UNITED STATES DEPARTMENT OF AGRICULTURE
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PRELIMINARY TESTS OF SYNTHETIC ORGANIC COMPOUNDS AS INSECTICIDES. PART I. 1/

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In 1941 the authors published a description (7) of certain methods and equipment used at the insecticide testing laboratory of the Bureau of Entomology and Plant Quarantine at Sanford, Fla. A large number of synthetic organic compounds have been evaluated as insecticides by these test methods, and the present paper summarizes the results obtained on 883 compounds that were tested from July 1937 to October 1939.

The present paper deals only with preliminary tests, in which no attempt was made to determine lethal doses or comparative toxicity. They were made under conditions allowing fairly normal reaction by the insects, and the data merely indicate those compounds that may have potential insecticidal value. Materials showing toxicity in these tests were set aside for later, more specialized tests to determine their utility as spray deposits on potted plants, effect on tender foliage, stability to outdoor exposure, and other information important to their practical use.

Twenty species of insects were used in these tests. Not all of the compounds were tested on every species, but in general more insects were used with the more toxic materials.

1/ Most of the materials tested were furnished by the Division of Insecticide Investigations, and many of them have been patented as insecticides by members of that Division. The writers wish to acknowledge the assistance of R. C. Roark, H. L. Haller, C. M. Smith, and other members of that Division who supplied the samples for testing, and especially of C. V. Bowen, who furnished the formulas and other information on the characteristics of the materials.

2/ Resigned December 18, 1943.

3/ Now with the Division of Fruit Insect Investigations.

4/ Now with the Division of Insects Affecting Man and Animals.

MONS 045303

The following insects were used:

American cockroach (Periplaneta americana (L.))
Australian cockroach (Periplaneta australasiae (F.))
Bean leaf roller (Urbanus proteus (L.))
Cabbage aphid (Brevicoryne brassicae (L.))
Cabbage looper (Autographa brassicae (Riley))
Cabbage webworm (Hellula undalis (F.))
Colorado potato beetle (Leptinotarsa decemlineata (Say))
Cowpea weevil (Callosobruchus maculatus (F.))
Cross-striped cabbage worm (Evergestis rimosalis (Guen.))
Diamondback moth (Plutella maculipennis (Curt.))
Fall webworm (Hyphantria cunea (Drury))
Greenhouse leaf tier (Phlyctaenia rubigalis (Guen.))
Hawaiian beet webworm (Hymenia fascialis (Cram.))
Imported cabbage worm (Pieris rapae (L.))
Melon worm (Diaphania hyalinata (L.))
Rice weevil (Sitophilus oryza (L.))
Southern armyworm (Prodenia eridania (Cram.))
Southern beet webworm (Pachyzancla bipunctalis (F.))
Termites (Reticulitermes sp.)
Yellow woolly bear (Diacrisia virginica (F.))

All the species except the bean leaf roller, the cabbage aphid, and termites were reared in the laboratory, in order to standardise the population and to insure their availability when desired.

The results obtained in an insecticide-testing program will depend upon the test insects. If a number of species are used, the general results are less variable and the compounds may be judged not only on the mortality caused but also on their effectiveness against species of varying resistance. An estimate based on the results obtained with 10 standard insecticides (table 1) shows the order of susceptibility of the 10 species most commonly used (larval stage) to be approximately as follows: Colorado potato beetle, diamondback moth, southern beet webworm, cross-striped cabbage worm, Hawaiian beet webworm, melon worm, cabbage looper, fall webworm, southern armyworm, and greenhouse leaf tier.

Many of the samples received for testing were without physical preparation to reduce them to a particle size similar to that of commercial insecticides. When necessary, materials were ground in a mortar to obtain a dustable sample, but in some cases this improved the samples only slightly. In general the particle size was much larger than that of commercial insecticides, and this fact must be considered when appraising these results.

MONS 045304

METHODS OF TESTING

Leaf-Feeding Insects.—The first tests with leaf-feeding insects were made by feeding to larvae leaf sections that had been rather heavily dusted with the undiluted material. For most of the tests three leaf sections about 2 inches square were used. The dust was applied in a settling chamber (7) to both surfaces of the leaves, and the amount was determined by weighing an aluminum plate dusted at the same time. Each leaf section was then placed in a 9-cm. Petri dish together with 10 nearly full grown larvae. After 48 hours the dishes were examined for dead larvae and an estimate of the amount of feeding on the leaves.

The possibility of fumigation in these tests was easily determined by isolating a quantity of the material between two sheets of filter paper which were fitted into the lid of Petri dishes. The larvae were placed in the dish with untreated foliage.

To distinguish between contact and stomach action necessitated a more elaborate technique than seemed warranted in these preliminary tests. This information was generally obtained later when extensive tests were made on the more toxic materials.

Cockroaches.—Most of the tests on cockroaches were made by placing 10 roaches in a 7-inch-diameter battery jar containing a known quantity of the compound evenly distributed over the bottom. The jars were coated with vaseline around the rim to prevent escape of the roaches. No food or water was placed in the jars.

Termites.—The method described by Hockenyos (4) was used in tests with termites. Forty grams of sandy soil, ground in a mortar with a weighed portion of the insecticide, was placed in a 150-ml. beaker containing 12 ml. of water and a little paper tissue. When the soil had taken up the water, 30 to 40 termites of the worker caste were placed in each beaker. The beakers were held in a cabinet at 80° F.

Grain Weevils.—Many of the compounds were tested on rice weevils and cowpea weevils in Petri dishes with treated grain. A weighed portion of the insecticide was thoroughly mixed with 15 grams of wheat or peas by shaking in a small flask, and then placed in a Petri dish with 25 adult weevils. The dishes were held in a cabinet at 80° F. and after 2 and 4 days examined for dead insects.

DISCUSSION OF RESULTS

Approximately 2 percent of the compounds tested were found to be very effective (90 to 100 percent mortality or no more than a trace of feeding) against all the leaf-feeding insects on which they were tested.

MONS 045305

Seven percent of the compounds were effective against at least 60 percent of the species but were not found effective on them all. An additional 6 percent were effective against one or more species but not as many as 50 percent of those on which they were tested. Most of these toxic materials, however, were discarded after further testing. Many potential stomach insecticides were found to be too volatile for practical use, and other compounds that killed by fumigation in Petri dishes were not sufficiently volatile for practical use as fumigants. Injury to plant foliage was another common cause for rejection.

Table 2 includes all the compounds showing appreciable toxicity. Fourteen compounds were effective on all the leaf-feeding species on which they were tested. Eight of these were found to kill by fumigation — p-bromoiodobenzene, p-chloroiodobenzene, 2,5-dichloroaniline, alpha, beta-dibromoethylbenzene, o-nitrobromobenzene, o-nitrochlorobenzene, p-nitrochlorobenzene, and o-nitroiodobenzene. The remaining six compounds were phthalonitrile, 4,6-dinitro-o-cresol, 4,6-dibromo-o-cresol, o-nitroaniline, p-nitrobenzyl bromide, and alpha, beta-dibromo-beta-nitroethylbenzene. All but phthalonitrile and 4,6-dinitro-o-cresol were too volatile to be used as stomach insecticides. Phthalonitrile is slowly volatile, but extensive tests by the authors (8) have shown it to be rather effective as a stomach insecticide for use on foliage, equaling lead arsenate or derris in laboratory tests against certain insects. Dinitro-o-cresol is very toxic to insects but is injurious to foliage. It was found toxic to the codling moth by McAlister and Van Leeuwen (5), and has been reported toxic to other insects by several workers. Most of the better compounds have been tested against the screwworm by Bushland (1) and against mosquito larvae by Fink and coworkers (2).

Sixty-two compounds in table 2 killed more than half the species on which they were tested but were ineffective against some. At least 20 percent of these are fumigants. Of the others, the better compounds are 1,4-diphenylsemicarbazide, p-aminoazobenzene, p-aminoazobenzene hydrochloride, diazoaminobenzene, 1,4-dinitrosopiperazine, p-phenylenediamine, acetone semicarbazone, thiocoumarin, xanthydrol, hexachlorophenol, 2,4-dinitrophenol, and pentabromophenol. Extensive tests on 1,4-diphenylsemicarbazide have been made by the authors (3), and the compound has been found to equal lead arsenate as a stomach insecticide against certain insects in laboratory tests. A complete report of the tests with p-aminoazobenzene hydrochloride (6) shows this compound to be very effective against certain insects.

Approximately 60 additional samples in table 2 were effective against from 20 to 60 percent of the leaf-feeding insects against which they were tested. These are very specific materials and have definitely less value as insecticides.

Table 3 lists the compounds that were not toxic or showed only slight toxicity. This table includes approximately 85 percent of the

MONS 045306

compounds tested. It is recognized that the table may contain a few materials worthy of inclusion in the more toxic groups had a greater number of tests been made.

SUMMARY

The insecticidal action of 853 synthetic organic compounds has been estimated by preliminary tests in the laboratory. Each compound was tested against 1 or more of 20 species, most of them leaf-feeding insects, in order to evaluate their utility in the general field of insect control. The 25 most toxic compounds tested were as follows:

Acetone semicarbazone
p-Aminoazobenzene
p-Aminoazobenzene hydrochloride
p-Bromoiodobenzene
p-Chloroiodobenzene
Diazoaminobenzene
4,6-Dibromo-o-cresol
alpha, beta-Dibromoethylbenzene
alpha, beta-Dibromo-beta-nitroethylbenzene
2,5-Dichloroaniline
1,4-Diphenylsemicarbazide
4,6-Dinitro-o-cresol
2,4-Dinitrophenol
1,4-Dinitrosopiperazine
Hexachlorophenol
o-Nitroaniline
p-Nitrobenzyl bromide
o-Nitrobromobenzene
o-Nitrochlorobenzene
p-Nitrochlorobenzene
o-Nitroiodobenzene
p-Phenylenediamine
Phthalonitrile
Thiocoumarin
Xanthydrol

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MONS 045307

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MONS 045308

Table 1.—Results of laboratory toxicity tests of certain common insecticides used as standards for comparing the results obtained on new insecticidal compounds

Compound and Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill in 48 hrs.[3]
				Micrograms per sq. cm.	Percent
Barium fluosilicate					
Cabbage looper	Fifth	Collards	1	100	90
Cross-striped cabbage worm	First	do.	1	180	81
do.	Fourth	do.	1	260	97
Hawaiian beet webworm	do.	Beet	1	170	100
Imported cabbage worm	Second	Collards	0	45	100
do.	Third	do.	0	45	100
Southern armyworm	First	do.	0	45	100
do.	Second	do.	1	45	96
Southern beet webworm	Fourth	Beet	1	170	100
Cryolite, natural					
American cockroach	Full grown	—	-	190	0
Cabbage looper	Fifth	Collards	2	125	50
Colorado potato beetle	Fourth	Potato	1	140	94
Cross-striped cabbage worm	First	Collards	1	170	83
do.	Fourth	do.	2	170	70
Diamondback moth	do.	do.	0	170	100
Fall webworm	Fifth	Pecan	3	140	0
Greenhouse leaf tier	do.	Collards	1	200	100
Hawaiian beet webworm	Fourth	Beet	2	155	77
Melon worm	Fifth	Pumpkin	1	210	100
Southern armyworm	First	Collards	0	85	100
do.	Third	do.	1	85	84
do.	Fifth	do.	3	85	0
Southern beet webworm	Fourth	Beet	1	125	93
Cryolite, synthetic					
American cockroach	Full grown	—	-	250	0
Cabbage looper	Fifth	Collards	1	345	84
Colorado potato beetle	Fourth	Potato	1	110	100
Cross-striped cabbage worm	First	Collards	0	250	100
do.	Fourth	do.	1	260	87
Diamondback moth	Second	do.	1	250	90
do.	Fourth	do.	1	250	70
Fall webworm	do.	Pecan	1	235	(72) 7

[1] Numbers refer to instar.

[2] 0 = no visible feeding, 1 = trace, 2 = moderate, 3 = normal feeding, comparable with that on untreated foliage.

[3] Numbers in parentheses indicate number of hours if not 48.

MONS 045309

Table 1.—(Continued)

Compound and Insect	Stage 1/	Foliage	Feeding 2/	Deposit	Killing 48 hrs. 3/
				Micrograms per sq.cm.	Percent
Cryolite, synthetic (Cont.)					
Greenhouse leaf tier	Fifth	Collards	1	95	93
Hawaiian beet webworm	Fourth	Beet	1	135	97
Melon worm	Fifth	Pumpkin	1	310	100
Southern armyworm	First	Collards	0	170	100
do.	Sixth	do.	1	170	97
Southern beet webworm	Fourth	Beet	1	155	97
Cube root, powdered, 4.4% rotenone					
American cockroach	Full grown	—	-	460	30
Cabbage looper	Fifth	Collards	0	135	50
Colorado potato beetle	Fourth	Potato	1	140	100
Cross-striped cabbage worm	do.	Collards	1	135	100
Diamondback moth	do.	do.	0	140	100
Fall webworm	do.	Pecan	0	210	0
Greenhouse leaf tier	Fifth	Collards	2	280	3
Hawaiian beet webworm	Fourth	Beet	0	240	73
Melon worm	Fifth	Pumpkin	1	140	3
Southern armyworm	First	Collards	2	170	48
do.	Third	do.	2	170	7
Southern beet webworm	Fourth	Beet	0	280	76
Derris root, powdered 5.6% rotenone					
American cockroach	Full grown	—	-	340	20
Cabbage looper	Fifth	Collards	1	140	67
Cabbage webworm	Third	do.	0	170	56
Colorado potato beetle	Fourth	Potato	1	135	100
Cross-striped cabbage worm	do.	Collards	1	135	53
Greenhouse leaf tier	Fifth	do.	2	250	0
Hawaiian beet webworm	Fourth	Beet	0	270	71
Imported cabbage worm	Second	Collards	0	75	100
do.	Fourth	do.	0	80	100
Melon worm	Fifth	Squash	1	220	60
Rice weevil	Adult	(Treated wheat)		4/1:200	4
Southern armyworm	First	Collards	1	110	26
do.	Third	do.	3	110	0
do.	Fifth	do.	2	300	2
Termites	Adult	(Treated soil)		1:200	80
do.	do.	do.		1:1000	0

4/ All proportions by weight.

MONS 045310

Table 1.--(Continued)

Compound and Insect	Stage1/	Foliage	Feeding2/	Deposit	Kill in 48 hrs.3/
				Micrograms per sq. cm.	Percent
Lead arsenate					
Bean leaf roller	Fourth	Bean	1	130	86
Cabbage looper	Fifth	Collards	2	95	50
Colorado potato beetle	Fourth	Potato	1	60	97
Cross-striped cabbage worm	First	Collards	0	70	100
do.	Fourth	do.	1	70	66
Diamondback moth	Second	do.	0	60	100
do.	Fourth	do.	0	60	87
Fall webworm	Fifth	Pecan	3	80	(72) 7
Greenhouse leaf tier	do.	Collards	1	140	100
Hawaiian beet webworm	Fourth	Beet	1	125	51
Melon worm	Fifth	Pumpkin	1	130	97
Southern armyworm	First	Collards	0	70	100
do.	Fourth	do.	1	70	22
Southern beet webworm	do.	Beet	1	110	53
Paris green					
American cockroach	Full grown	—	-	400	45
Cabbage looper	Fifth	Collards	0	250	100
Colorado potato beetle	Fourth	Potato	1	200	100
Cross-striped cabbage worm	First	Collards	0	250	100
do.	Fourth	do.	1	250	96
Diamondback moth	Second	do.	0	250	100
do.	Fourth	do.	0	250	97
Fall webworm	Fifth	Pecan	0	295	(72) 100
Greenhouse leaf tier	do.	Collards	0	325	100
Hawaiian beet webworm	Fourth	Beet	1	185	100
Melon worm	Fifth	Pumpkin	0	155	93
Southern armyworm	Sixth	Collards	1	230	100
Southern beet webworm	Fourth	Beet	1	185	100
Phenothiazine. $C_6H_4\langle NH \rangle C_6H_4$					
American cockroach	Full grown	—	-	200	20
Cabbage looper	Fifth	Collards	2	200	28
Colorado potato beetle	Fourth	Potato	1	110	33
Cross-striped cabbage worm	First	Collards	0	95	100
do.	Fourth	do.	1	95	23
Diamondback moth	Second	do.	0	180	100
do.	Fourth	do.	1	180	30
Fall webworm	do.	Pecan	0	230	(72) 7
Greenhouse leaf tier	Fifth	Collards	3	160	0
Hawaiian beet webworm	do.	Swiss chard	1	200	58
Melon worm	do.	Pumpkin	2	200	13
Rice weevil	Adult	(Treated wheat)		1:200	16

MONS 045311

Table 1.—(Continued)

Compound and Insect	Stage1/	Foliage	Feeding2/	Deposit	Kill in 48 hrs.3/
				Micrograms per sq. cm.	Percent
Phenothiazine, $C_6H_4NHC_6H_4$ (Cont.)					
Southern armyworm	First	Collards	0	125	98
do.	Third	do.	1	125	43
Southern beet webworm	Fourth	Beet	1	170	58
Termites	Adult	(Treated soil)		1:1000	98
do.	do.	do.		1:2000	56
Pyrethrum: 0.23% pyrethrin I, 0.38% pyrethrin II					
American cockroach	Full grown	—	-	310	60
Cabbage looper	Fifth	Collards	1	140	97
Cross-striped cabbage worm	Fourth	do.	0	220	100
Greenhouse leaf tier	First	do.	0	280	100
do.	Fifth	do.	1	295	83
Hawaiian beet webworm	Fourth	Beet	0	220	100
Imported cabbage worm	Fifth	Collards	2	170	72
Melon worm	do.	Pumpkin	1	155	66
Rice weevil	Adult	(Treated wheat)		1:200	12
Southern armyworm	First	Collards	1	240	73
do.	Fourth	do.	2	240	10
do.	Sixth	do.	3	370	0
Southern beet webworm	Fourth	Beet	0	215	94
Termites	Adult	(Treated soil)		1:200	100
do.	do.	do.		1:1000	20
Sulfur					
American cockroach	Full grown	—	-	310	30
Cabbage looper	Fifth	Collards	3	140	0
Colorado potato beetle	Fourth	Potato	3	220	0
Cross-striped cabbage worm	do.	Collards	3	155	0
Diamondback moth	do.	do.	3	280	0
Fall webworm	Fifth	Pecan	3	185	0
Greenhouse leaf tier	do.	Collards	3	295	0
Hawaiian beet webworm	Fourth	Beet	3	250	0
Melon worm	Fifth	Pumpkin	3	230	0
Southern armyworm	First	Collards	1	240	44
do.	Third	do.	1	240	3
Southern beet webworm	Fourth	Beet	3	220	0

MONS 045312

Table 3.-(Continued)

Compound	Insect	Stage
Lauranilide $C_{11}H_{23}CONHC_6H_5$	Colorado potato beetle	Fourth
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	do.
m-Laurotoluide	Colorado potato beetle	Fourth
o-Laurotoluide	Greenhouse leaf tier	Fifth
p-Laurotoluide $C_{11}H_{23}CONHC_6H_4CH_3$	Hawaiian beet webworm	do.
	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	do.
Lenchocarpic acid $C_{26}H_{26}O_6$	Colorado potato beetle	do.
	Cross-striped cabbage worm	do.
	Southern armyworm	Sixth
1-Mercaptobenzothiazole, morpholine salt	Cross-striped cabbage worm	Fourth
	Southern armyworm	do.
N-(1-Mercaptobenzothiazyl) methyl-o-toluidine $NC_6H_4SCSCH_2NHCH_4CH_3$	Cross-striped cabbage worm	do.
	Southern armyworm	Fifth
N-(1-Mercaptobenzothiazyl) methyl-p-toluidine $NC_6H_4SCSCH_2NHCH_4CH_3$	Cross-striped cabbage worm	Fourth
	Diamondback moth	do.
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Southern armyworm	do.
	do.	Sixth
	Southern beet webworm	Fifth
4-Methoxyacridone $NHC_6H_4COC_6H_3OCH_3$	Cross-striped cabbage worm	First
	Imported cabbage worm	do.
	Southern armyworm	do.
	do.	Sixth
N-Methyl-o-acetotoluide $CH_3C_6H_4N(CH_3)COCH_3$	Cross-striped cabbage worm	Fourth
	Southern armyworm	Sixth
Methylacridone $NHC_6H_4CH_3C_6H_3CH_3$	do.	Fifth
Methyl-p-aminobenzoate $NH_2C_6H_4COOCH_3$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Southern armyworm	do.
beta-Methylanthraquinone $OOC_6H_4COC_6H_3CH_3$	Australian cockroach	First
	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Fall webworm	Fifth
	Southern armyworm	First
	do.	Sixth

MONS 045411

Table 3.—(Continued)

Compound	Insect	Stage[1/]
4-Methyldiphenylamine-2-carboxylic acid $C_6H_5NHC_6H_3(CH_3)COOH$	Southern armyworm	Sixth
p,p'-Methylenebis(N,N-dimethylaniline) $[(CH_3)_2NC_6H_4]_2CH_2$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. do.
Methylene-1,1'-bis-2-naphthol $HOC_{10}H_6CH_2C_{10}H_6OH$	Cabbage looper Cross-striped cabbage worm do. Southern armyworm do.	First do. Third First Third
Methylene-1,1'-bis(1-nitro-1,2-naphthoquinone) $(NO_2C_{10}H_4O_2)_2CH_2$	Cross-striped cabbage worm Southern armyworm	First do.
Methyl 3-methoxy-2-naphthoate $C_{10}H_6(OCH_3)COOCH_3$	Cross-striped cabbage worm Diamondback moth Greenhouse leaf tier Hawaiian beet webworm Melon worm Southern beet webworm	Fourth do. do. Fifth Fourth Fifth
4-Methyloxythianaphthene $CH_3OC_6H_3SCH_2CH$	Southern armyworm	Third
Methyl phenyl methylene dithioglycolic acid $CH_3C(SCH_2COOH)_2C_6H_5$	do.	Fifth
4'-Methyl-4-nitrodiphenylamine $CH_3C_6H_4NHC_6H_4NO_2$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. do.
4-Methyl-4'-nitro-N-nitrosodiphenylamine $CH_3C_6H_4N(NO)C_6H_4NO_2$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	do. do. Third
Methyl-1-thionaphthocoumarin $C_{12}H_8O_2S$	do.	Fifth
N-Methyl-p-toluenesulfonamide $CH_3C_6H_4SO_2NHCH_3$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. do.

