony 2	9
3	Insect net	10
4	<i>Apis cerana</i> forager with pollen	11
5	Corbicula with pollen	11
6	The counting chamber	13
7	<i>Cocos nucifera</i> L., x400.	17
8	a. <i>Mimosa invisa</i> L.; b. <i>Syzygium</i> sp., x400.	17
9	<i>Veitchia merrilli</i> (Bec.) H. E. Moore, x400.	18
10	<i>Coffea</i> sp., x400.	18
11	<i>Leucaena leucocephala</i> (Lam.) de Wit, x400.	19
12	<i>Vitex negundo</i> L., x400.	19
13	<i>Helianthus annuus</i> L., x400.	20
14	Papilionaceae, x400.	20
15	Tiliaceae, x1000.	21
16	Gramineae Species A, x200.	21
17	Gramineae Species B, x200.	22
18	<i>Panicum</i> sp., x200.	27
19	Unknown Species B, x400.	27
20	<i>Meremia</i> sp., x400.	28

21	Compositae Species B, x400.	30
22	Unknown Species D, x 1000.	30
23	Unknown Species C, x400.	31
24	<i>Psidium guajava</i> L., x400.	35
25	<i>Indigofera</i> sp., x400.	35
26	<i>Cynodon dactylon</i> (L.) Pers., x200.	36
27	<i>Chloris barbata</i> (L) Sw., x200	36
28	a. Cyperaceae; b. <i>Mimosa invisa</i> L., x400.	37
29	Compositae Species A, x400.	37
30	Unknown Species A, x400.	38
31	Unknown Species E, x400.	38
32	Unknown Species F, x400.	39
33	Frequency occurrence of the pollen foraged by <i>Apis cerana</i>	42
34	Similarity coefficient of plant species within sampling periods	47
35	Dendrogram analysis of the foraged plants by <i>Apis cerana</i>	48

LIST OF APPENDICES

Appendix	Title	Page
1	Acetolysis procedure	56
2	Blooming periods of flowering plants in the vicinity of Cavite State University	57

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¹An undergraduate thesis submitted to the Faculty of the Department of Biological Science, College of Arts and Sciences, Cavite State University, Indang, Cavite, in partial fulfillment of the requirements for the degree of Bachelor of Science in Biology (major in General Biology) with contribution number CAS 98-99-308-11. Prepared under the supervision and guidance of Dr. Evelyn O. Singson.

INTRODUCTION

Apiculture is a non-land-based food and income source for small farmers. However, the use of imported European honeybees *Apis mellifera* Linnaeus hampered its development in the Philippines. Starting colonies are expensive and the bees are susceptible to pests and diseases, which they do not normally encounter in their original habitat. These coupled with its required management practices made beekeeping practically unsustainable. The recent thrust in using native bee species, like *Apis cerana* Fabricius, is promising. *Apis cerana*, however, developed traits of frequent migration and absconding in response to resource shortage. Knowledge of bee plants is therefore important to beekeepers. However, only few researches on the distribution of plants foraged by *A. cerana* in a certain geographical area has been done.

Analysis of pollen load of honeybees is useful in identifying the pollen plants of an area and is a direct indication of pollen preferences of the bees on the pollen flora available in their foraging area (Payawal, 1986).