



United States
Department of
Agriculture

Agricultural
Research
Service

Southern Region
Insects Affecting
Man and Animals
Research Laboratory

1600 SW 23rd Drive
P.O. Box 14565
Gainesville, Florida
32604

Analyses - YK
Carlson

MAY 7, 1984

Dr. M. Meselson
Department of Biochemistry & Molecular Biology
Harvard University
7 Divinity Avenue
Cambridge, MA 02138

Dear Dr. Meselson:

The following is my best guess as to the identities of blind honeybee samples. I looked at the bees first, and will do the other samples next, to attempt to match them* with the corresponding generator (if fecal) honeybee.

DAC #	MM #	BEE ID.	COMMENTS
26.32.1a	1	<i>A. dorsata</i>	} 1-3 very similar
.2a	2	"	
.3a	3	"	
.4a	4	"	} Like 1-3 but more alkenes
.5a	5	<i>A. florea</i>	74% alkenes
.6a	6	<i>A. florea</i>	58% alkenes - young bee?
.7a	7	<i>A. cerana</i>	Large KI 3475 = 35:1
.8a	8	<i>A. mellifera</i>	High boiling alkenes like Mozambique, Africanized
.9a	9	<i>A. florea</i>	53% alkenes
.17a	17	<i>A. cerana</i>	Large KI 3475 = 35:1 ALKENE
.13a	13	POLLEN	MATCHES #8 for 2500, 2700, 2900. High boilers??
.11a	11	POLLEN	MATCHES #7, #17 for KI 3475 = 35:1 ALKENE

I understand that *A. florea* may have high boilers as a homologous series, just as *A. mellifera adansonii* and South American Africanized bees. I did not see this with these small bees (#5, 6, 9). We are repeating all GC using short DB1FSC column.

Mailed 11:30 AM

May 7, 1984 before confirming call

Sincerely

David A. Carlson

Willi van Damer: Hendryckx has a Finnigan Peak Identifier, '69
Prototype small model

Heinrich Schnoes, U. Wisc.

Odette Shotwell, Pearia,

Peter Scott

Ag Health & Welfare Canada.

20 April 84

To David A. Carlson

904 373 6701 ext: 290

Research Chemist

USDA/ARS Southern Region Insects Affecting Man
and Animals Research Laboratory

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% hydrocarbons
in bee feces is
ca. 35 carbon
peak in C₂₀.

✓ 1 *Dorsata* #1 forager (mg #9)

✓ 2 " " curtain #8

✓ 3 " #7 curtain #21

✓ 4 " #7 forager #22

✓ 5 *Florea* #1 ~~curtain~~ #10X

✓ 6 " #1 #10X

✓ 7 *Cerana* Pak Chong Thailand T.D. Sealey March 1980 via Ed Wort

✓ 8 *Dorsata* " " " "

✓ 9 *Florea* " " " "

✓ 10 Spot of bee feces from Bio Labs Parking Lot May '83 (#31)

✓ 11 *A. cerana* feces from mulberry leaves Urukanehan 9 July 2A
F. Dyer

✓ 12 *A. Dorsata* feces Dor #4 from a leaf

✓ 13 *A. Dorsata* 4 feces mg #14

✓ 14 *A. Dorsata* 1 feces mg #6

15 Spot of bee feces from Bio Labs Parking Lot May '83 (#32)

15-20% of
bee feces is wax, this
excludes wax esters.