MONS 045412

Table 3.—(Continued)

Compound	Insect	Stage[1/]
N-Methyl-p-toluenesulfonanilide $CH_3C_6H_4SO_2N(CH_3)C_6H_5$	Colorado potato beetle Southern armyworm	Fourth do.
N-Methyl-N-p-tolyl-p-toluenesulfonamide $CH_3C_6H_4SO_2N(CH_3)C_6H_4CH_3$	Cross-striped cabbage worm Southern armyworm	do. do.
p,p',p''-Methyltris(N,N-dimethylaniline) $\left[(CH_3)_2NC_6H_4\right]_3CH$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	do. do. Third
Mono-para-isopropoxydiphenylamine $(CH_3)_2CHOC_6H_4NHC_6H_5$	do.	First
2-Naphthalenesulfonamide $C_{10}H_7SO_2NH_2$	American cockroach Cross-striped cabbage worm Melon worm Southern armyworm	do. Fourth Fifth Sixth
alpha-Naphthiazine $SC_{10}H_6NHC_{10}H_6$	do.	First
1-Naphthylamine 2-Naphthylamine $C_{10}H_7NH_2$	Cross-striped cabbage worm Southern armyworm	Fourth Sixth
p-(1-Naphthylazo)-dimethylaniline p-(2-Naphthylazo)-dimethylaniline $C_{10}H_7N{:}NC_6H_4N(CH_3)_2$	Cross-striped cabbage worm Southern armyworm	Fourth Sixth
1-(1-Naphthylazo)-2-naphthol 4-(1-Naphthylazo)-1-Naphthol $C_{10}H_7N{:}NC_{10}H_6OH$	Cross-striped cabbage worm Southern armyworm	Fourth Sixth
N-1-Naphthylbenzamide N-2-Naphthylbenzamide $C_6H_5CONHC_{10}H_7$	Colorado potato beetle Diamondback moth Greenhouse leaf tier Hawaiian beet webworm Melon worm Southern armyworm Southern beet webworm Tallow woolly bear	Fourth do. do. Fifth Fourth Third Fourth Sixth

MONS 045413

Table 3.—(Continued)

Compound	Insect	Stage[1/]
Bis(2-naphthyl)-disulfide $(C_{10}H_7)_2S_2$	Cross-striped cabbage worm	First
	Southern armyworm	do.
N-1-Naphthylformamide	Colorado potato beetle	Fourth
N-2-Naphthylformamide	Greenhouse leaf tier	Fifth
$NOCHNC_{10}H_7$	Hawaiian beet webworm	do.
	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	do.
N-1-Naphthyllauramide	Colorado potato beetle	do.
N-2-Naphthyllauramide	Greenhouse leaf tier	Fifth
$C_{11}H_{23}CONHC_{10}H_7$	Hawaiian beet webworm	do.
	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	do.
N-1-Naphthylpalmitamide	Colorado potato beetle	do.
$C_{15}H_{31}CONHC_{10}H_7$	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	do.
N-1-Naphthylpropionamide	Colorado potato beetle	do.
$C_2H_5CONHC_{10}H_7$	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	do.
N-1-Naphthylpyromucamide	Colorado potato beetle	do.
N-2-Naphthylpyromucamide	Diamondback moth	do.
$(C_4H_3O)CONHC_{10}H_7$	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	Fourth
	Southern armyworm	Third
	Southern beet webworm	Fourth
	Yellow woolly bear	Sixth
N-(2-Naphthylsulfonyl)-glycine	Cross-striped cabbage worm	First
$C_{10}H_7SO_2NHCH_2COOH$	do.	Third
	Southern armyworm	First
Nigrosine, spirit-soluble	do.	do.

MONS 045414

Table 3.—(Continued)

Compound	Insect	Stage[1/]
4-Nitroacridone $NHC_6H_4COC_6H_3NO_2$	Cross-striped cabbage worm Southern armyworm	First do.
3-Nitro-4-aminotoluene $NO_2C_6H_3(CH_3)NH_2$	do.	Fifth
m-Nitroaniline $NO_2C_6H_4NH_2$	do. do.	First Sixth
10-Nitroanthrone $C_{14}H_9ONO_2$	do. do.	First Sixth
m-Nitrobenzaldehyde $NO_2C_6H_4CHO$	do.	First
p,p'-(m-Nitrobenzal)-bis-(N,N-dimethylaniline) $NO_2C_6H_4CH[C_6H_4N(CH_3)_2]_2$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. Third
m-Nitrobenzenesulfonamide $NO_2C_6H_4SO_2NH_2$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. do.
2-Nitro-6-chlorodibenzofuran $ClC_6H_2OC_6H_3NO_2$	Colorado potato beetle Southern armyworm	do. do.
Nitrochrysene $C_{18}H_{11}NO_2$	do.	First
o-Nitro-m-cresol $NO_2C_6H_3(CH_3)OH$	do.	do.
p-Nitrodimethylaniline $NO_2C_6H_4N(CH_3)_2$	Colorado potato beetle Diamondback moth Greenhouse leaf tier Hawaiian beet webworm Melon worm Southern armyworm Yellow woolly bear	Fourth do. do. Fifth Fourth Third Sixth

MONS 045415

Table 3.—(Continued)

Compound	Insect	Stage1/
4-Nitrodiphenylamine $C_6H_5NHC_6H_4NO_2$	Cabbage webworm	Fourth
	Colorado potato beetle	do.
	Cross-striped cabbage worm	do.
	Diamondback moth	Third
	Fall webworm	Fifth
	Greenhouse leaf tier	Fourth
	Melon worm	Fifth
	Southern armyworm	Fourth
	do.	Sixth
	Southern beet webworm	Fourth
o-Nitrodiphenylamine $C_6H_5NHC_6H_4NO_2$	Colorado potato beetle	do.
	Cross-striped cabbage worm	do.
	Southern armyworm	Sixth
p-Nitrodiphenyl ether $C_6H_5OC_6H_4NO_2$	American cockroach	3/4 grown
	Cabbage looper	First
	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Greenhouse leaf tier	Fifth
	Melon worm	do.
	Rice weevil	Adult
	Southern armyworm	First
	do.	Third
	Southern beet webworm	Fourth
	Termites	Adult
6-Nitro-2,3-diphenylquinoxaline $NO_2C_6H_2N:C(C_6H_5)C(C_6H_5):N$	Southern armyworm	First
2-Nitrofluorene $C_6H_4CH_2C_6H_3NO_2$	Cross-striped cabbage worm	Fourth
	Diamondback moth	do.
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	do.
	Southern armyworm	Fourth
	Southern beet webworm	Fifth
2-Nitrofluorenone $C_6H_4COC_6H_3NO_2$	Southern armyworm	First
Nitroguanidine $NH_2C(NH)NHNO_2$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	First
	Southern armyworm	do.
5-Nitroindazole $NO_2C_6H_3CH:NN$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Southern armyworm	Third

MONS 045416

Table 3.—(Continued)

Compound	Insect	Stage1/
p-Nitroiodobenzene $IC_6H_4NO_2$	Cross-striped cabbage worm	Fourth
	Diamondback moth	do.
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Southern armyworm	First
	do.	Sixth
	Southern beet webworm	Fifth
p-Nitroiodosobenzene $NO_2OC_6H_4IO$	American cockroach	1/4 grown
	Cross-striped cabbage worm	Fourth
	Diamondback moth	do.
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	do.
	Southern armyworm	Fourth
	Southern beet webworm	Fifth
p-Nitroiodoxybenzene $NO_2OC_6H_4IO_2$	Southern armyworm	First
	do.	Third
	do.	Fifth
p-Nitromethylaniline $CH_3HNC_6H_4NO_2$	Cross-striped cabbage worm	Fourth
	Southern armyworm	First
	do.	Fifth
3-Nitro-6-methylphenothiozin $CH_3C_6H_2OC_6H_2(NO_2)S$	do.	do.
m-Nitro-N-1-naphthylbenzene sulfonamide $NO_2C_6H_4SO_2HNC_{10}H_7$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Southern armyworm	do.
2-Nitro-N-1-naphthyl-4-toluene sulfonamide $CH_3C_6H_3(NO_2)SO_2HNC_{10}H_7$	Colorado potato beetle	do.
	Cross-striped cabbage worm	do.
	Melon worm	Fifth
	Southern armyworm	Sixth
o-Nitronitrosobenzene $NO_2C_6H_4NO$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Southern armyworm	Third
2-Nitro-N-nitrosodiphenylamine 4-Nitro-N-nitrosodiphenylamine $C_6H_5N(NO)C_6H_4NO_2$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Southern armyworm	Third
	do.	Fifth

MONS 045417

Table 3.—(Continued)

Compound	Insect	Stage1/
2-Nitrophenanthraquinone $OC_6H_4COC_6H_3NO_2$	Colorado potato beetle Cross-striped cabbage worm Melon worm Southern armyworm	Fourth do. Fifth Fourth
m-Nitrophenol $NO_2C_6H_4OH$	do. do.	First Fifth
3-Nitrophenothioxin $SC_6H_4OC_6H_3NO_2$	do.	do.
o-Nitrophenylacetic acid $NO_2C_6H_4CH_2COOH$	Cross-striped cabbage worm do. Southern armyworm	First Third First
o-Nitrophenylacetonyl sulfide $NO_2C_6H_4SCH_2COCH_3$	Hawaiian beet webworm Southern armyworm	Fourth Third
1-(p-Nitrophenylazo)-2-naphthol $NO_2C_6H_4NNC_{10}H_6OH$	do.	First
2-(p-Nitrophenylazo)-1-naphthol $NO_2C_6H_4NNC_{10}H_6OH$	Cabbage webworm Colorado potato beetle Cross-striped cabbage worm Diamondback moth Greenhouse leaf tier Melon worm Southern armyworm Southern beet webworm	Fourth do. do. Third Fourth do. do. do.
4-(p-Nitrophenyl)-asoresorcinol $NO_2C_6H_4NNC_6H_3(OH)_2$	Cross-striped cabbage worm Diamondback moth Southern armyworm	do. First do.
m-Nitro-N-phenylbenzenesulfonamide $NO_2C_6H_4SO_2NHC_6H_5$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. Sixth
Bis(p-nitrophenyl) ether $(NO_2C_6H_4)_2O$	Colorado potato beetle Diamondback moth Greenhouse leaf tier Hawaiian beet webworm Melon worm Southern armyworm Southern beet webworm Yellow woolly bear	Fourth do. Fifth do. Fourth Third Fourth Sixth

MONS 045418

Table 3.—(Continued)

Compound	Insect	Stage[1]
p-Nitrophenylhydrazine $NO_2C_6H_4NHNH_2$	Cross-striped cabbage worm	Fourth
	Southern armyworm	First
	do.	Fifth
p-Nitrophenyliodochloride $NO_2C_6H_4ICl_2$	Colorado potato beetle	Fourth
	Diamondback moth	do.
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	Fourth
	Rice weevil	Adult
	Southern armyworm	First
	do.	Fourth
	Southern beet webworm	do.
	Yellow woolly bear	Sixth
4-(4-Nitrophenyl)morpholine $NO_2C_6H_4N(CH_2CH_2)_2O$	American cockroach	First
	Cross-striped cabbage worm	Fourth
	Melon worm	Fifth
	Southern armyworm	do.
o-Nitrophenyl-beta-napthol sulfide $NO_2C_6H_4SC_{10}H_6OH$	do.	do.
2-p-Nitrophenyl-3-phenylquinoxaline $C_6H_5C{:}NC_6H_4N{:}CC_6H_4NO_2$	do.	First
o-Nitrophenylpyruvic acid $NO_2C_6H_4CH_2COCO_2H$	Cross-striped cabbage worm	do.
	Southern armyworm	do.
3-(o-Nitrophenyl)sulfuramine $NO_2C_6H_4SNH_2$	do.	Third
2-Nitro-N-phenyl-4-toluenesulfonamide $CH_3C_6H_3(NO_2)SO_2NHC_6H_5$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Southern armyworm	do.
4-Nitrophthalic acid $NO_2C_6H_3(COOH)_2$	Colorado potato beetle	do.
	Diamondback moth	do.
	Greenhouse leaf tier	do.
	Hawaiian beet webworm	Fifth
	Melon worm	Fourth
	Southern armyworm	Third
	Southern beet webworm	Fourth
	Yellow woolly bear	Sixth

MONS 045419

Table 3.— (Continued)

Compound	Insect	Stage 1/
3-Nitrophthalic anhydride $NO_2C_6H_3(CO)_2O$	Colorado potato beetle	Fourth
	Diamondback moth	do.
	Greenhouse leaf tier	do.
	Hawaiian beet webworm	Fifth
	Melon worm	Fourth
	Southern armyworm	Third
	Southern beet webworm	Fourth
	Yellow woolly bear	Sixth
2-Nitroso-m-cresol $NOC_6H_3(CH_3)OH$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Hawaiian beet webworm	Fifth
	Melon worm	Fourth
	Southern armyworm	Third
	do.	Fourth
	Southern beet webworm	do.
	Yellow woolly bear	do.
p-Nitrosodiphenylamine $C_6H_5NHC_6H_4NO$	Cross-striped cabbage worm	do.
	Southern armyworm	Fifth
4-Nitroso-p-isopropoxydiphenylamine $C_6H_5N(NO)C_6H_4OCH(CH_3)_2$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Southern armyworm	do.
1-Nitroso-2-naphthol $C_{10}H_6(NO)OH$	do.	Fifth

MONS 045420

Table 3.—(Continued)

Compound	Insect	Stage[1/]
2-Nitroso-1-naphthol $C_{10}H_6(NO)OH$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. Third
o-Nitrosonitrobenzene $(NO_2)C_6H_4NO$	do.	First
p-Nitrosophenol $(NO)C_6H_4OH$	do.	Fifth
N-Nitroso-N-phenyl-1-naphthylamine $C_{10}H_7N(NO)C_6H_5$	Colorado potato beetle Southern armyworm	Fourth Third
N-Nitroso-N-phenyl-2-naphthylamine $C_{10}H_7N(NO)C_6H_5$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. Third
4-Nitrosothymol $(CH_3)_2CHC_6H_2(NO)(CH_3)OH$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. Third
7-Nitro-1,2,3,4-tetrahydrodiphenylene oxide $NO_2C_6H_3OC_6H_3$	do.	Fourth
o-Nitrothiophenol methyl ether $NO_2C_6H_4SCH_3$	do.	Sixth
3-Nitro-4-toluenesulfonamide $CH_3C_6H_3(NO_2)SO_2NH_2$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. do.
N-(3-Nitro-p-tolylsulfonyl)-morpholine $CH_3C_6H_3(NO_2)SO_2N(CH_2CH_2)_2O$	Colorado potato beetle Cross-striped cabbage worm Melon worm Southern armyworm	do. do. Fifth Third
2,3-Octanedione-3-oxime $CH_3(CH_2)_4C(NOH)COCH_3$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. Third
Orcein $C_{28}H_{24}N_2O_7$	do.	First
Palmitamide $C_{15}H_{31}CONH_2$	Colorado potato beetle Greenhouse leaf tier Hawaiian beet webworm Melon worm Southern armyworm Southern beet webworm	Fourth Fifth do. Fourth do. do.

MONS 045421

Table 3.—(Continued)

Compound	Insect	Stage[1/]
m-Palmitotoluide	Colorado potato beetle	Fourth
o-Palmitotoluide	Greenhouse leaf tier	Fifth
p-Palmitotoluide	Hawaiian beet webworm	do.
$C_{15}H_{31}CONHC_6H_4CH_3$	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	do.
p-Phenylphenol	Southern armyworm	Third
$C_6H_5C_6H_4OH$		
Pentaerythritol	Cross-striped cabbage worm	First
$C(CH_2OH)_4$	Imported cabbage worm	do.
	Southern armyworm	do.
Pentaerythritol, mixture of chlore derivatives, 86 percent chlorine	Colorado potato beetle	Fourth
	Diamondback moth	do.
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	do.
	Southern armyworm	Fourth
	Southern beet webworm	do.
	Yellow woolly bear	Second
Pentaerythrityl iodide	Cross-striped cabbage worm	First
$C(CH_2I)_4$	Southern armyworm	do.
Pentamethylbenzene	do.	do.
$C_6H(CH_3)_5$	do.	Fifth
2,3-Pentanedione-3-monoxime	Colorado potato beetle	Fourth
$CH_3CH_2C(NOH)COCH_3$	Cross-striped cabbage worm	do.
	Southern armyworm	do.
Phenanthrene	do.	Fifth
$C_{14}H_{10}$		
Phenazone	Southern armyworm	do.
$C_6H_4N_2NC_6H_4$		
Phenazone monoxide	do.	Sixth
$C_6H_4NONC_6H_4$		
Phenothiazine sulfoxide	do.	First
$C_6H_4NHC_6H_4SO$	do.	Sixth
Phenothioxin oxide	do.	Fifth
$C_6H_4OOC_6H_4SO$		

MONS 045422

Table 3.—(Continued)

Compound	Insect	Stage[1/]
p-Phenoxystearophenone $C_6H_5OOC_6H_4COC_{17}O_{35}$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Southern armyworm	do.
Phenylacetamide $C_6H_5CH_2CONH_2$	Colorado potato beetle	do.
	Cross-striped cabbage worm	do.
	Southern armyworm	Sixth
Phenylacridan $C_6H_4CH(C_6H_5)C_6H_4NH$	Cross-striped cabbage worm	First
	do.	Fourth
	Southern armyworm	First
Phenylacridin $C_6H_4C(C_6H_5)C_6H_4N$	Cross-striped cabbage worm	do.
	Southern armyworm	do.
p-(Phenylazo)-azobenzene $C_6H_5NNC_6H_4NNC_6H_5$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	First
	Imported cabbage worm	do.
	Southern armyworm	do.
4-Phenylazo-m-cresol 4-Phenylazo-o-cresol $C_6H_5NNC_6H_3(CH_3)OH$	Cross-striped cabbage worm	Fourth
	Southern armyworm	Sixth
p-Phenylazodimethylaniline $C_6H_5N:NC_6H_4N(CH_3)_2$	do.	do.
1-Phenylazo-2-naphthol $C_6H_5NNC_{10}H_6OH$	Cross-striped cabbage worm	Fourth
	Southern armyworm	Sixth
p-Phenylazophenol $C_6H_5NNC_6H_4OH$	Cross-striped cabbage worm	Fourth
	Southern armyworm	do.
1-(p-Phenylazophenylazo)-2-naphthol $C_6H_5NNC_6H_4NNC_{10}H_6OH$	Cross-striped cabbage worm	do.
	Southern armyworm	Sixth
p-Phenylazophenyl ester of ethyl xanthic acid $C_2H_5OCSSC_6H_4N:NC_6H_5$	do.	First
2,4-Bis(phenylazo)-resorcinol $(C_6H_5N:N)_2C_6H_2(OH)_2$	Cross-striped cabbage worm	Fourth
	Diamondback moth	do.
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	Fourth
	Southern beet webworm	Fifth

MONS 045423

Table 3.—(Continued)

Compound	Insect	Stage[1]
4-Phenylazoresorcinol $C_6H_5N{:}NC_6H_3(OH)_2$	Southern armyworm	Sixth
N'-Phenyl-1,2,4-benzenetriamine $C_6H_5NHC_6H_3(NH_2)_2$	Cross-striped cabbage worm Southern armyworm	Fourth Sixth
Phenyl benzoate $C_6H_5COOC_6H_5$	do.	Fourth
2-Phenylbenzothiazole $SC_6H_4NCC_6H_5$	do.	Fifth
alpha-(p-Phenylbenzoyl)-beta-phenylethylene oxide $C_6H_5C_6H_4COCHOCHC_6H_5$	Southern armyworm	First
5-Phenyl-1,3-cyclohexanedione $C_6H_5CHCH_2CH{:}CHOH{:}CH$	do.	do.
N-Phenyldibenzylamine $C_6H_5CH_2N(C_6H_5)CH_2C_6H_5$	Colorado potato beetle Southern armyworm	Fourth Third
Phenyl 3,4-dichlorobenzenesulfonate $Cl_2C_6H_3SO_3C_6H_5$	do. do.	First Fifth
N,N'-o-Phenylenebisacetamide $C_6H_4(NHCOCH_3)_2$	Colorado potato beetle Cross-striped cabbage worm Melon worm Southern armyworm	Fourth do. Fifth Sixth
m-Phenylenediamine (technical) $C_6H_4(NH_2)_2$	do. do.	First Third
o-Phenylenediamine $C_6H_4(NH_2)_2$	do. do.	First Fifth
Phenyl ester of 3,4-dichlorobenzenesulfonic acid $C_6H_5OSO_2C_6H_3Cl_2$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. Third
Phenyl ester of p-toluenesulfonic acid $C_6H_5OSO_2C_6H_4CH_3$	American cockroach Colorado potato beetle Cross-striped cabbage worm Hawaiian beet webworm Rice weevil Southern armyworm Southern beet webworm Termites	3/4 grown Fourth do. Fifth Adult Sixth Fourth Adult

MONS 045424

Table 3.—(Continued)

Compound	Insect	Stage[1]
N-Phenylglycine $C_6H_5NHCH_2COOH$	Cross-striped cabbage worm Southern armyworm	First do.
Phenylglyoxal oxime $C_6H_5COCHNOH$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. do.
1-Phenyl-3-methyl-5-pyrazolone $C_6H_5NNC(CH_3)CH_2CO$	do.	Third
p-Phenylphenacyl bromide $C_6H_5C_6H_4COCH_2Br$	do.	First
N-Phenyl-2-naphthalenesulfonamide $C_{10}H_7SO_2NHC_6H_5$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. Sixth
Phenyl-alpha-naphthylamine $C_{10}H_7NHC_6H_5$	American cockroach Colorado potato beetle do. Cross-striped cabbage worm Fall webworm Rice weevil Southern armyworm do. Southern beet webworm Termites do.	First Fourth do. do. Fifth Adult First Sixth Fifth Adult do.
Phenyl-beta-naphthylamine $C_{10}H_7NHC_6H_5$	Southern armyworm	First
p-Phenylphenacyl chloride $C_6H_5C_6H_4COCH_2Cl$	Cross-striped cabbage worm Southern armyworm	Fourth Sixth
p-Phenylphenacyl ester of acetic acid $CH_3COOCH_2COOC_6H_4C_6H_5$	do.	do.
p-Phenylphenacyl ester of chloroacetic acid $CH_2ClCOOCH_2COOC_6H_4C_6H_5$	do.	do.
p-Phenylphenacyl ester of dehydrabietic monocarboxylic acid $(CH_3)_2C{:}CHCHCOOCH_2COOC_6H_4C_6H_5C(CH_3)_2$	do.	First

MONS 045425

Table 3.—(Continued)

Compound	Insect	Stage[1]
p-Phenylphenacyl ester of formic acid $HCO_2CH_2COC_6H_4C_6H_5$	Southern armyworm	Sixth
p-Phenylphenacyl thiocyanate $C_6H_5C_6H_4COCH_2SCN$	do.	Fifth
1-Phenyl-1,2-propanedione-2-monoxime $C_6H_5CO(NOH)CH_3$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Melon worm	Fifth
	Southern armyworm	Fourth
Phenyl salicylate $C_6H_4(OH)CO_2C_6H_5$	Cross-striped cabbage worm	do.
	Southern armyworm	Sixth
p-Phenylstearophenone $C_6H_5C_6H_4COC_{17}H_{35}$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Southern armyworm	do.
p-Phenylsulfonylphenetole $C_6H_5SO_2C_6H_4OC_2H_5$	American cockroach	First
	Cross-striped cabbage worm	Fourth
	Melon worm	Fifth
	Southern armyworm	do.
Phenylsulfone $(C_6H_5)_2SO_2$	Cross-striped cabbage worm	Fourth
	Melon worm	Fifth
	Southern armyworm	Sixth
2-Phenyl-1-o-toluino-alpha-naphthimidazole $C_{10}H_6N(C_6H_5)NC_6H_4CH_3$	do.	First
alpha-Phenyl-beta-(p-tolyl) ethylene oxide $C_6H_5CHOCHCOC_6H_4CH_3$	Cross-striped cabbage worm	Fourth
	Greenhouse leaf tier	Fifth
	Melon worm	Fourth
	Southern armyworm	First
	do.	Fifth
	Southern beet webworm	Fourth
Phenyl-p-tolylsulfone $C_6H_5SO_2C_6H_4CH_3$	Southern armyworm	First
Phthalimide $C_6H_4(CO)_2NH$	do.	Third
Piperonal oxime, "anti" form	Cross-striped cabbage worm	First
Piperonal oxime, "syn" form $OCH_2OC_6H_3CHNOH$	do.	Fourth
	Diamondback moth	do.
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Imported cabbage worm	First
	Melon worm	Fourth
	Southern armyworm	First
	Southern beet webworm	Fifth

MONS 045426

Table 3.—(Continued)

Compound	Insect	Stage[1/]
Propionamide $C_2H_5CONH_2$	Colorado potato beetle	Fourth
	Greenhouse leaf tier	Fifth
	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	do.
Propionanilide $C_2H_5CONHC_6H_5$	Colorado potato beetle	do.
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	do.
m-Propionotoluide $C_2H_5CONHC_6H_4CH_3$	Colorado potato beetle	do.
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	do.
o-Propionotoluide $C_2H_5CONHC_6H_4CH_3$	Colorado potato beetle	do.
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	do.
Propyl ester of p-hydroxybenzoic acid $OHC_6H_4COOC_3H_7$	Colorado potato beetle	do.
	Cross-striped cabbage worm	do.
	Melon worm	Fifth
	Southern armyworm	Sixth
beta-Pyridylphenylthiourea $(C_5H_4N)(CH_2N_2S)(C_6H_5)$	Cross-striped cabbage worm	Fourth
	Southern armyworm	Third
Pyromucoanilide $(C_4H_3O)CONHC_6H_5$	Colorado potato beetle	Fourth
	Diamondback moth	do.
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	Fourth
	Southern armyworm	Third
	Southern beet webworm	Fourth
	Yellow woolly bear	Sixth
Quinhydrone $C_6H_4O_2C_6H_4(OH)_2$	Colorado potato beetle	Fourth
	Diamondback moth	do.
	Fall webworm	Fifth
	Greenhouse leaf tier	do.
	Hawaiian beet webworm	do.
	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	Fifth

MONS 045427

Table 3. (Continued)

Compound	Insect	Stage1/
Saponin from Madhuca latifolia (Mowrah meal)	Colorado potato beetle Cross-striped cabbage worm Melon worm	Fourth do. do.
Saponin, hydrolyzed, from Madhuca latifolia (Mowrah meal)	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	do. do. Sixth
Sodium benzylthioxanthate $C_6H_5CH_2SCSSNa$	do.	do.
Sodium 2-chloro-6-phenylphenoxide $C_6H_5C_6H_3(Cl)ONa$	do.	Fifth
Sodium 5-n-hexyl-2,4-dihydroxy benzenesulfonate $(OH)_2C_6H_2(C_6H_{13})SO_3Na$	do.	Second
Sodium-phenylphenoxide $C_6H_5C_6H_4ONa$	do.	Fifth
Sodium 5-phenyl-5-ethylbarbiturate $CONHCONHC(OONa)(C_6H_5)C_2H_5$	do.	Third
Sodium sulfolenate	do.	First
Sucrose octaacetate $C_{12}H_{14}O_3(OOCCH_3)_8$	do.	do.
N-Sulfidobenzamide $(C_6H_5CONH)_2S$	do.	Third
p-p'-Tolylsulfone $(CH_3C_6H_4)_2SO_2$	Cross-striped cabbage worm Melon worm Southern armyworm	Fourth Fifth Sixth
N,N',N'',N'''-Tetrabenzoyl triethylenetetramine $\left[C_6H_5CONH(CH_2)_2N(C_6H_5CO)CH_2\right]_2$	Cross-striped cabbage worm Southern armyworm	First do.
1,2,4,5-Tetrabromobenzene $C_6H_2Br_4$	do.	do.
Tetrabromo-m-cresolsulfonphthalein $OSO_2C_6H_4C:\left[C_6H(Br_2)(CH_3)OH\right]_2$	do.	do.

MONS 045428

Table 3. (Continued)

Compound	Insect	Stage[1/]
2,3,5,6-Tetrabromo-2,6-dimethyl-4-heptanone $[(CH_3)_2CBrCHBr]_2CO$	Cross-striped cabbage worm Melon worm Southern armyworm	Fourth Fifth Sixth
1,2,3,4-Tetrachloronaphthylene $C_{10}H_4Cl_4$	do.	First
1,2,3,4-Tetrahydroacridone $C_6H_4C(OH)C_6H_8N$	Cross-striped cabbage worm do. Southern armyworm	do. Fourth First
alpha-1,2,3,4-Tetrahydro-2,3-diphenylquinoxaline $C_6H_4(NHCH)_2(C_6H_5)_2$	Cross-striped cabbage worm Southern armyworm	do. do.
5,6,7,8-Tetrahydro-1-naphthol $C_{10}H_{11}OH$	Cross-striped cabbage worm Southern armyworm do.	Fourth First Sixth
5,6,7,8-Tetrahydro-1-naphthylthiourea $C_{10}H_{11}NHCSNH_2$	Cross-striped cabbage worm Southern armyworm	Fourth First
Tetramethyldiaminobenzhydrol $[(CH_3)_2NC_6H_5]_2CHOH$	do.	Sixth
Tetramethyldiaminobenzophenone $[(CH_3)_2NC_6H_4]_2CO$	do.	First
2,2,6,6-Tetramethyl-1-nitroso-4-piperidone $(CH_3)_2[CH_2COCH_2C(CH_3)_2]NNO$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. Third
Tetramethylthiuram disulfide $[(CH_3)_2NCS]_2S_2$	do.	Fourth
2,2',4,4'-Tetranitrodiphenyl $(NO_2)_2C_6H_3C_6H_3(NO_2)_2$	do.	Sixth
Thallous formate $HCOOTl$	do.	Fourth
Theobromine $C_7H_8O_2N_4$	do.	First

MONS 045429

Table 3. (Continued)

Compound	Insect	Stage[1/]
Thianthrene $C_6H_4SC_6H_4S$	Southern armyworm	Sixth
Thiobarbituric acid $CH_2CONHCSNHCO$	Cross-striped cabbage worm Southern armyworm	Fourth Fifth
b-Thiobenzaldehyde $(C_6H_5CHS)_3$	do.	Third
4-Thiobenzaldehyde $(C_6H_5CHS)_3$	do.	do.
Thiobenzanilide $C_6H_5NHCSC_6H_5$	do.	do.
Thiocarbanilide $(C_6H_5NH)_2CS$	Cross-striped cabbage worm Melon worm Southern armyworm Southern beet webworm	Fourth do. Fifth do.
Thiocyanogen, polymerized $(C_2N_2S_2)_X$	Southern armyworm	do.
o-Thiodianisidine $[CH_3OC_6H_3NH_2]_2S$	Cross-striped cabbage worm Southern armyworm	Fourth Sixth
Thiodiphenyl-beta-amylurea $C_6H_4SC_6H_4NCONHC_5H_{11}$	do.	Third
Thiodiphenylcarbamylchloride $C_6H_4SC_6H_4NCOCl$	do.	do.
1-Thiodiphenyl beta-o-chlorophenylurea $C_6H_4-S-C_6H_4N-CONHC_6H_4Cl$	do.	do.
Thiodiphenyl-beta-phenylurea $C_6H_4SC_6H_4NCONHC_6H_5$	do.	do.
1-Thiol-benzoxazole $C_6H_4NHC(S)O$	do. do.	First Sixth
Thiophenylnaphthylamine $C_{10}H_6NHC_6H_4S$	do.	Fifth
Thiosalicylic acid $HSC_6H_4CO_2H$	Cross-striped cabbage worm Southern armyworm	First do.

MONS 045430

Table 3. (Continued)

Compound	Insect	Stage[1]
Thiotrimethylacetamide $(CH_3)_3OCSNH_2$	Southern armyworm	Fifth
Thioxanthene $C_6H_4CH_2C_6H_4S$	do.	do.
Thioxanthenyl ether $(SC_6H_4CHC_6H_4)_2O$	do.	Sixth
Thioxanthone $C_6H_4COC_6H_4S$	do.	Fifth
Thioxanthydrol $C_6H_4CH(OH)C_6H_4S$	do.	do.
p-Toluenesulfonamide $CH_3C_6H_4SO_2NH_2$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. do.
p-Toluenesulfonanilide $CH_3C_6H_4SO_2NHC_6H_5$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	do. do. do.
1-(o-Tolylazo)-2-naphthylamine $CH_3C_6H_4NNC_{10}H_6NH_2$	Cross-striped cabbage worm Southern armyworm	do. Sixth
4-(o-Tolylazo)-o-toluidine $CH_3C_6H_4N:NC_6H_2(CH_3)NH_2$	do. do.	First Fifth
1-(4-(o-Tolylazo)-2-tolylazo)-2-naphthol $CH_3C_6H_4N:NC_6H_2(CH_3)N:NC_{10}H_6OH$	do.	Sixth
o-Tolyl ester of p-toluenesulfonic acid $CH_3C_6H_4OSO_2C_6H_4CH_3$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. Sixth
p-Tolylmethenyl-p,p'-bis(N,N-dimethylaniline) $CH_3C_6H_4CH[C_6H_4N(CH_3)_2]_2$	Colorado potato beetle Cross-striped cabbage worm Hawaiian beet webworm Southern beet webworm	Fourth do. Fifth Fourth

MONS 045431

Table 3. (Continued)

Compound	Insect	Stage[1/]
N-m-Tolylpyromucamide	Colorado potato beetle	Fourth
N-p-Tolylpyromucamide	Diamondback moth	do.
$(C_4H_3O)CONHC_6H_4CH_3$	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	Fourth
	Rice weevil	Adult
	Southern armyworm	Third
	Southern beet webworm	Fourth
	Yellow woolly bear	Sixth
N-o-Tolylpyromucamide	Hawaiian beet webworm	Fifth
$(C_4H_3O)CONHC_6H_4CH_3$	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	do.
	Yellow woolly bear	do.
N-p-Tolylsulfonylmorpholine	Colorado potato beetle	do.
$CH_3C_6H_4SO_2N(CH_2CH_2)_2O$	Cross-striped cabbage worm	do.
	Melon worm	Fifth
	Southern armyworm	Sixth
N-p-Tolyl-p-toluenesulfonamide	American cockroach	3/4 grown
$CH_3C_6H_4SO_2NHC_6H_4CH_3$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Diamondback moth	do.
	Greenhouse leaf tier	do.
	Hawaiian beet webworm	Fifth
	Melon worm	do.
	Rice weevil	Adult
	Southern armyworm	Fourth
	Southern beet webworm	Fifth
	Termites	Adult
	do.	do.
Tribenzylamine	Southern armyworm	Fourth
$(C_6H_5CH_2)_3N$		
2,4,6-Tribromoaniline	Australian cockroach	First
$Br_3C_6H_2NH_2$	Fall webworm	Fifth
	Southern armyworm	First
	do.	Third
2,3,4-Tribromo-4-phenylbutane	Colorado potato beetle	Fourth
$C_6H_5(CHBr)_3CH_3$	Cross-striped cabbage worm	do.
	Melon worm	Fifth
	Southern armyworm	Sixth
2,4,6-Tribromophenyl ester of	Colorado potato beetle	Fourth
p-toluenesulfonic acid	Cross-striped cabbage worm	do.
$Br_3C_6H_2OSO_2C_6H_4CH_3$	Southern armyworm	Sixth

MONS 045432

Table 3. (Continued)

Compound	Insect	Stage[1]
Trichloroacetamide CCl_3CONH_2	Southern armyworm	Sixth
3,4-omega-Trichloroacetophenone $Cl_2C_6H_3COCH_2Cl$	do.	do.
Tri-m-cresyl thiophosphate Tri-p-cresyl thiophosphate $(CH_3C_6H_4O)_3PO$	do.	First
1,3,5-Trinitrobenzene $C_6H_3(NO_2)_3$	do. do.	do. Fifth
2,4,6-Trinitrobenzoic acid $C_6H_2(NO_2)_3COOH$	do.	First
2,5,7-Trinitrofluorenone $(NO_2)_2C_6H_2CO[C_6H_3NO_2]$	Cross-striped cabbage worm Greenhouse leaf tier Melon worm Southern armyworm do. Southern beet webworm	Fourth Fifth Fourth First Fourth do.
1,3,8-Trinitronaphthalene $C_{10}H_5(NO_2)_3$	Hawaiian beet webworm Melon worm Rice weevil Southern armyworm Southern beet webworm	Fifth Fourth Adult Sixth Fourth
2,4,6-Trinitrophenylhydrazine $(NO_2)_3C_6H_2NHNH_2$	Melon worm Southern armyworm	Second Third
2,4,6-Trinitroresorcinol $(NO_2)_3C_6H(OH)_2$	do.	Fourth
2,4,2'-Trinitrostilbine $(NO_2)_2C_6H_3CHCHC_6H_4NO_2$	Cross-striped cabbage worm Imported cabbage worm Southern armyworm	First do. do.
2,4,6-Trinitrotoluene $C_6H_2(NO_2)_3CH_3$	do. do.	do. Fifth
1,3,5-Triphenylbenzene $(C_6H_5)_3C_6H_3$	do.	Sixth
Triphenylcarbinol $(C_6H_5)_3COH$	Colorado potato beetle Cross-striped cabbage worm do.	Fourth First Fourth

MONS 045433

Table 3. (Continued)

Compound	Insect	Stage[1/]
Triphenylcarbinol (Cont.)	Diamondback moth	Fourth
	Greenhouse leaf tier	do.
	Hawaiian beet webworm	Fifth
	Melon worm	Fourth
	Southern armyworm	First
	do.	Sixth
	Southern beet webworm	Fifth
Triphenyl ester of trithioarsenious acid $(C_6H_5)_3AsS_3$	Cross-striped cabbage worm	First
	Southern armyworm	do.
alpha,alpha,gamma-Triphenylguanidine $NH:C(NHC_6H_5)N(C_6H_5)_2$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Southern armyworm	Fifth
Trithioformaldehyde $(H_2CS)_3$	Cross-striped cabbage worm	Fourth
	Southern armyworm	Fifth
Trithiovanillin $\left[CH_3OC_6H_3(OH)CHS\right]_3$	do.	First
Tri-p-tolyl ester of trithioarsenious acid $(CH_3C_6H_4)_3AsS_3$	Cross-striped cabbage worm	Fourth
	Southern armyworm	Fifth
Xanthione $C_6H_4CSC_6H_4O$	Cross-striped cabbage worm	Fourth
	Southern armyworm	Fifth
Xanthone $C_6H_4COC_6H_4O$	do.	Sixth
N-Xenylacetamide $CH_3CONHC_6H_4C_6H_5$	Hawaiian beet webworm	Fifth
	Imported cabbage worm	do.
	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	Fifth
	Termites	Adult
N-Xenylbenzamide $C_6H_5CONHC_6H_4C_6H_5$	Hawaiian beet webworm	Fifth
	Imported cabbage worm	do.
	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	Fifth
	Termites	Adult
	do.	do.

MONS 045434

Table 3. (Continued)

Compound	Insect	Stage[1/]
N-Xenylformamide $HCONHC_6H_4C_6H_5$	Hawaiian beet webworm	Fifth
	Imported cabbage worm	do.
	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	Fifth
	Termites	Adult
N-Xenylpropionamide $C_2H_5CONHC_6H_4C_6H_5$	Hawaiian beet webworm	Fifth
	Imported cabbage worm	do.
	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	Fifth
	Termites	Adult
N-Xenylpyromucamide $(C_4H_3O)CONHC_6H_4C_6H_5$	Hawaiian beet webworm	Fifth
	Imported cabbage worm	do.
	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	Fifth
	Termites	Adult
1-((4-m-Xylyl)-azo))-2-naphthol $(CH_3)_2C_6H_3NNC_{10}H_6OH$	Southern armyworm	First
N-(2,4-Xylyl)-benzamide $C_6H_5CONHC_6H_3(CH_3)_2$	Hawaiian beet webworm	Fifth
	Imported cabbage worm	do.
	Melon worm	Fourth
	Southern armyworm	do.
N-(2,5-Xylyl)-benzamide N-(2,6-Xylyl)-benzamide $C_6H_5CONHC_6H_3(CH_3)_2$	Hawaiian beet webworm	Fifth
	Imported cabbage worm,	do.
	Melon worm	Fourth
	Southern armyworm	do.
N-(2,4-Xylyl)-formamide N-(2,5-Xylyl)-formamide $HCONHC_6H_3(CH_3)_2$	Hawaiian beet webworm	Fifth
	Imported cabbage worm	do.
	Melon worm	Fourth
	Southern armyworm	do.
N-(2,4-Xylyl)-propionamide N-(2,5-Xylyl)-propionamide N-(2,6-Xylyl)-propionamide $C_2H_5CONHC_6H_3(CH_3)_2$	Hawaiian beet webworm	Fifth
	Imported cabbage worm	do.
	Melon worm	Fourth
	Southern armyworm	do.
N-(2,4-Xylyl)-pyromucamide N-(2,5-Xylyl)-pyromucamide N-(2,6-Xylyl)-pyromucamide $(C_4H_3O)CONHC_6H_3(CH_3)_2$	Hawaiian beet webworm	Fifth
	Imported cabbage worm	do.
	Melon worm	Fourth
	Southern armyworm	do.

MONS 045435

Table 3. (Continued)

Compound	Insect	Stage[1/]
Zinc lauryl xanthate $Zn(C_{13}H_{24}OCS_2)_2$	Cross-striped cabbage worm	First
	Imported cabbage worm	do.
	Southern armyworm	do.
Zinc octyl xanthate $Zn(C_8H_{16}OCS_2)_2$	Cross-striped cabbage worm	do.
	Imported cabbage worm	do.
	Southern armyworm	do.
Zinc sulfoleate $Zn(O_{16}H_{33}O_2S)_2$	do.	do.

MONS 045436

Table 2.—Results of laboratory toxicity tests of materials that were found to be toxic to certain species of insects

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
Acetone semicarbazone $(CH_3)_2CHNHCONH_2$	American cockroach	3/4 grown	—	-	870	1
	Cross-striped cabbage worm	Fourth	Collards	1	155	100
	Diamondback moth	do.	do.	1	145	100
	Greenhouse leaf tier	Fifth	do.	1	145	97
	Hawaiian beet webworm	do.	Swiss chard	2	315	100
	Imported cabbage worm	do.	Collards	3	390	18
	Melon worm	Fourth	Pumpkin	2	320	87
	Southern armyworm	do.	Collards	3	320	15
	Southern beet webworm	do.	Swiss chard	2	315	64
	Termites	Adult	—	-	[4]/1:1000	15
	Yellow woolly bear	Fourth	Collards	3	270	2
3-Acetamy-2-naphthoic acid $CH_3CONH_{10}H_6COOH$	Colorado potato beetle	Fourth	Eggplant	1	160	80
	Cross-striped cabbage worm	First	Collards	0	125	100
	do.	Fourth	do.	2	215	69
	Greenhouse leaf tier	do.	do.	3	125	0
	Melon worm	Fifth	Squash	3	155	0
	Southern armyworm	First	Collards	0	125	100
	do.	Fourth	do.	3	140	0
	do.	Sixth	do.	3	125	0

[1] Numbers refer to instar.

[2] 0 = no visible feeding, 1 = trace, 2 = moderate, 3 = normal feeding, comparable with that on untreated foliage.

[3] Numbers in parentheses indicate number of hours if not 48.

[4] All proportions by weight.

MONS 045313

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
N-Acetyl-N-ethyl-p-phenylenediamine $CH_3CON(C_2H_5)C_6H_4NH_2$	Cross-striped cabbage worm	First	Collards	2	125	57
	Southern armyworm	do.	do.	0	125	96
	do.	Third	do.	1	90	56
	do.	Sixth	do.	3	310	0
sym-Acetyl-1-thiolbenzoxazole $OC_6H_3:SCOCH_3$	American cockroach	3/4 grown	—	-	740	77
	Cross-striped cabbage worm	Fourth	Collards	3	310	0
	Diamondback moth	do.	do.	1	340	67
	Greenhouse leaf tier	Fifth	do.	3	340	0
	Hawaiian beet webworm	do.	Beet	2	340	60
	Melon worm	do.	Pumpkin	1	345	38
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	Fourth	Collards	1	280	80
	Southern beet webworm	Fifth	Beet	2	340	66
	Termites	Adult	(Treated soil)	-	1:1000	13
	Yellow woolly bear	Fourth	Collards	2	435	65
Acridine $C_6H_4NC_6H_4$	Cross-striped cabbage worm	First	Collards	0	120	100
	Melon worm	Fifth	Pumpkin	1	200	12
	Southern armyworm	First	Collards	0	120	100
	do.	Fifth	do.	3	125	0
p-Aminoacetanilide $NH_2C_6H_4NHCOCH_3$	American cockroach	First	—	-	115	17
	do.	3/4 grown	—	-	510	0
	Bean leaf roller	Fourth	Bean	1	225	33
	Cabbage looper	Fifth	Collards	2	170	16
	Cowpea weevil	Adult	(Treated peas)	-	1:1000	24
	Diamondback moth	Fourth	Collards	1	125	73
	Fall webworm	do.	Pecan	1	130	0
	Greenhouse leaf tier	Fifth	Collards	2	295	0
	Hawaiian beet webworm	do.	Swiss chard	1	420	24
	Imported cabbage worm	do.	Collards	2	165	10
	Melon worm	Fourth	Squash	1	200	(72) 43
	Rice weevil	Adult	(Treated wheat)	-	1:200	36

MONS 045314

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq.cm.	Percent
p-Aminoacetanilide (Cont.)	Southern armyworm	Fourth	Collards	1	200	20
	Southern beet webworm	do.	Beet	1	200	33
	Termites	Adult	(Treated soil)	—	1:200	(72) 100
	do.	do.	do.	-	1:1000	(72) 44
	Yellow woolly bear	Fourth	Collards	2	310	28
p-Aminoacetobenzene $NH_2C_6H_4NHC_6H_5$	American cockroach	3/4 grown	—	-	280	10
	Cabbage looper	First	Turnip	1	75	41
	Cabbage webworm	Fourth	Collards	1	110	28
	Colorado potato beetle	do.	Eggplant	1	110	83
	Cowpea weevil	Adult	(Treated peas)	-	1:1000	0
	Cross-striped cabbage worm	First	Turnip	1	75	100
	do.	Fourth	Collards	1	130	78
	Diamondback moth	do.	do.	1	130	75
	Greenhouse leaf tier	do.	do.	3	110	13
	Hawaiian beet webworm	Fifth	Beet	1	215	67
	Imported cabbage worm	Third	Collards	1	90	100
	Melon worm	Fifth	Pumpkin	2	190	83
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	First	Collards	1	75	100
	do.	Fifth	do.	1	230	97
	do.	Sixth	do.	1	185	23
	Southern beet webworm	Fifth	Beet	1	200	12
	Termites	Adult	(Treated soil)	-	1:1000	6
	Yellow woolly bear	Fourth	Collards	2	215	33
p-Aminoacetobenzene hydrochloride $C_6H_5NHC_6H_4NH_2HCl$	American cockroach	3/4 grown	—	-	155	7
	Cabbage looper	Fourth	Collards	2	240	0
	Colorado potato beetle	do.	Eggplant	0	230	94
	Cowpea weevil	Adult	(Treated peas)	-	1:1000	0
	Cross-striped cabbage worm	Fourth	Collards	1	230	86
	Fall webworm	do.	Pecan	1	230	0
	Hawaiian beet webworm	do.	Swiss chard	1	325	82
	Melon worm	Fifth	Pumpkin	1	300	70

MONS 045315

Table 2.--(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
p-Aminoazobenzene hydrochloride (Cont.)	Rice weevil	Adult	(Treated wheat)	-	1:200	0
	Southern armyworm	Third	Collards	1	217	64
	do.	Sixth	do.	2	270	13
	Southern beet webworm	Fourth	Swiss chard	0	240	90
	Termites	Adult	(Treated soil)	-	1:200	100
	do.	do.	do.	-	1:2000	15
	Yellow woolly bear	Fourth	Collards	2	490	76
2-Amino-5-azotoluene $CH_3C_6H_4N{:}NC_6H_3(CH_3)NH_2$	American cockroach	1/4 grown	—	-	310	0
	Cabbage webworm	Fourth	Collards	2	310	16
	Colorado potato beetle	do.	Eggplant	1	175	97
	Cross-striped cabbage worm	do.	Collards	1	175	66
	Diamondback moth	Third	do.	1	310	47
	Greenhouse leaf tier	Fourth	do.	3	310	0
	Hawaiian beet webworm	Fifth	Swiss chard	3	260	4
	Melon worm	do.	Squash	2	235	33
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	Fourth	Collards	3	280	0
	Southern beet webworm	do.	Beet	2	310	36
	Termites	Adult	(Treated soil)	-	1:1000	0
3-Aminodibenzofuran $C_6H_4OC_6H_3NH_2$	American cockroach	1/2 grown	—	-	385	67
	Cabbage looper	Fourth	Collards	3	190	0
	Colorado potato beetle	do.	Eggplant	1	155	5
	Cowpea weevil	Adult	(Treated peas)	-	1:1000	14
	Greenhouse leaf tier	Fourth	Collards	1	250	73
	Hawaiian beet webworm	Fifth	Beet	1	155	27
	Melon worm	Fourth	Squash	1	170	38
	Rice weevil	Adult	(Treated wheat)	-	1:200	64
	Southern armyworm	Sixth	Collards	1	265	84
	Southern beet webworm	Fourth	Beet	0	190	66
	Termites	Adult	(Treated soil)	-	1:200	100
	do.	do.	do.	-	1:1000	32

NDNS 045316

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
p-Aminodiphenyl $C_6H_5C_6H_4NH_2$	American cockroach	1/4 grown	—	-	380	100
	do.	3/4 grown	—	-	155	20
	Cabbage looper	Fourth	Collards	2	160	7
	Cabbage webworm	do.	do.	3	375	0
	Colorado potato beetle	do.	Eggplant	2	50	33
	Cross-striped cabbage worm	do.	Collards	2	230	10
	Diamondback moth	Third	do.	2	375	57
	Fall webworm	Fourth	Pecan	2	170	0
	Greenhouse leaf tier	do.	Collards	1	375	100
	Hawaiian beet webworm	Fifth	Swiss chard	3	200	8
	Melon worm	do.	Squash	1	175	46
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	Fourth	Collards	1	215	97
	do.	Sixth	do.	1	155	83
	Southern beet webworm	Fourth	Beet	2	375	16
	Termites	Adult	(Treated soil)	-	1:1000	0
	Yellow woolly bear	Fourth	Collards	2	295	40
Aminodiphenylamine hydrochloride $C_6H_5NHC_6H_4NH_2 \cdot HCl$	American cockroach	3/4 grown	—	-	124	10
	Cabbage webworm	Fourth	Collards	2	230	48
	Cross-striped cabbage worm	do.	do.	3	155	0
	Diamondback moth	Third	do.	2	230	17
	Greenhouse leaf tier	Fourth	do.	1	230	90
	Hawaiian beet webworm	Fifth	Swiss chard	3	155	11
	Melon worm	Fourth	Squash	2	155	0
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	Fourth	Collards	3	210	0
	Southern beet webworm	do.	Beet	2	230	64
	Termites	Adult	(Treated soil)	-	1:1000	0

MONS 045317

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
p-Aminophenylammonium 2-benzothiazolyl sulfide $SC_6H_4N:CSNH_3C_6H_4NH_2$	American cockroach	3/4 grown	—	-	160	8
	Cross-striped cabbage worm	Fourth	Collards	2	355	97
	Greenhouse leaf tier	Fifth	do.	3	420	0
	Hawaiian beet webworm	Fourth	Beet	1	150	8
	Melon worm	do.	Squash	1	355	6
	Rice weevil	Adult	(Treated wheat)	-	1:1000	7
	Southern armyworm	First	Collards	0	260	100
	do.	Fifth	do.	3	125	0
	Southern beet webworm	Fourth	Beet	3	150	12
	Termites	Adult	(Treated soil)	-	1:1000	0
alpha-Anisaldoxime $CH_3OC_6H_4CH:NOH$	American cockroach	3/4 grown	—	-	155	0
	Colorado potato beetle	Fourth	Eggplant	2	60	10
	Cross-striped cabbage worm	First	Collards	0	125	100
	do.	Third	do.	1	125	94
	do.	Fifth	do.	2	125	0
	Diamondback moth	Fourth	do.	1	250	93
	Greenhouse leaf tier	do.	do.	1	295	53
	Hawaiian beet webworm	Fifth	Beet	2	250	0
	Imported cabbage worm	First	Collards	0	125	100
	Melon worm	Fifth	Pumpkin	2	210	10
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	Third	Collards	0	125	100
	do.	Fourth	do.	2	135	0
	Southern beet webworm	Fifth	Beet	2	250	8
	Termites	Adult	(Treated soil)	-	1:1000	96
	do.	do.	do.	-	1:5000	0
beta-Anisaldoxime $CH_3OC_6H_4CH=NOH$	Colorado potato beetle	Fourth	Eggplant	2	150	40
	Cross-striped cabbage worm	First	Collards	1	200	60
	do.	Fourth	do.	2	150	6
	Imported cabbage worm	First	do.	1	200	48
	Southern armyworm	do.	do.	0	200	26

MQNS 045318

Table 2.— (Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
Antimonyl pyrogallol $HOC_6H_3O(SbOH)O$	American cockroach	3/4 grown	—	-	930	0
	Colorado potato beetle	Fourth	Potato	3	370	0
	Greenhouse leaf tier	Fifth	Collards	0	370	100
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	Fourth	Collards	1	370	100
	Termites	Adult	(Treated soil)	-	1:1000	3
	Yellow woolly bear	Second	Spanish needles	1	370	100
Arsenic ethyl xanthate $As(C_2H_5OCS_2)_3$	American cockroach	First	—	-	310	100
	Cabbage looper	do.	Collards	0	124	83
	Colorado potato beetle	Fourth	Eggplant	1	155	80
	Cross-striped cabbage worm	First	Collards	0	220	100
	do.	Fourth	do.	1	155	80
	Melon worm	Fifth	Squash	1	185	70
	Southern armyworm	First	Collards	0	220	100
	do.	Sixth	do.	1	460	100
Auramine $[(CH_3)_2NC_6H_4]_2C:NH$	American cockroach	3/4 grown	—	-	140	0
	Cabbage webworm	Third	Collards	1	215	24
	Cross-striped cabbage worm	Fourth	do.	2	230	50
	Diamondback moth	do.	do.	1	215	7
	Fall webworm	do.	Pecan	2	280	0
	Greenhouse leaf tier	Fifth	Collards	2	215	10
	Hawaiian beet webworm	do.	Beet	2	215	0
	Melon worm	do.	Pumpkin	1	190	33
	Rice weevil	Adult	(Treated wheat)	-	1:1000	4
	Southern armyworm	Fourth	Collards	3	235	0
	Southern beet webworm	Fifth	Beet	2	160	100
	Termites	Adult	(Treated soil)	-	1:1000	0

MDNS 045319

Table 2.--(Continued)

Compound	Insect	Stage1/	Foliage	Feeding2/	Deposit	Kill after 48 hours3/
					Micrograms per sq. cm.	Percent
Azobenzene $C_6H_5NNC_6H_5$	American cockroach	3/4 grown	—	-	250	93
	Cabbage looper	Fourth	Collards	2	220	50
	Colorado potato beetle	do.	Eggplant	1	155	100
	Cross-striped cabbage worm	Fifth	Collards	0	170	100
	Diamondback moth	Fourth	do.	0	185	97
	Fall webworm	Fifth	Pecan	3	215	0
	Greenhouse leaf tier	do.	Collards	3	185	0
	Hawaiian beet webworm	do	Beet	1	185	80
	Imported cabbage worm	First	Collards	0	170	100
	Melon worm	Fourth	Squash	1	210	100
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	Sixth	Collards	1	140	100
	Southern beet webworm	Fifth	Beet	0	185	100
	Termites	Adult	(Treated soil)	-	1:1000	100
	do.	do.	do.	-	1:5000	25
	Yellow woolly bear	Fourth	Collards	0	265	100
Anoxybenzene $C_6H_5NONC_6H_5$	American cockroach	3/4 grown	—	-	695	40
	Cabbage looper	Fourth	Collards	1	230	50
	Colorado potato beetle	do.	Eggplants	2	230	0
	Cross-striped cabbage worm	do.	Collards	0	280	90
	Greenhouse leaf tier	Fifth	do.	1	325	10
	Hawaiian beet webworm	do.	Beet	0	230	76
	Melon worm	Fourth	Squash	1	280	68
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	First	Collards	0	90	100
	do.	Fourth	do.	0	540	100
	do.	Fifth	do.	1	90	47
	Southern beet webworm	Fourth	Beet	0	230	100
	Termites	Adult	(Treated soil)	-	1:1000	100
	do.	do.	do.	-	1:5000	(72) 80
	Yellow woolly bear	Fourth	Collards	1	800	100

MONS 045320

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
Barium antimonyl tartrate $Ba[(SbO)C_4H_4O_6]_2$	American cockroach	3/4 grown	—	-	1065	10
	Colorado potato beetle	Fourth	Potato	3	310	5
	Greenhouse leaf tier	Fifth	Collards	0	310	100
	Hawaiian beet webworm	do.	Swiss chard	1	310	92
	Melon worm	Fourth	Squash	1	310	96
	Rice weevil	Adult	(Treated wheat)	-	1:1000	12
	Southern armyworm	Fourth	Collards	1	310	100
	Southern beet webworm	do.	Swiss chard	0	310	100
	Termites	Adult	(Treated soil)	-	1:1000	0
	do.	do.	do.	-	1:5000	3
	Yellow woolly bear	Second	Spanish-needles	0	310	100
Benzalaniline $C_6H_5CH:NC_6H_5$	American cockroach	First	—	-	185	89
	do.	3/4 grown	—	-	400	(72) 20
	Cross-striped cabbage worm	Fourth	Collards	1	385	80
	Melon worm	do.	Squash	0	385	100
	Rice weevil	Adult	(Treated wheat)	-	1:1000	18
	Southern armyworm	Third	Collards	0	170	96
	do.	Sixth	do.	3	215	0
	Termites	Adult	(Treated soil)	-	1:1000	60
	do.	do.	do.	-	1:3000	16
Benzalazine $C_6H_5CH:N:CHC_6H_5$	American cockroach	3/4 grown	—	-	435	0
	Cabbage webworm	Third	Collards	2	280	50
	Cross-striped cabbage worm	First	do.	0	150	100
	do.	Third	do.	1	170	90
	do.	Fifth	do.	2	170	3
	Diamondback moth	Fourth	do.	2	280	23
	Fall webworm	do.	Pecan	1	230	70
	Greenhouse leaf tier	Fifth	Collards	3	280	3
	Hawaiian beet webworm	do.	Beet	1	280	6

MONS 045221

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]	
					Micrograms per sq. cm.	Percent	
Benzalazine (Cont.)	Imported cabbage worm	First	Collards	0	150	96	
	Melon worm	Fifth	Squash	2	230	53	
	Southern armyworm	Third	Collards	1	170	100	
	do.	Fourth	do.	2	255	0	
	Southern beet webworm	Fifth	Beet	2	310	32	
	Yellow woolly bear	Fourth	Collards	1	340	46	
Benzeneazo-m-cresol $C_6H_5NNC_6H_3(CH_3)OH$	American cockroach	3/4 grown	—	-	155	0	
	Cabbage webworm	Third	Collards	2	230	90	
	Cross-striped cabbage worm	Fourth	do.	2	280	14	
	Diamondback moth	do.	do.	1	230	47	
	Greenhouse leaf tier	Fifth	do.	2	230	7	
	Hawaiian beet webworm	do.	Beet	2	230	20	
	Melon worm	do.	Pumpkin	1	270	43	
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0	
	Southern armyworm	Fourth	Collards	1	215	0	
	Southern beet webworm	Fifth	Beet	1	230	4	
	Termites	Adult	(Treated soil)	-	1:1000	(72) 10	
	do.	do.	do.	-	1:5000	0	
Benzopinacol $(C_6H_5)_2C(OH)C(OH)(C_6H_5)_2$	Colorado potato beetle	Fourth	Eggplant	2	125	90	
	Cross-striped cabbage worm	First	Collards	0	150	100	
	do.	Fourth	do.	3	125	13	
	Southern armyworm	First	do.	0	150	75	
1-Benzothiazolyl hydroxymethyl sulfide $SC_6H_4N{:}CSCH_2OH$	Southern armyworm	First	Collards	0	170	100	
9-Benzoylcarbazole $C_6H_4N(COC_6H_5)C_6H_4$	Southern armyworm	First	Collards	0	185	77	

MONS 045322

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq.cm.	Percent
n-Benzylpyromucamide $(C_4H_3O)CONHCH_2C_6H_5$	Colorado potato beetle	Fourth	Potato	3	155	0
	Diamondback moth	do.	Collards	1	155	50
	Greenhouse leaf tier	Fifth	do.	2	155	0
	Hawaiian beet webworm	do.	Beet	1	340	15
	Melon worm	Fourth	Squash	1	340	0
	Rice weevil	Adult	(Treated wheat)	-	1:1000	4
	Southern armyworm	Fourth	Collards	2	155	0
	Southern beet webworm	do.	Beet	1	340	24
	Termites	Adult	(Treated soil)	-	1:1000	3
	do.	do.	do.	-	1:5000	3
	Yellow woolly bear	Sixth	Collards	3	155	0
Bis(2,4,6-Trinitrophenyl)-amine. See p. 69.						N
p-Bromobenzenesulfonamide $BrC_6H_4SO_2NH_2$	Southern armyworm	Fourth	Collards	1	146	78
	do.	Sixth	do.	1	115	0
	Southern beet webworm	Fifth	Swiss chard	1	410	93
	Yellow woolly bear	Fourth	Collards	2	465	14
p-Bromobenzenitrile BrC_6H_4CN	American cockroach	1/4 grown	—	-	310	100
	Cross-striped cabbage worm	Fourth	Collards	0	155	100
	do.	do.	do.	1	Fumigation	100
	Diamondback moth	do.	do.	0	250	100
	Greenhouse leaf tier	Fifth	do.	1	153	37
	Hawaiian beet webworm	do.	Beet	0	250	100
	Melon worm	Fourth	Squash	0	155	100
	do.	do.	do.	1	Fumigation	100
	Southern armyworm	Fifth	Collards	0	260	93
	Southern beet webworm	do.	Beet	0	250	100
	do.	do.	do.	0	Fumigation	100

NONS 045323

Table 2.--(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
p-Bromodiphenyl $C_6H_5C_6H_4Br$	American cockroach	3/4 grown	—	-	540	100
	Cross-striped cabbage worm	Third	Collards	0	60	100
	do.	Fourth	do.	0	60	75
	Diamondback moth	do.	do.	1	280	100
	Greenhouse leaf tier	Fifth	do.	3	280	0
	Hawaiian beet webworm	do.	Beet	1	230	80
	Imported cabbage worm	First	Collards	0	85	100
	Melon worm	Fifth	Squash	1	175	6
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	Third	Collards	0	60	100
	do.	Fourth	do.	3	60	0
	Southern beet webworm	Fifth	Beet	2	230	8
	Termites	Adult	(Treated soil)	-	1:1000	0
p-Bromohydrazobenzene $BrC_6H_4NHNHC_6H_5$	American cockroach	Full grown	—	-	525	60
	Cabbage webworm	Third	Collards	1	140	68
	Cross-striped cabbage worm	Fourth	do.	2	260	86
	Diamondback moth	do.	do.	1	140	10
	Greenhouse leaf tier	Fifth	do.	3	140	0
	Hawaiian beet webworm	do.	Beet	2	140	56
	Melon worm	do.	Squash	1	190	50
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	Sixth	Collards	2	265	57
	Southern beet webworm	Fifth	Beet	2	140	12
	Termites	Adult	(Treated soil)	-	1:1000	10
	Yellow woolly bear	Fourth	Collards	1	395	100
p-Bromoiodobenzene BrC_6H_4I	Colorado potato beetle	Fourth	Eggplant	0	260	100
	do.	do.	do.	0	Fumigation (24)	100
	Cross-striped cabbage worm	do.	Collards	0	260	100
	Melon worm	do.	Pumpkin	0	775	100
	do.	do.	do.	1	Fumigation	100
	Southern armyworm	do.	Collards	0	155	100
	do.	Sixth	do.	0	186	43
	do.	do.	do.	1	Fumigation	70

MONS 045324

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
2-Bromonaphthalene $C_{10}H_7Br$	Cross-striped cabbage worm	First	Collards	0	200	100
	do.	Fourth	do.	0	Fumigation	100
	Diamondback moth	do.	do.	0	350	100
	Greenhouse leaf tier	do.	do.	0	340	100
	Hawaiian beet webworm	Fifth	Beet	0	350	96
	Melon worm	Fourth	Collards	0	310	100
	do.	do.	do.	0	Fumigation	100
	Rice weevil	Adult	(Treated wheat)	-	1:1000	16
	Southern armyworm	Fourth	Collards	0	250	100
	do.	do.	do.	0	Fumigation	17
	Southern beet webworm	Fifth	Beet	0	350	100
	do.	do.	do.	0	Fumigation	100
	Termites	Adult	(Treated soil)	-	1:1000	100
	do.	do.	do.	-	1:5000	69
4-(p-Bromophenylazo)-o-cresol $BrC_6H_4N:NC_6H_3(CH_3)OH$	Cabbage looper	First	Turnip	3	75	22
	Cabbage webworm	do.	do.	2	75	61
	Cross-striped cabbage worm	do.	do.	1	75	95
	Southern armyworm	do.	do.	1	90	16
4-(p-Bromophenylazo)-o-cresol $BrC_6H_4N:NC_6H_3(CH_3)OH$	Cabbage looper	First	Turnip	2	110	34
	Cabbage webworm	do.	do.	3	110	44
	Cross-striped cabbage worm	do.	do.	2	110	95
	Southern armyworm	Sixth	Collards	3	435	7
1-(p-Bromophenylazo)-2-naphthylamine $BrC_6H_4N:NC_{10}H_6NH_2$	Cabbage looper	First	Collards	2	155	2
	Cross-striped cabbage worm	Third	do.	3	155	25
	Imported cabbage worm	First	Turnip	2	90	96
	Southern armyworm	do.	Collards	0	140	100
	do.	Third	do.	3	155	63

MONS 045325

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
n-Butylsulfone $(C_4H_9)_2SO_2$	Cabbage webworm	Third	Collards	1	400	8
	Colorado potato beetle	Fourth	Eggplant	0	170	100
	Cross-striped cabbage worm	do.	Collards	1	155	83
	Diamondback moth	do.	do.	1	400	20
	Greenhouse leaf tier	Fifth	do.	3	400	0
	Hawaiian beet webworm	do.	Beet	1	400	24
	Melon worm	do.	Squash	2	290	51
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	Fourth	Collards	3	235	0
	Southern beet webworm	Fifth	Beet	2	400	0
	Termites	Adult	(Treated soil)	-	1:1000	100
	do.	do.	do.	-	1:5000	31
alpha-Chloroacetanilide $C_6H_5NHCOCH_2Cl$	Cross-striped cabbage worm	Fourth	Collards	2	195	66
	Diamondback moth	do.	do.	2	290	30
	Greenhouse leaf tier	Fifth	do.	2	290	3
	Hawaiian beet webworm	do.	Beet	0	185	100
	Melon worm	Fourth	Pumpkin	2	295	100
	Southern armyworm	Sixth	Collards	2	195	100
	Southern beet webworm	Fifth	Beet	2	185	6
2-Chlorodiphenylene oxide $C_6H_4OC_6H_3Cl$	Southern armyworm	Sixth	Collards	1	310	53
2-Chlorofluorene $C_6H_4CH_2C_6H_3Cl$	American cockroach	3/4 grown	—	-	295	100
	Colorado potato beetle	Fourth	Potato	2	160	67
	Diamondback moth	do.	Collards	0	160	100
	Greenhouse leaf tier	Fifth	do.	2	160	0
	Hawaiian beet webworm	do.	Beet	2	230	44
	Melon worm	Fourth	Squash	2	230	27
	Rice weevil	Adult	(Treated wheat)	-	1:1000	44
	Southern armyworm	First	Collards	0	80	100
	do.	Fourth	do.	3	160	0
	do	Sixth	do.	3	215	0

MONS 045326

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
2-Chlorofluorene (Cont.)	Southern beet webworm	Fifth	Beet	2	230	48
	Termites	Adult	(Treated soil)	-	1:1000	100
	do.	do.	do.	-	1:5000	100
	do.	do.	do.	-	1:10,000	6
	Yellow woolly bear	Sixth	Collards	3	160	0
p-Chloroiodobenzene ClC_6H_4I	Colorado potato beetle	Fourth	Eggplant	0	50	100
	do.	do.	do.	-	Fumigation	100
	Cross-striped cabbage worm	do.	Collards	2	50	43
	Melon worm	do.	Pumpkin	0	310	100
	do.	do.	do.	-	Fumigation	100
	Southern armyworm	Sixth	Collards	0	146	100
	do.	do.	do.	-	Fumigation	100
beta-Chloronaphthalene $C_{10}H_7Cl$	American cockroach	3/4 grown	—	-	310	0
	Cross-striped cabbage worm	First	Collards	0	170	100
	Hawaiian beet webworm	Fifth	Swiss chard	0	340	100
	Melon worm	Fourth	Squash	0	340	100
	do.	do.	do.	-	Fumigation	100
	Rice weevil	Adult	(Treated wheat)	-	1:1000	61
	Southern armyworm	First	Collards	0	170	100
	do.	Sixth	do.	3	125	6
	Southern beet webworm	Fourth	Swiss chard	0	340	100
	Termites	Adult	(Treated soil)	-	1:1000	100
	do.	do.	do.	-	1:5000	90
Copper arsenite compound of sulfonated fish oil acids	Colorado potato beetle	Fourth	Eggplant	0	110	100
	Cross-striped cabbage worm	First	Collards	0	60	100
	do.	Third	do.	0	185	100
	do.	Fifth	do.	2	185	100
	Imported cabbage worm	First	do.	0	60	100
	Melon worm	Fifth	Squash	1	130	94
	Southern armyworm	First	Collards	0	60	100
	do.	Third	do.	0	125	100
	do.	Sixth	do.	1	95	93

MNS 045227

Table 2.— (Continued)

Compound	Insect	Stage1/	Foliage	Feeding2/	Deposit	Kill after 48 hours3/
					Micrograms per sq.cm.	Percent
Copper arsenite compound of sulf-linseed oil acids	Colorado potato beetle	Fourth	Eggplant	0	110	100
	Cross-striped cabbage worm	First	Collards	0	90	100
	do.	Third	do.	0	170	100
	Imported cabbage worm	First	do.	0	90	100
	Melon worm	Fifth	Squash	1	130	86
	Southern armyworm	First	Collards	0	90	100
	do.	Fifth	do.	2	170	100
Copper arsenite compound sulf-peanut oil acids	Colorado potato beetle	Fourth	Eggplant	1	280	100
	Cross-striped cabbage worm	do.	Collards	2	230	100
	Hawaiian beet webworm	Fifth	Beet	1	280	96
	Melon worm	Fourth	Squash	1	280	100
	Southern beet webworm	do.	Beet	0	230	100
Copper arsenite compound sulf-soybean oil acids	Colorado potato beetle	Fourth	Eggplant	1	110	70
	Cross-striped cabbage worm	do.	Collards	2	230	100
	Hawaiian beet webworm	Fifth	Beet	2	110	64
	Melon worm	Fourth	Squash	2	110	38
	Southern beet webworm	do.	Beet	0	230	100
Copper arsenite compound of sulf-tung oil acids	Colorado potato beetle	Fourth	Eggplant	0	125	100
	Cross-striped cabbage worm	First	Collards	0	120	100
	do.	Fifth	do.	0	140	90
	Imported cabbage worm	First	do.	0	120	100
	Melon worm	Fifth	Squash	1	175	100
	Southern armyworm	First	Collards	0	120	100
	do.	Sixth	do.	1	125	93
Copper benzoyl lactoarsenite	Colorado potato beetle	Fourth	Tomato	0	170	100
	Diamondback moth	do.	Collards	1	200	90
	Greenhouse leaf tier	Fifth	do.	0	200	100
	Hawaiian beet webworm	do.	Swiss chard	0	280	96
	Melon worm	do.	Pumpkin	0	280	100

MONS 045328

Table 2.—(Continued)

Compound	Insect	Stage1/	Foliage	Feeding2/	Deposit	Kill after 48 hours3/
					Micrograms per sq.cm.	Percent
Copper benzoyl lactoarsenite (Cont)	Southern armyworm	Fourth	Collards	1	280	100
	Southern beet webworm	do.	Swiss chard	0	280	100
	Yellow woolly bear	Second	Collards	0	200	100
Copper oleoarsenite	Fall webworm	Fifth	Pecan	3	155	0
	Melon worm	do.	Squash	0	170	100
	Southern armyworm	Fourth	Collards	1	155	100
Copper phenyl stearoarsenite	Colorado potato beetle	Fourth	Eggplant	1	110	100
	Cross-striped cabbage worm	do.	Collards	1	110	100
	Melon worm	Fifth	Squash	1	165	90
	Southern armyworm	Fourth	Collards	1	84	100
	do.	Sixth	do.	1	145	97
Copper sulfelecarsenite	Australian cockroach	First	—	-	115	100
	Colorado potato beetle	Fourth	Eggplant	1	80	100
	Cross-striped cabbage worm	First	Collards	0	90	100
	do.	Fifth	do.	2	110	94
	Imported cabbage worm	First	do.	0	90	100
	Melon worm	Fifth	Squash	2	115	40
	Southern armyworm	First	Collards	0	90	100
	do.	Sixth	do.	1	75	100
Cupferron $C_6H_5N(NO)ONH_4$	Colorado potato beetle	Fourth	Eggplant	1	230	86
	Cross-striped cabbage worm	do.	Collards	0	140	70
	Diamondback moth	do.	do.	0	310	80
	Greenhouse leaf tier	do.	do.	1	540	80
	Hawaiian beet webworm	Fifth	Beet	1	310	12
	Melon worm	do.	Squash	0	310	16
	Southern armyworm	Fourth	Collards	2	310	0
	Southern beet webworm	Fifth	Beet	1	310	32

MONS 045329

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq.cm.	Percent
Di-o-aminophenyl disulfide $(NH_2C_6H_4S)_2$	Diamondback moth	Fourth	Collards	1	200	33
	Greenhouse leaf tier	do.	do.	3	355	0
	Hawaiian beet webworm	Fifth	Beet	1	200	40
	Southern armyworm	Fourth	Collards	2	195	0
	Southern beet webworm	Fifth	Beet	2	200	94
Dimethylhydroquinone $C_6H_2(OH)_2(C_5H_{11})_2$	American cockroach	3/4 grown	—	-	255	0
	Cross-striped cabbage worm	Fourth	Collards	1	75	13
	Diamondback moth	do.	do.	0	220	100
	Greenhouse leaf tier	Fifth	do.	3	220	0
	Hawaiian beet webworm	do.	Beet	2	220	68
	Imported cabbage worm	Fourth	Collards	2	75	76
	Melon worm	Fifth	Squash	1	360	12
	Southern armyworm	Fourth	Collards	3	355	0
	Southern beet webworm	Fifth	Beet	2	220	0
Diaminobenzene $C_6H_3(NH_2)_2$	Australian cockroach	First	—	-	155	100
	Cabbage looper	Fourth	Collards	2	170	50
	Colorado potato beetle	do.	Eggplant	1	195	100
	Cross-striped cabbage worm	do.	Collards	1	125	100
	Diamondback moth	do.	do.	0	230	100
	Fall webworm	Fifth	Pecan	3	110	(72) 57
	Greenhouse leaf tier	do.	Collards	2	230	30
	Hawaiian beet webworm	do.	Beet	1	230	100
	Melon worm	do.	Pumpkin	1	190	100
	Rice weevil	Adult	(Treated wheat)	-	1:1000	8
	Southern armyworm	Sixth	Collards	1	155	90
	Southern beet webworm	Fifth	Beet	1	230	80
	Termites	Adult	(Treated soil)	-	1:1000	14
	Yellow woolly bear	Fourth	Collards	1	435	96

MDNS 045330

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Microgram per sq.cm.	Percent
p-Dibromobenzene $C_6H_4Br_2$	American cockroach	First	—	-	340	100
	Colorado potato beetle	Fourth	Eggplant	0	125	100
	do.	do.	do.	0	Fumigation	100
	Cross-striped cabbage worm	do.	Collards	0	125	100
	Diamondback moth	do.	do.	0	495	100
	Fall webworm	Fifth	Pecan	0	255 (72)	97
	Greenhouse leaf tier	do.	Collards	3	495	0
	Hawaiian beet webworm	do.	Beet	0	310	100
	Rice weevil	Adult	(Treated wheat)	-	1:1000	61
	Southern armyworm	Sixth	Collards	0	139	100
	do.	do.	do.	1	Fumigation	100
	Southern beet webworm	Fifth	Beet	0	310	100
	Termites	Adult	(Treated soil)	-	1:1000	0
4,6-Dibromo-o-cresol $Br_2C_6H_2(CH_3)OH$	American cockroach	3/4 grown	—	-	570	90
	Cabbage webworm	Fourth	Collards	1	325	80
	Colorado potato beetle	do.	Eggplant	0	170	100
	Cow pea weevil	Adult	(Treated peas)	-	1:10,000	100
	Cross-striped cabbage worm	Fourth	Collards	0	110	100
	Diamondback moth	Third	do.	0	325	100
	Greenhouse leaf tier	Fourth	do.	0	325	100
	Hawaiian beet webworm	Fifth	Swiss chard	0	185	96
	Melon worm	Fourth	Squash	0	270	100
	Rice weevil	Adult	(Treated wheat)	-	1:1000	100
	Southern armyworm	Fourth	Collards	1	170	76
	Southern beet webworm	do.	Beet	0	325	96
	Termites	Adult	(Treated soil)	-	1:50,000 (72)	96
	Yellow woolly bear	Fourth	Collards	0	540	100
alpha-beta-Dibromoethylbenzene (styrene dibromide) $C_6H_5CHBrCH_2Br$	American cockroach	1/2 grown	—	-	370	8
	Cross-striped cabbage worm	First	Collards	0	170	100
	do.	Fifth	do.	0	200	100
	do.	Fourth	do.	2	Fumigation	85

MONS 045331

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq.cm.	Percent
alpha-beta-Dibromoethylbenzene (styrene dibromide) (Cont.)	Diamondback moth	Fourth	Collards	0	260	93
	Greenhouse leaf tier	do.	do.	0	310	80
	Hawaiian beet webworm	Fifth	Beet	0	260	24
	Imported cabbage worm	First	Collards	0	170	100
	Melon worm	Fifth	Squash	1	200	16
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	First	Collards	0	170	100
	do.	Third	do.	0	200	100
	do.	Sixth	do.	0	95	83
	Southern beet webworm	Fifth	Beet	0	260	48
	Termites	Adult	(Treated soil)	-	1:1000	100
	do.	do.	do.	-	1:5000	10
alpha,beta-Dibromo-beta-nitroethylbenzene $C_6H_5CHBrCH(Br)NO_2$	American cockroach	1/4 grown	—	-	680	100
	cabbage webworm	Third	Collards	0	230	92
	Cross-striped cabbage worm	Fourth	do.	1	155	97
	Diamondback moth	do.	do.	0	230	87
	Greenhouse leaf tier	Fifth	do.	1	230	30
	Hawaiian beet webworm	do.	Beet	0	230	96
	Melon worm	do.	Squash	0	425	76
	Rice weevil	Adult	(Treated wheat)	-	1:1000	100
	do.	do.	do.	-	1:10,000	60
	Southern armyworm	Fifth	Collards	1	250	83
	Southern beet webworm	do.	Beet	0	230	8
	Termites	Adult	(Treated soil)	-	1:1000	100
	do.	do.	do.	-	1:5000	40
	Yellow woolly bear	Fourth	Collards	0	620	100

MONS 045332

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq.cm.	Percent
2,6-Dibromo-4-nitrophenol $Br_2C_6H_2(NO_2)OH$	American cockroach	3/4 grown	—	-	770	(72) 36
	Diamondback moth	Fourth	Collards	0	590	100
	Greenhouse leaf tier	Fifth	do.	0	590	100
	Hawaiian beet webworm	do.	Beet	0	360	100
	Melon worm	Fourth	Pumpkin	0	355	100
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	Sixth	Collards	3	255	86
	Southern beet webworm	Fifth	Beet	0	360	100
	Termites	Adult	(Treated soil)	-	1:1000	71
	do.	do.	do.	-	1:3000	46
Dichloramine-T $CH_3C_6H_4SO_2NCl_2$	Cross-striped cabbage worm	First	Collards	0	170	70
	Southern armyworm	do.	do.	0	170	97
3,4-Dichloroacetophenone $Cl_2C_6H_3COCH_3$	American cockroach	3/4 grown	—	-	415	29
	Cabbage looper	Fourth	Collards	3	140	0
	Colorado potato beetle	do.	Eggplant	1	210	100
	Cross-striped cabbage worm	do.	Collards	0	185	94
	Greenhouse leaf tier	Fifth	do.	3	340	0
	Hawaiian beet webworm	do.	Beet	2	210	56
	Melon worm	Fourth	Squash	1	185	88
	Rice weevil	Adult	(Treated wheat)	-	1:1000	16
	Southern armyworm	Fourth	Collards	1	140	50
	Southern beet webworm	do.	Beet	1	140	90
	Termites	Adult	(Treated soil)	-	1:10,000	100
	Yellow woolly bear	Fourth	Collards	1	465	96
p,omega-Dichloroacetophenone $ClC_6H_4COCH_2Cl$	Cabbage looper	First	Collards	0	155	100
	Cross-striped cabbage worm	Third	do.	0	155	66
	Southern armyworm	First	do.	0	124	100
	do.	Third	do.	1	155	43
	do.	Sixth	do.	3	235	0
2,5-Dichloroaniline $Cl_2C_6H_3NH_2$	Colorado potato beetle	Fourth	Eggplant	0	200	100
	do.	do.	do.	0	Fumigation	100
	Cross-striped cabbage worm	do.	Collards	0	200	100
	do.	do.	do.	1	Fumigation	100

MONS 045333

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
2,5-Dichloroaniline (Cont.)	Diamondback moth	Fourth	Collards	0	415	100
	do.	do.	do.	0	Fumigation	97
	Greenhouse leaf tier	Fifth	do.	0	415	100
	do.	do.	do.	0	Fumigation	97
	Hawaiian beet webworm	do.	Beet	0	230	100
	Melon worm	Fourth	do.	0	Fumigation	100
	Rice weevil	Adult	(Treated wheat)	-	1:1000	100
	do.	do.	do.	-	1:5000	10
	Southern armyworm	Sixth	Collards	1	194	97
	do.	do.	do.	2	Fumigation	100
	Southern beet webworm	Fifth	Beet	0	230	100
	Termites	Adult	(Treated soil)	-	1:5000	100
	do.	do.	do.	-	1:10,000	52
	do.	do.	do.	-	1:25,000 (72)	42
9,9-Dichlorofluorene $C_6H_4CCl_2C_6H_4$	Cross-striped cabbage worm	First	Collards	0	70	100
	Imported cabbage worm	do.	do.	0	70	100
	Southern armyworm	do.	do.	0	70	100
	do.	Third	do.	1	70	40
2,6-Dichloro-4-nitroaniline $Cl_2C_6H_2(NO_2)NH_2$	Bean leaf roller	First	Bean	0	93	4
	Cabbage looper	do.	Collards	0	95	100
	Cross-striped cabbage worm	do.	do.	0	95	100
	do.	Third	do.	1	124	36
	Diamondback moth	Fourth	do.	1	215	90
	Greenhouse leaf tier	Fifth	do.	2	200	10
	Hawaiian beet webworm	do.	Beet	3	215	0
	Melon worm	Fourth	Pumpkin	3	450	20
	Southern armyworm	First	Collards	0	95	100
	do.	Third	do.	1	124	26
	Southern beet webworm	Fifth	Beet	3	215	16

MONS 045334

Table 2.--(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq.cm.	Percent
4-(2,5-Dichlorophenylazo)-o-cresol $Cl_2C_6H_3N:NC_6H_3(CH_3)OH$	Cabbage looper	First	Collards	2	170	30
	Cross-striped cabbage worm	Fourth	do.	0	55	80
	Diamondback moth	First	Turnip	2	75	60
	Imported cabbage worm	do.	Collards	1	170	63
	Southern armyworm	do.	do.	0	90	100
	do.	Third	do.	3	170	3
2,6-Dichloro-4-nitrophenol $Cl_2C_6H_2(NO_2)OH$	American cockroach	3/4 grown	—	-	1130	100
	Cowpea weevil	Adult	(Treated peas)	-	1:10,000	100
	Greenhouse leaf tier	Fourth	Collards	0	310	100
	Hawaiian beet webworm	Fifth	Beet	0	385	96
	Melon worm	Fourth	Squash	0	385	100
	Rice weevil	Adult	(Treated wheat)	-	1:200	100
	do.	do.	do.	-	1:1000	76
	Southern armyworm	Third	Collards	0	310	100
	Southern beet webworm	Fourth	Beets	0	310	100
	Termites	Adult	(Treated soil)	-	1:200 (2)	100
	do.	do.	do.	-	1:1000 (3)	100
	do.	do.	do.	-	1:5000	14
p,p'-Difluorodiphenyl $FC_6H_4C_6H_4F$	Cabbage looper	First	Turnip	0	90	100
	Cabbage webworm	do.	do.	0	90	100
	Cross-striped cabbage worm	do.	do.	0	90	100
	do.	Fourth	Collards	0	170	100
	do.	do.	do.	1	Fumigation	100
	Diamondback moth	First	Turnip	0	75	100
	do.	Fourth	Collards	0	185	100
	Greenhouse leaf tier	Fifth	do.	2	185	10
	Hawaiian beet webworm	do.	Beet	0	380	100
	Melon worm	Fourth	Squash	0	325	100
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	First	Turnip	0	75	100
	do.	Sixth	Collards	1	280	33
	do.	Fourth	do.	1	Fumigation	77
	Southern beet webworm	Fifth	Beet	0	380	96

MONS 045335

Table.2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq.cm.	Percent
2,3-Dihydro-5,6-diphenyl-pyrazine $C_6H_5CH{=}N{-}CH_2{-}CH_2{-}N{=}CC_6H_5$	Bean leaf roller	First	Bean	0	93	(72) 100
	Cabbage looper	do.	Collards	0	95	98
	Cross-striped cabbage worm	do.	do.	0	150	100
	do.	Third	do.	1	95	0
	Southern armyworm	First	do.	0	150	100
	do.	Third	do.	2	95	0
3,5-Diiodosalicylic acid $I_2C_6H_2(OH)COOH$	Bean leaf roller	First	Bean	0	155	35
	Cabbage looper	do.	Collards	0	155	100
	Cross-striped cabbage worm	do.	do.	0	110	100
	do.	Third	do.	0	75	66
	Greenhouse leaf tier	Fifth	do.	2	325	3
	Melon worm	do.	Squash	2	260	19
	Southern armyworm	First	Collards	0	110	100
	do.	Third	do.	1	75	14
	Southern beet webworm	Fifth	Swiss chard	1	310	63
5,5-Dimethylacridan $C_6H_4C(CH_3)_2C_6H_4NH$	Colorado potato beetle	Fourth	Eggplant	1	110	80
	Cabbage looper	First	Turnip	1	75	46
	Cabbage webworm	do.	do.	1	75	38
	Cross-striped cabbage worm	do.	Collards	0	70	100
	do.	Second	do.	1	70	93
	do.	Third	do.	1	70	46
	do.	Fourth	do.	3	295	0
	Diamondback moth	do.	do.	1	295	100
	Greenhouse leaf tier	Fifth	do.	3	295	0
	Hawaiian beet webworm	do.	Beet	2	310	60
	Melonworm	do.	Squash	2	275	16
	Southern armyworm	First	Collards	1	95	90
	do.	Third	do.	2	85	10
	Southern beet webworm	Fifth	Beet	2	310	12
	Termites	Adult	(Treated soil)	-	1:1000	16
	do.	do.	do.	-	1:3000	0

MONS 045336

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
beta,beta'-Dinaphthol $HOC_{10}H_6C_{10}H_6OH$	Southern armyworm	Sixth	Collards	3	185	63
2,4-Dinitroanisole $CH_3OC_6H_3(NO_2)_2$	Hawaiian beet webworm	Fifth	Swiss chard	2	435	64
	Melon worm	Fourth	Pumpkin	2	250	20
	Southern armyworm	do.	Collards	2	185	9
	Southern beet webworm	Fifth	Swiss chard	1	385	97
m-Dinitrobenzene $C_6H_4(NO_2)_2$	American cockroach	3/4 grown	—	-	310	58
	Hawaiian beet webworm	Fifth	Beet	1	380	60
	Melon worm	Fourth	Squash	1	380	89
	Rice weevil	Adult	(Treated wheat)	-	1:200	100
	do.	do.	do.	-	1:1000	88
	Southern armyworm	First	Collards	0	170	100
	do.	Third	do.	3	60	60
	do.	Fifth	do.	3	60	0
	Southern beet webworm	do.	Beet	1	380	76
	Termites	Adult	(Treated soil)	-	1:1000	100
	do.	do.	do.	-	1:3000	84
	do.	do.	do.	-	1:5000	27
	do.	do.	do.	-	1:10,000	0
	Yellow woolly bear	Fourth	Collards	0	280	100
p-Dinitrobenzene $C_6H_4(NO_2)_2$	Cabbage looper	Second	Turnip	1	75	65
	do.	Third	do.	2	75	11
	do.	Fourth	do.	3	75	0
	Cabbage webworm	First	do.	1	75	9
	Cross-striped cabbage worm	do.	do.	1	75	100
	Diamond-back moth	do.	do.	1	75	100
	Southern armyworm	do.	do.	0	75	100
	do.	Second	do.	1	75	25
	do.	Fourth	do.	2	75	0

MONS 045337

Table 2.— (Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
4,6-Dinitro-o-cresol $(NO_2)_2C_6H_2(CH_3)OH$	American cockroach	First	—	-	188	(1/4) 100
	Colorado potato beetle	Fourth	Egg plant	0	230	100
	Cowpea weevil	Adult	(Treated peas)	-	1:5000	100
	do.	do.	do.	-	1:10,000	100
	Cross-striped cabbage worm	Fourth	Collards	0	250	100
	Diamondback moth	do.	do.	1	200	100
	Greenhouse leaf tier	Fifth	do.	0	200	87
	Hawaiian beet webworm	do.	Beet	0	350	100
	Imported cabbage worm	Fourth	Collards	0	230	88
	Melon worm	Fifth	Squash	0	175	100
	Rice weevil	Adult	(Treated wheat)	-	1:200	100
	Southern armyworm	Sixth	Collards	1	150	87
	Southern beet webworm	Fourth	Beet	0	310	100
	Termites	Adult	(Treated soil)	-	1:40,000	(16) 100
	do.	do.	do.	-	1:100,000	86
4,6-Dinitro-o-cresol acetate $(NO_2)_2C_6H_2(CH_3)OOCH_3$	American cockroach	3/4 grown	—	-	465	86
	Hawaiian beet webworm	Fifth	Beet	0	340	100
	Melon worm	Fourth	Squash	0	340	100
	Rice weevil	Adult	—	-	1:1000	0
	Southern beet webworm	Fifth	Beet	1	340	100
	Termites	Adult	(Treated soil)	-	1:5000	100
	do.	do.	do.	-	1:10,000	18
	Yellow woolly bear	Fourth	Collards	1	390	96
2,4-Dinitro-6-cyclohexyl phenol $C_6H_{11}C_6H_2(NO_2)_2OH$	Southern armyworm	Fifth	Collards	0	270	100
	Termites	Adult	(Treated soil)	-	1:1000	100
	do.	do.	do.	-	1:10,000	66

MONS 045338

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
2,4-Dinitrophenol $(NO_2)_2C_6H_3OH$	American cockroach	3/4 grown	—	-	525	100
	Australian cockroach	First	—	-	170	100
	Diamondback moth	Fourth	Collards	0	215	100
	Greenhouse leaf tier	Fifth	do.	1	265	33
	Hawaiian beet webworm	do.	Beet	0	215	100
	Melon worm	Fourth	Pumpkin	0	170	100
	Rice weevil	Adult	(Treated wheat)	-	1:1000	92
	Southern armyworm	First	Collards	0	230	100
	do.	Fifth	do.	1	230	100
	Southern beet webworm	do.	Beet	1	215	72
	Termites	Adult	(Treated soil)	-	1:1000	100
	do.	do.	do.	-	1:3000	97
	do.	do.	do.	-	1:5000	(72) 43
2,4-Dinitrophenol acetate $CH_3OO_2C_6H_3(NO_2)_2$	Hawaiian beet webworm	Fifth	Swiss chard	2	200	88
	Melon worm	Fourth	Pumpkin	0	420	100
	Southern armyworm	do.	Collards	0	325	100
	Southern beet webworm	Fifth	Swiss chard	1	510	97
	Termites	Adult	(Treated soil)	-	1:10,000	(24) 100
	do.	do.	do.	-	1:25,000	(72) 68
	Yellow woolly bear	Fourth	Collards	0	440	100
2,4-Dinitro-6-phenylphenol $(NO_2)_2C_6H_2(C_6H_5)OH$	Southern armyworm	Fifth	Collards	0	310	100
	do.	Sixth	do.	0	250	100
1,4-Dinitrosopiperazine $OHN(CH_2CH_2)_2NHO$	Cabbage webworm	Fourth	Collards	2	270	12
	Colorado potato beetle	do.	Eggplant	2	140	100
	Cross-striped cabbage worm	do.	Collards	1	190	93
	Diamondback moth	Third	do.	0	270	33
	Greenhouse leaf tier	Fourth	do.	1	270	100
	Hawaiian beet webworm	Fifth	Swiss chard	2	200	52
	Melon worm	Fourth	Squash	1	260	0
	Rice weevil	Adult	(Treated wheat)	-	1:1000	4
	Southern armyworm	Third	Collards	3	140	0

MONS 045339

Table 2.--(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
1,4-Dinitrosopiperazine (Cont.)	Southern beet webworm	Fourth	Beet	2	270	68
	Termites	Adult	(Treated soil)	-	1:1000	11
	do.	do.	do.	-	1:5000	0
Dinitrosoresorcinol $C_6H_2(NO)_2(OH)_2$	American cockroach	3/4 grown	—	-	480	0
	Hawaiian beet webworm	Fifth	Swiss chard	2	200	20
	Melon worm	Fourth	Squash	2	200	57
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	Fifth	Collards	1	225	0
	Southern beet webworm	Fourth	Swiss chard	2	200	16
	Termites	Adult	—	-	1:1000	0
2,4-Dinitrotoluene $(NO_2)_2C_6H_3CH_3$	American cockroach	3/4 grown	—	-	510	15
	Colorado potato beetle	Fourth	Eggplant	0	110	100
	Cross-striped cabbage worm	First	Collards	0	75	100
	do.	Third	do.	1	110	66
	do.	Fourth	do.	2	355	7
	Greenhouse leaf tier	Fifth	do.	2	310	0
	Hawaiian beet webworm	do.	Beet	2	155	4
	Melon worm	do.	Squash	1	310	10
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	First	Collards	0	75	100
	do.	Third	do.	2	110	10
	Southern beet webworm	Fourth	Beet	1	350	40
	Termites	Adult	(Treated soil)	-	1:1000	100
	do.	do.	do.	-	1:5000	22
Diphenyl $C_6H_5C_6H_5$	American cockroach	First	—	-	70	100
	do.	3/4 grown	—	-	290	53
	Cross-striped cabbage worm	Fourth	Collards	1	230	66
	Diamondback moth	do.	do.	0	310	100
	Greenhouse leaf tier	Fifth	do.	3	310	0
	Hawaiian beet webworm	do.	Beet	1	310	60
	Melon worm	Fourth	Squash	0	230	81

MONS 045340

Table 2.--(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
Diphenyl (Cont.)	Rice weevil	Adult	(Treated wheat)	-	1:1000	8
	Southern armyworm	Third	Collards	0	100	100
	do.	Sixth	do.	2	350	87
	Southern beet webworm	Fifth	Beet	0	310	88
	do.	Fourth	Swiss chard	1	Fumigation	97
	Termites	Adult	—	-	1:1000	11
	do.	do.	—	-	1:5000	3
Diphenylamine $C_6H_5NHC_6H_5$	American cockroach	3/4 grown	—	-	640	40
	Termites	Adult	(Treated soil)	-	1:3000	100
	do.	do.	do.	-	1:5000	25
Diphenylene oxide $C_6H_4OC_6H_4$	Southern armyworm	Sixth	Collards	1	290	93
Diphenylene sulfide $C_6H_4SC_6H_4$	do.	Sixth	do.	3	185	73
1,4-Diphenylsemicarbazide $C_6H_5NHNHCONHC_6H_5$	American cockroach	3/4 grown	—	-	265	0
	Cabbage looper	Fourth	Collards	3	125	0
	Colorado potato beetle	do.	Eggplant	1	140	3
	Cross-striped cabbage worm	do.	Collards	3	125	0
	Diamondback moth	do.	do.	1	170	30
	Greenhouse leaf tier	Fifth	do.	1	170	80
	Hawaiian beet webworm	do.	Beet	1	170	52
	Imported cabbage worm	do.	Collards	3	355	0
	Melon worm	do.	Squash	2	115	16
	Rice weevil	Adult	—	-	1:1000	8
	Southern armyworm	Fifth	Collards	1	140	83
	Southern beet webworm	do.	Beet	2	170	100
	Termites	Adult	—	-	1:1000	0
	Yellow woolly bear	Fourth	Collards	1	200	84

MDNS 045341

Table 2.--(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq.cm.	Percent
Fluorene $C_6H_4CH_2C_6H_4$	American cockroach	First	—	-	110	100
	Cross-striped cabbage worm	Fourth	Collards	3	95	0
	Southern armyworm	Third	do.	0	95	100
	do.	Sixth	do.	3	100	0
2-Fluorenol $C_6H_4CH_2C_6H_3OH$	American cockroach	3/4 grown	—	-	215	0
	Cross-striped cabbage worm	Fourth	Collards	2	310	0
	Diamondback moth	do.	do.	1	170	83
	Greenhouse leaf tier	Fifth	do.	2	170	63
	Hawaiian beet webworm	do.	Beet	1	230	48
	Melon worm	Fourth	Squash	2	310	6
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	Fourth	Collards	2	200	0
	Southern beet webworm	Fifth	Beet	1	230	40
	Termites	Adult	(Treated soil)	-	1:1000	3
9-Fluorenone $C_6H_4CO C_6H_4$	Cowpea weevil	Adult	(Treated peas)	-	1:1000	7
	Cross-striped cabbage worm	First	Collards	0	75	100
	do.	Second	do.	0	75	100
	do.	Third	do.	2	75	60
	Greenhouse leaf tier	Fifth	do.	2	250	3
	Melon worm	Fourth	Squash	0	255	100
	do.	do.	do.	2	Fumigation	80
	Rice weevil	Adult	(Treated wheat)	-	1:200	68
	do.	do.	do.	-	1:1000	48
	Southern armyworm	First	Collards	0	75	100
	do.	Second	do.	1	75	72
	do.	Third	do.	2	75	36
	Southern beet webworm	Fourth	Beet	0	155	100
	do.	Fifth	do.	1	Fumigation	92
	Termites	Adult	(Treated soil)	-	1:200	100
	do.	do.	do.	-	1:5000	73
	do.	do.	do.	-	1:10,000 (72)	6

MDNS 045342

Table 2.--(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
p-Fluoroacetanilide $CH_3CONHC_6H_4F$	American cockroach	3/4 grown	—	-	620	0
	Cross-striped cabbage worm	Fourth	Collards	3	890	0
	Diamondback moth	do.	do.	1	155	17
	Greenhouse leaf tier	Fifth	do.	3	155	0
	Hawaiian beet webworm	do.	Swiss chard	2	340	69
	Melon worm	Fourth	Squash	3	250	0
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	Fifth	Collards	3	325	63
	Southern beet webworm	Fourth	Swiss chard	1	340	60
	Termites	Adult	(Treated soil)	-	1:1000 (72)	100
	do.	do.	do.	-	1:3000 (72)	73
	do.	do.	do.	-	1:5000 (72)	28
p-Fluorodiphenyl $FC_6H_4C_6H_5$	American cockroach	3/4 grown	—	-	310	0
	Cross-striped cabbage worm	Fourth	Collards	1	185	26
	Diamondback moth	do.	do.	0	310	100
	Greenhouse leaf tier	Fifth	do.	2	310	10
	Hawaiian beet webworm	do.	Beet	1	295	52
	Melon worm	Fourth	Squash	0	185	78
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	Sixth	Collards	1	175	77
	Southern beet webworm	Fifth	Beet	0	295	100
	Termites	Adult	(Treated soil)	-	1:1000	23
	do.	do.	do.	-	1:3000	3
	Yellow woolly bear	Fourth	Collards	0	310	100
2-Fluorylamine $C_6H_4CH_2C_6H_3NH_2$	American cockroach	1/4 grown	—	-	310	8
	do.	3/4 grown	—	-	75	0
	Cabbage looper	Fourth	Collards	3	100	0
	Colorado potato beetle	do.	Potato	2	125	7
	Cross-striped cabbage worm	do.	Collards	2	140	50
	Diamondback moth	do.	do.	1	125	93
	Greenhouse leaf tier	do.	do.	2	385	27

HONS 045343

Table 2.--(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq.cm.	Percent
2-Fluorylamine (Cont.)	Hawaiian beet webworm	Fifth	Swiss chard	2	155	37
	Melon worm	Fourth	Squash	1	185	75
	Rice weevil	Adult	(Treated wheat)	-	1:1000	12
	Southern armyworm	First	Collards	0	80	100
	do.	Fourth	do.	1	240	100
	do.	Sixth	do.	1	217	10
	Southern beet webworm	Fourth	Swiss chard	3	155	28
	Termites	Adult	(Treated soil)	-	1:1000	18
	do.	do.	do.	-	1:2000	15
	do.	do.	do.	-	1:3000	0
	Yellow woolly bear	Sixth	Collards	3	125	0
alpha-Furfuraldoxime (C_4H_3O)CH(NOH)	Cabbage webworm	Third	Collards	1	400	68
	Cross-striped cabbage worm	Fourth	do.	1	260	87
	Diamondback moth	do.	do.	0	400	20
	Greenhouse leaf tier	Fifth	do.	2	400	10
	Hawaiian beet webworm	do.	Beet	1	400	65
	Melon worm	Fourth	Squash	1	260	26
	Southern armyworm	do.	Collards	3	230	0
	Southern beet webworm	Fifth	Beet	2	400	8
beta-Furfuraldoxime (C_4H_3O)CH(NOH)	Cabbage webworm	Third	Collards	0	240	68
	Cross-striped cabbage worm	Fourth	do.	1	260	100
	Diamondback moth	do.	do.	3	240	0
	Greenhouse leaf tier	Fifth	do.	3	240	0
	Hawaiian beet webworm	do.	Beet	1	240	68
	Melon worm	Fourth	Squash	0	370	100
	Southern armyworm	do.	Collards	2	340	0
	Southern beet webworm	Fifth	Beet	2	240	44

MONS 0453444

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
Glycine NH_2CH_2COOH	Colorado potato beetle	Fourth	Eggplant	2	170	86
	Cross-striped cabbage worm	do.	Collards	3	170	0
Hexachloroethane Cl_3CCCl_3	Southern armyworm	Sixth	Collards	3	46	0
	do.	do.	do.	0	Fumigation	100
Hexachlorophenol C_6Cl_6O	American cockroach	3/4 grown	—	-	745	100
	Diamondback moth	Fourth	Collards	0	220	100
	Greenhouse leaf tier	Fifth	do.	0	220	100
	Hawaiian beet webworm	do.	Beet	0	220	100
	Melon worm	Fourth	Squash	0	310	100
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	Sixth	Collards	0	260	100
	Southern beet webworm	Fifth	Beet	0	220	100
	Termites	Adult	(Treated soil)	-	1:1000 (24)	100
	do.	do.	do.	-	1:3000 (24)	100
	do.	do.	do.	-	1:5000	100
	do.	do.	do.	-	1:10,000	48
	do.	do.	do.	-	1:20,000	12
	Yellow woolly bear	Fourth	Collards	0	545	100
Hydrazobenzene $C_6H_5NHNHC_6H_5$	Colorado potato beetle	Fourth	Eggplant	0	250	100
	do.	do.	do.	2	Fumigation	85
	Cross-striped cabbage worm	do.	Collards	2	250	66
	Diamondback moth	do.	do.	1	215	90
	Fall webworm	Fifth	Pecan	2	260	0
	Greenhouse leaf tier	do.	Collards	3	215	0
	Hawaiian beet webworm	do.	Beet	0	350	100
	Melon worm	Fourth	Squash	0	250	41
	Southern armyworm	Third	Collards	0	205	100
	do.	Sixth	do.	2	194	84
	Southern beet webworm	Fifth	Beet	0	350	88

MONS 045345

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq.cm.	Percent
3-Hydroxy-2-naphthoic acid $C_{10}H_6(OH)COOH$	American cockroach	3/4 grown	—	-	680	10
	Colorado potato beetle	Fourth	Eggplant	0	130	40
	Cross-striped cabbage worm	First	Collards	0	215	100
	do.	Fourth	do.	1	130	100
	Diamondback moth	do.	do.	0	230	93
	Greenhouse leaf tier	Fifth	do.	2	240	7
	Hawaiian beet webworm	do.	Beet	2	230	8
	Imported cabbage worm	First	Collards	0	215	100
	Melon worm	Fifth	Squash	2	230	0
	Rice weevil	Adult	(Treated wheat)	-	1:1000	3
	Southern armyworm	First	Collards	1	215	78
	do.	Fourth	do.	2	215	17
	Southern beet webworm	Fifth	Beet	2	230	48
	Termites	Adult	(Treated soil)	-	1:1000	15
Indole $C_6H_4CH:CHNH$	American cockroach	3/4 grown	—	-	140	9
	Cabbage webworm	Fourth	Collards	0	200	96
	Colorado potato beetle	do.	Eggplant	0	185	100
	do.	do.	do.	1	Fumigation (24)	100
	Cross-striped cabbage worm	do.	Collards	0	70	100
	do.	do.	do.	2	Fumigation	100
	Diamondback moth	Third	do.	0	200	100
	Greenhouse leaf tier	Fourth	do.	0	200	93
	Rice weevil	Adult	(Treated wheat)	-	1:10,000	100
	Southern armyworm	Fourth	Collards	1	185	96
	do.	do.	do.	2	Fumigation	100
	Southern beet webworm	do.	Beet	3	200	0
	Termites	Adult	(Treated soil)	-	1:5000 (24)	100
	do.	do.	do.	-	1:10,000	45

MONS 045346

Table 2.--(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
o-Iodoaniline $IC_6H_4NH_2$	Cabbage webworm	Fourth	Collards	1	310	88
	Colorado potato beetle	do.	Eggplant	0	200	100
	do.	do.	do.	0	Fumigation (24)	100
	Cross-striped cabbage worm	do.	Collards	0	70	100
	do.	do.	do.	1	Fumigation	100
	Diamondback moth	Third	do.	0	310	100
	Greenhouse leaf tier	Fourth	do.	0	310	100
	Melon worm	do.	Squash	0	230	100
	do.	do.	do.	2	Fumigation	94
	Rice weevil	Adult	(Treated wheat)	-	1:1000	28
	Southern armyworm	Fourth	Collards	2	200	74
	do.	do.	do.	2	Fumigation	100
	Southern beet webworm	do.	Beet	0	310	100
	Termites	Adult	(Treated soil)	-	1:1000	100
	do.	do.	do.	-	1:5000	23
p-Iodoaniline $IC_6H_4NH_2$	Cross-striped cabbage worm	Fourth	Collards	3	200	33
	Diamondback moth	do.	do.	0	295	100
	Greenhouse leaf tier	Fifth	do.	2	295	17
	Hawaiian beet webworm	do.	Beet	2	280	48
	Melon worm	do.	Squash	1	215	33
	Southern armyworm	Fourth	Collards	0	310	87
	Southern beet webworm	Fifth	Beet	1	280	60
p-Iodoazobenzene $C_6H_5NNC_6H_4I$	Cabbage looper	First	Turnip	1	30	60
	Cabbage webworm	do.	do.	3	30	15
	Cross-striped cabbage worm	do.	do.	1	30	91
	do.	Fourth	Collards	3	155	0
	Diamondback moth	do.	do.	2	310	40
	Greenhouse leaf tier	Fifth	do.	3	310	0
	Hawaiian beet webworm	do.	Beet	3	170	0
	Imported cabbage worm	Fourth	Collards	1	45	90
	Melon worm	do.	Squash	3	155	29
	Southern armyworm	First	Turnip	1	62	100

MONS 045347

Table 2.--(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit		Kill after 48 hours[3]
					Micrograms per sq.cm.		Percent
p-Iodoazobenzene (Cont.)	Southern armyworm	Second	Collards	1	45		69
	do.	Third	do.	2	45		10
	Southern beet webworm	Fifth	Beet	3	170		0
p-Iodo-n-dimethylaniline $IC_6H_4N(CH_3)_2$	Cross-striped cabbage worm	First	Collards	0	170		100
	Southern armyworm	do.	do.	0	170		100
	do.	Sixth	do.	3	110		13
b-Iodonaphthalene $C_{10}H_7I$	American cockroach	3/4 grown	—	-	660	(72)	100
	Diamondback moth	Fourth	Collards	0	310		100
	Greenhouse leaf tier	Fifth	do.	3	310		3
	Hawaiian beet webworm	do.	Beet	2	340		40
	Melon worm	Third	Squash	1	330		80
	do.	Fourth	do.	2	Fumigation		60
	Rice weevil	Adult	(Treated wheat)	-	1:1000		11
	Southern armyworm	Fifth	Collards	0	295		90
	Southern beet webworm	do.	Beet	1	340		68
	Termites	Agult	(Treated soil)	-	1:1000		100
	do.	do.	do.	-	1:5000		76
	do.	do.	do.	-	1:10,000		20
	Yellow woolly bear	Fourth	Collards	2	590		84
o-Iodonitrobenzene $IC_6H_4NO_2$	Cross-striped cabbage worm	Fourth	Collards	1	Fumigation		100
	Diamondback moth	do.	do.	0	295		100
	do.	do.	do.	1	Fumigation		100
	Greenhouse leaf tier	Fifth	do.	0	295		37
	do.	do.	do.	3	Fumigation		0
	Rice weevil	Adult	(Treated wheat)	-	1:1000		96
	do.	do.	do.	-	1:10,000		34
	Termites	do.	(Treated soil)	-	1:1000	(24)	100
	do.	do.	do.	-	1:5000		91
	do.	do.	do.	-	1:20,000		4

MDNS 045348

Table 2.--(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq.cm.	Percent
2-Iodo-1-nitronaphthalene $IC_{10}H_6NO_2$	American cockroach	3/4 grown	—	-	480	9
	Diamondback moth	Fourth	Collards	1	450	90
	Greenhouse leaf tier	do.	do.	2	565	13
	Hawaiian beet webworm	Fifth	Beet	3	450	40
	Melon worm	Fourth	Pumpkin	2	385	48
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	Fourth	Collards	1	465	73
	do.	Sixth	do.	3	200	7
	Southern beet webworm	Fifth	Beet	3	450	16
	Termites	Adult	(Treated soil)	-	1:1000	3
	Yellow woolly bear	Fourth	Collards	3	575	12
o-Iodosonitrobenzene $C_6H_4(NO_2)IO$	American cockroach	3/4 grown	—	-	895	70
	Colorado potato beetle	Fourth	Potato	0	340	100
	Diamondback moth	do.	Collards	0	340	100
	Greenhouse leaf tier	Fifth	do.	1	340	73
	Hawaiian beet webworm	do.	Swiss chard	0	340	92
	Melon worm	Fourth	Squash	1	340	80
	Rice weevil	Adult	(Treated wheat)	-	1:1000	78
	do.	do.	do.	-	1:10,000	24
	Southern armyworm	Fourth	Collards	0	340	100
	Southern beet webworm	do.	Swiss chard	1	340	100
	Termites	Adult	(Treated soil)	-	1:1000	(24) 100
	do.	do.	do.	-	1:5000	0
	Yellow woolly bear	Sixth	Collards	1	340	77
Iodoxybenzene $C_6H_5IO_2$	American cockroach	3/4 grown	—	-	420	10
	Cabbage looper	Fourth	Collards	2	215	13
	Cross-striped cabbage worm	First	do.	0	170	98
	do.	Third	do.	1	170	46
	do.	Fifth	do.	3	170	0
	Greenhouse leaf tier	do.	do.	1	420	0
	Hawaiian beet webworm	Fourth	Beet	0	280	36
	Imported cabbage worm	First	Collards	0	170	100

MONS 045349

Table 2.--(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
Iodoxybenzene (Cont.)	Melon worm	Fourth	Squash	1	185	30
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	First	Collards	0	170	98
	do.	Third	do.	1	170	0
	Southern beet webworm	Fourth	Beet	1	280	16
	Termites	Adult	(Treated soil)	-	1:1000	0
N-(1-Mercaptobenzothiazyl)-methylaniline $[C_6H_4SCSN]CH_2NHC_6H_5$	Cross-striped cabbage worm	Fourth	Collards	2	245	33
	Diamondback moth	do.	do.	2	185	13
	Greenhouse leaf tier	Fifth	do.	3	185	8
	Hawaiian beet webworm	do.	Beet	3	280	0
	Southern armyworm	do.	Collards	2	345	67
	Southern beet webworm	do.	Beet	3	280	0
2-Mercapto-3-phenylbenzimidazole $C_6H_5N[C_6H_4NH]CO:S$	Hawaiian beet webworm	Fifth	Beet	1	280	92
	Southern armyworm	do.	Collards	1	230	70
	Southern beet webworm	do.	Beet	0	280	100
p-Methoxydiphenyl $C_6H_5C_6H_4OCH_3$	Cabbage looper	First	Collards	0	115	100
	Cross-striped cabbage worm	Third	do.	1	115	16
	Southern armyworm	First	do.	0	105	100
	do.	Third	do.	2	115	27
N-Methyl-m-acetotoluide $CH_3C_6H_4N(CH_3)COCH_3$	American cockroach	3/4 grown	---	-	340	0
	Cabbage webworm	Fourth	Collards	3	215	4
	Colorado potato beetle	do.	Potato	0	110	97
	Cross-striped cabbage worm	do.	Collards	1	170	66
	Diamondback moth	Third	do.	1	215	100
	Greenhouse leaf tier	Fourth	do.	2	215	0
	Hawaiian beet webworm	Fifth	Swiss chard	3	185	0
	Melon worm	Fourth	Squash	2	170	16
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	Third	Collards	3	280	0
	Southern beet webworm	Fourth	Beet	1	215	4

MONS 045350

Table 2.--(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
N-Methyl-m-acetotoluide (Cont.)	Termites	Adult	(Treated soil)	-	1:1000	100
	do.	do.	do.		1:5000	3
N-Methyl-p-acetotoluide $CH_3C_6H_4N(CH_3)OCCH_3$	American cockroach	3/4 grown	—	-	265	0
	Cabbage webworm	Fourth	Collards	3	200	0
	Colorado potato beetle	do.	Potato	1	130	73
	Cross-striped cabbage worm	do.	Collards	1	260	72
	Diamondback moth	Third	do.	1	200	87
	Greenhouse leaf tier	Fourth	do.	2	200	20
	Hawaiian beet webworm	Fifth	Swiss chard	3	185	12
	Melon worm	Fourth	Squash	1	280	42
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	Fourth	Collards	3	325	0
	Southern beet webworm	do.	Beet	3	200	0
	Termites	Adult	(Treated soil)	-	1:1000	84
	do.	do.	do.	-	1:5000	24
2-Methylbenzimidazole $HC_6H_4NHCCH_3$	American cockroach	First	—	-	155	85
	Colorado potato beetle	Fourth	Eggplant	2	80	13
	Cross-striped cabbage worm	do.	Collards	2	230	64
	Hawaiian beet webworm	Fifth	Swiss chard	2	280	8
	Melon worm	Fourth	Squash	2	230	0
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	Fourth	Collards	3	190	0
	Southern beet webworm	do.	Swiss chard	3	280	15
	Termites	Adult	(Treated soil)	-	1:1000	(72) 54
p-Methylhydrazobenzene $C_6H_5NHNHC_6H_4CH_3$	Colorado potato beetle	Fourth	Eggplant	2	230	10
	Diamondback moth	do.	Collards	1	185	50
	Fall webworm	Fifth	Pecan	3	140	0
	Greenhouse leaf tier	do.	Collards	3	185	0
	Hawaiian beet webworm	Fourth	Beet	2	185	64
	Melon worm	do.	Squash	2	230	80
	do.	Fifth	do.	2	215	40
	Southern armyworm	Fourth	Collards	2	140	0
	Southern beet webworm	Fifth	Beet	2	185	76

MDNS 045351

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq.cm.	Percent
6-Methylphenothiazine $SC_6H_4NHC_6H_3CH_3$	Southern armyworm	Second	Collards	2	195	86
N-Methylthiopyridon $S{:}C_5H_4NCH_3$	Southern armyworm	Second	Collards	0	250	94
	do.	Sixth	do.	2	175	3
1-Naphthol $C_{10}H_7OH$	American cockroach	3/4 grown	—	-	0.25 gm.	50
	Cross-striped cabbage worm	Fourth	Collards	2	295	21
	Diamondback moth	do.	do.	1	310	57
	Greenhouse leaf tier	Fifth	do.	2	310	17
	Hawaiian beet webworm	do.	Beet	1	310	8
	Melon worm	Fourth	Squash	1	295	32
	Southern armyworm	First	Collards	0	130	98
	do.	Sixth	do.	2	310	33
	Southern beet webworm	Fifth	Beet	1	310	88
alpha-Naphthyl isothiocyanate $C_{10}H_7NCS$	Cross-striped cabbage worm	Fourth	Collards	2	125	100
	Fall webworm	Fifth	Pecan	3	95	0
	Southern armyworm	do.	Collards	0	260	97
o-Nitroaniline $NO_2C_6H_4NH_2$	American cockroach	3/4 grown	—	-	310	0
	Cross-striped cabbage worm	Fourth	Collards	1	260	80
	Diamondback moth	do.	do.	0	200	87
	Greenhouse leaf tier	Fifth	do.	1	200	20
	Hawaiian beet webworm	do.	Beet	1	340	56
	Melon worm	do.	Squash	1	190	16
	Rice weevil	Adult	(Treated wheat)	-	1:1000	20
	Southern armyworm	First	Collards	0	260	100
	do.	Fourth	do.	1	355	50
	do.	Sixth	do.	2	335	13
	Southern beet webworm	Fifth	Beet	1	340	80
	Termites	Adult	(Treated soil)	-	1:3000	100
	do.	do.	do.	-	1:5000	3
	Yellow woolly bear	Fourth	Collards	0	420	96

MDNS 045352

Table 2.--(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
p-Nitroaniline $NO_2C_6H_4NH_2$	American cockroach	3/4 grown	—	-	590	0
	Cross-striped cabbage worm	Fourth	Collards	2	280	43
	Diamondback moth	do.	do.	2	420	7
	Greenhouse leaf tier	Fifth	do.	3	420	3
	Hawaiian beet webworm	do.	Beet	1	280	48
	Melon worm	do.	Squash	1	190	30
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	First	Collards	0	125	100
	do.	Fourth	do.	1	465	0
	Southern beet webworm	Fifth	Beet	1	280	12
	Termites	Adult	(Treated soil)	-	1:1000	2
	do.	do.	do.	-	1:3000	0
o-Nitrobenzyl bromide $NO_2C_6H_4CH_2Br$	American cockroach	3/4 grown	—	-	0.25 gm.	100
	Cross-striped cabbage worm	Third	Collards	1	95	23
	Diamondback moth	Fourth	do.	0	340	90
	Greenhouse leaf tier	Fifth	do.	1	340	50
	Hawaiian beet webworm	do.	Beet	1	350	72
	Melon worm	do.	Squash	1	215	43
	Southern armyworm	First	Collards	0	40	100
	do.	Sixth	do.	1	170	63
	Southern beet webworm	Fifth	Beet	1	350	60
	Yellow woolly bear	Fourth	Collards	2	400	61
Nitrobenzyl chloride $NO_2C_6H_4CH_2Cl$	American cockroach	3/4 grown	—	-	405	100
	Cross-striped cabbage worm	Fourth	Collards	2	215	6
	Diamondback moth	do.	do.	1	325	100
	Greenhouse leaf tier	Fifth	do.	2	325	0
	Hawaiian beet webworm	do.	Beet	1	350	68
	Melon worm	Fourth	Squash	2	215	90
	Rice weevil	Adult	(Treated wheat)	-	1:2000	88
	do.	do.	do.	-	1:3000	16
	Southern armyworm	Fourth	Collards	0	320	100
	do.	Sixth	do.	2	340	17

MDNS 045353

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
Nitrobenzyl chloride (Cont.)	Southern beet webworm	Fifth	Beet	1	350	100
	Termites	Adult	(Treated soil)	-	1:1000 (24)	100
	do.	do.	do.	-	1:3000	100
	do.	do.	do.	-	1:5000	100
	do.	do.	do.	-	1:10,000	38
	do.	do.	do.	-	1:20,000	3
o-Nitrobromobenzene $BrC_6H_4NO_2$	Colorado potato beetle	Fourth	Eggplant	0	Fumigation (24)	100
	Cross-striped cabbage worm	do.	Collards	0	225	100
	Diamondback moth	do.	do.	0	325	100
	do.	do.	do.	0	Fumigation	100
	Greenhouse leaf tier	Fifth	do.	1	325	47
	do.	do.	do.	2	Fumigation	100
	Hawaiian beet webworm	do.	Beet	0	230	100
	Rice weevil	Adult	(Treated wheat)	-	1:1000	34
	Southern armyworm	Third	Collards	1	93	100
	do.	Sixth	do.	0	230	100
	do.	do.	do.	2	Fumigation	100
	Southern beet webworm	Fifth	Beet	0	230	100
	Termites	Adult	(Treated soil)	-	1:1000 (24)	100
	do.	do.	do.		1:3000 (24)	35
	do.	do.	do.		1:5000 (24)	0
p-Nitrobromobenzene $BrC_6H_4NO_2$	American cockroach	3/4 grown	—	-	740 (72)	30
	Cabbage looper	First	Turnip	0	90	100
	Cabbage webworm	do.	do.	0	90	100
	Cowpea weevil	Adult	(Treated peas)	-	1:1000	14
	Cross-striped cabbage worm	Fourth	Collards	0	385	100
	do.	do.	do.	3	Fumigation	25
	Diamondback moth	do.	do.	0	265	100
	Greenhouse leaf tier	Fifth	do.	3	265	0
	Hawaiian beet webworm	do.	Swiss chard	1	280	76
	do.	do.	do.	1	Fumigation	100
	Imported cabbage worm	Third	Collards	0	70	100

MONS 045354

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq.cm.	Percent
p-Nitrobromobenzene (Cont.)	Melon worm	Fifth	Squash	0	350	100
	do.	do.	do.	3	Fumigation	0
	Rice weevil	Adult	(Treated wheat)	-	1:200	100
	do.	do.	do.	-	1:1000	0
	Southern armyworm	Second	Collards	0	70	100
	do.	Third	do.	1	70	63
	Southern beet webworm	Fourth	Swiss chard	1	280	100
	do.	do.	do.	0	Fumigation	100
	Termites	Adult	(Treated soil)	-	1:200	(24) 100
	do.	do.	do.	-	1:1000	100
	do.	do.	do.	-	1:5000	65
	do.	do.	do.	-	1:10,000	0
	Yellow woolly bear	Fourth	Collards	1	465	92
2-Nitrocarbazole $C_6H_4NHC_6H_3NO_2$	Southern armyworm	First	do.	0	240	81
3-Nitro-4-chloroaniline $ClC_6H_3(NO_2)NH_2$	do.	First	do.	1	170	56
m-Nitrochlorobenzene $ClC_6H_4NO_2$	American cockroach	3/4 grown	—	-	0.25 mm.	50
	Melon worm	Fifth	Pumpkin	0	Fumigation	100
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	First	Collards	0	125	100
	do.	Sixth	do.	1	Fumigation	100
o-Nitrochlorobenzene $ClC_6H_4NO_2$	Cross-striped cabbage worm	Fourth	Collards	0	do.	100
	Diamondback moth	do.	do.	0	175	100
	Greenhouse leaf tier	Fifth	do.	0	175	80
	Southern armyworm	Third	do.	1	70	100
	do.	Sixth	do.	0	Fumigation	100

MDNS 045355

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq.cm.	Percent
p-Nitrochlorobenzene $ClC_6H_4NO_2$	Colorado potato beetle	Fourth	Eggplant	0	140	100
	do.	do.	do.	0	Fumigation	100
	Cross-striped cabbage worm	do.	Collards	0	140	100
	do.	do.	do.	0	Fumigation	100
	Diamondback moth	do.	do.	0	290	100
	Greenhouse leaf tier	Fifth	do.	0	290	100
	Hawaiian beet webworm	do.	Beet	0	290	100
	Rice weevil	Adult	(Treated wheat)	-	1:5000	100
	do.	do.	do.	-	1:10,000	40
	Southern armyworm	Sixth	Collards	2	250	53
	do.	do.	do.	1	Fumigation	83
	Southern beet webworm	Fifth	Beet	0	290	100
p-Nitrodiphenyl $C_6H_5C_6H_4NO_2$	Imported cabbage worm	Fifth	Collards	2	130	72
	Southern armyworm	First	do.	1	140	88
	do.	Fifth	do.	3	130	6
m-Nitroiodobenzene $IC_6H_4NO_2$	American cockroach	3/4 grown	—	-	790	92
	Colorado potato beetle	Fourth	Eggplant	0	140	100
	do.	do.	do.	1	Fumigation	100
	Cross-striped cabbage worm	do.	Collards	0	100	86
	do.	do.	do.	1	Fumigation	100
	Fall webworm	Fifth	Pecan	0	170	63
	Hawaiian beet webworm	do.	Swiss chard	0	325	100
	do.	do.	do.	2	Fumigation	80
	Melon worm	Fourth	Squash	0	170	100
	Rice weevil	Adult	(Treated wheat)	-	1:1000	40
	Southern armyworm	Third	Collards	0	162	100
	do.	Sixth	do.	2	124	36
	Southern beet webworm	Fourth	Swiss chard	0	325	100
	do.	do.	do.	1	Fumigation	100
	Termites	Adult	(Treated soil)	-	1:1000 (24)	100
	do.	do.	do.	-	1:3000 (72)	94
	do.	do.	do.	-	1:5000 (72)	36

MONS 045359

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
o-Nitroiodobenzene $IC_6H_4NO_2$	Diamondback moth	Fourth	Collards	0	200	100
	Greenhouse leaf tier	Fifth	do.	1	200	30
	Hawaiian beet webworm	do.	Beet	0	200	96
	Melon worm	do.	Pumpkin	0	Fumigation	100
	Southern armyworm	Sixth	Collards	0	335	100
	do.	do.	do.	3	Fumigation	37
	Southern beet webworm	Fifth	Beet	1	200	88
p-Nitroiodosobenzene acetate $NO_2C_6H_4I:(OCOCH_3)_2$	Hawaiian beet webworm	Fifth	Swiss chard	3	265	0
	Melon worm	Fourth	Squash	1	380	63
	Southern armyworm	do.	Collards	3	140	0
1-Nitronaphthalene $C_{10}H_7NO_2$	American cockroach	First	—	-	380	100
	do.	3/4 grown	—	-	525	30
	Colorado potato beetle	Fourth	Eggplant	1	385	100
	Cross-striped cabbage worm	do.	Collards	1	155	50
	Diamondback moth	First	Turnip	1	45	100
	Greenhouse leaf tier	Fifth	Collards	1	435	13
	Hawaiian beet webworm	do.	Beet	0	385	73
	Imported cabbage worm	First	Turnip	1	45	100
	Melon worm	Fourth	Squash	1	185	90
	Rice weevil	Adult	(Treated wheat)	-	1:1000	8
	Southern armyworm	Sixth	Collards	1	345	100
	Southern beet webworm	Fourth	Beet	2	140	23
	Termites	Adult	(Treated soil)	-	1:3000	100
	do.	do.	do.	-	1:5000	92
	do.	do.	do.	-	1:10,000	16
	do.	do.	do.	-	1:20,000	3
	Yellow woolly bear	Fourth	Collards	2	200	73
1-Nitro-2-naphthol $C_{10}H_5(NO_2)OH$	Cross-striped cabbage worm	First	do.	2	60	40
	Imported cabbage worm	do.	do.	0	60	100
	Southern armyworm	Second	do.	0	60	100
	do.	Third	do.	2	60	7

MONS 045357

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Amount	Kill after 48 hours[3]
					micrograms per sq. cm.	Percent
1-Nitro-2-naphthylamine $C_{10}H_6(NO_2)NH_2$	Cross-striped cabbage worm	First	Collards	1	45	76
	do.	Fifth	do.	2	110	0
	Melon worm	do.	Pumpkin	2	270	6
	Southern armyworm	First	Collards	1	45	92
	do.	Third	do.	1	105	83
	do.	Sixth	do.	3	220	0
p-Nitrophenol $NO_2C_6H_4OH$	Colorado potato beetle	Fourth	Eggplant	1	125	80
	Cross-striped cabbage worm	First	Collards	0	150	100
	do.	Fourth	do.	3	125	0
	Melon worm	Fifth	Squash	1	145	90
	Southern armyworm	First	Collards	0	80	100
	do.	Sixth	do.	2	260	33
p-Nitrophenylacetonitrile $NO_2C_6H_4CH_2CN$	Southern armyworm	First	Collards	0	170	82
m-Nitrophenyliodochloride $NO_2C_6H_4ICl_2$	Colorado potato beetle	Fourth	Potato	0	435	100
	Diamondback moth	do.	Collards	1	430	100
	Greenhouse leaf tier	Fifth	do.	1	430	73
	Hawaiian beet webworm	do.	Swiss chard	0	435	100
	Melon worm	Fourth	Squash	0	435	100
	Rice weevil	Adult	(Treated wheat)	--	1:1000	0
	Southern armyworm	Fourth	Collards	0	435	97
	Southern beet webworm	do.	Swiss chard	0	265	100
	Termites	Adult	(Treated soil)	-	1:1000	100
	do.	do.	do.	-	1:5000	32
	Yellow woolly bear	Sixth	Collards	0	435	90
o-Nitrophenyliodochloride $NO_2C_6H_4ICl_2$	Colorado potato beetle	Fourth	Potato	0	560	100
	Diamondback moth	do.	Collards	0	560	100
	Greenhouse leaf tier	Fifth	do.	1	560	20
	Hawaiian beet webworm	do.	Swiss chard	1	560	37
	Melon worm	Fourth	Squash	1	560	89

MONS 045358

Table 2.--(Continued)

Compounds	Insects	Stage[2]	Foliage	Feeding[3]	Deposit	Kill after 48 hours[4]
					Micrograms per sq.cm.	Percent
o-Nitrophenyliodochloride (Cont.)	Rice weevil	Adult	(Treated wheat)	-	1:1000	100
	Southern armyworm	Fourth	Collards	0	560	100
	Southern beet webworm	do.	Swiss chard	1	560	93
	Yellow woolly bear	Sixth	Collards	0	560	100
4-Nitrophthalimide $NO_2C_6H_3(CO)_2NH$	Cabbage webworm	Third	Collards	1	170	28
	Colorado Potato beetle	Fourth	Eggplant	1	150	0
	Cross-striped cabbage worm	do.	Collards	1	325	85
	Diamondback moth	do.	do.	1	170	7
	Greenhouse leaf tier	Fifth	do.	3	170	0
	Hawaiian beet webworm	do.	Beet	3	170	0
	Melon worm	Fourth	Squash	1	170	22
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	Fourth	Collards	2	325	0
	Southern beet webworm	Fifth	Beet	3	170	0
	Termites	Adult	(Treated soil)	-	1:1000	0
9-Nitrosocarbazole $C_6H_4N(NO)C_6H_4$	Colorado potato beetle	Fourth	Eggplant	1	220	70
	Cross-striped cabbage worm	do.	Collards	1	165	3
	Melon worm	do.	Pumpkin	0	310	84
	Rice weevil	Adult	(Treated wheat)	-	1:1000	8
	Southern armyworm	Third	Collards	1	220	4
	Southern beet webworm	Fifth	Swiss chard	2	248	27
	Termites	Adult	(Treated soil)	-	1:1000	62
	do.	do.	do.	-	1:5000	31
	Yellow woolly bear	Fourth	Collards	3	230	8
N-Nitrosodibenzylamine $C_6H_5CH_2N(NO)CH_2C_6H_5$	Colorado potato beetle	Fourth	Eggplant	1	140	100
	Cross-striped cabbage worm	do.	Collards	1	95	16
	Melon worm	do.	Pumpkin	2	230	12
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	Third	Collards	2	140	0
	Southern beet webworm	Fifth	Swiss chard	2	310	13
	Termites	Adult	(Treated soil)	-	1:1000	6

MONS 045359

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
p-Nitrosodiethylaniline $(C_2H_5)_2NC_6H_4NO$	Bean leaf roller	First	Bean	0	115	48
	Cabbage looper	do.	Collards	0	115	94
	Colorado potato beetle	Fourth	Eggplant	1	110	26
	Cross-striped cabbage worm	do.	Collards	2	110	10
	Southern armyworm	First	do.	0	75	100
	do.	Third	do.	3	105	0
N-Nitrosodiphenylamine $(C_6H_5)_2NNO$	American cockroach	3/4 grown	—	-	405	10
	Cabbage looper	Fourth	Collards	2	170	10
	Colorado potato beetle	do.	Eggplant	1	125	83
	Cross-striped cabbage worm	do.	Collards	0	125	83
	Greenhouse leaf tier	Fifth	do.	2	440	0
	Hawaiian beet webworm	do.	Beet	1	280	15
	Melon worm	do.	Squash	1	140	13
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	First	Collards	0	185	100
	do.	Third	do.	1	185	0
	Southern beet webworm	Fourth	Beet	1	170	30
	Termites	Adult	(Treated soil)	-	1:1000	81
	do.	do.	do.	-	1:5000	32
	Yellow woolly bear	Fourth	Collards	2	265	35
N-Nitroso-N-phenylbenzylamine $C_6H_5N(NO)CH_2C_6H_5$	American cockroach	3/4 grown	—	-	265	0
	Colorado potato beetle	Fourth	Eggplant	1	130	97
	Cross-striped cabbage worm	do.	Collards	1	125	17
	Diamondback moth	do.	do.	0	160	83
	Greenhouse leaf tier	do.	do.	3	265	0
	Hawaiian beet webworm	Fifth	Beet	2	160	8
	Melon worm	Fourth	Squash	1	170	6
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	Fourth	Collards	3	62	0
	Southern beet webworm	Fifth	Beet	1	160	94
	Termites	Adult	(Treated soil)	-	1:1000	0
	Yellow woolly bear	Fourth	Collards	2	280	18

MONS 045360

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq.cm.	Percent
beta-Nitrostyrene $C_6H_5CH{:}CHNO_2$	Colorado potato beetle	Fourth	Eggplant	0	180	87
	Southern armyworm	do.	Collards	1	135	84
4-Nitro-o-toluidine $NO_2C_6H_3(CH_3)NH_2$	Colorado potato beetle	Fourth	Eggplant	1	80	90
	Cross-striped cabbage worm	do.	Collards	2	185	46
	Southern armyworm	Sixth	do.	3	80	0
Pentabromophenol C_6Br_5OH	American cockroach	3/4 grown	—	-	760	10
	Cross-striped cabbage worm	Fourth	Collards	1	230	100
	Hawaiian beet webworm	Fifth	Swiss chard	0	310	100
	Melon worm	Fourth	Squash	0	230	100
	Rice weevil	Adult	(Treated wheat)	-	1:1000	4
	Southern armyworm	First	Collards	0	200	100
	do.	Fifth	do.	2	185	17
	Southern beet webworm	Fourth	Swiss chard	0	310	100
	Termites	Adult	(Treated soil)	-	1:1000	0
	do.	do.	do.	-	1:5000	0
Pentachlorophenol C_6Cl_5OH	American cockroach	3/4 grown	—	-	945	(24) 100
	Diamondback moth	Fourth	Collards	0	500	100
	Greenhouse leaf tier	Fifth	do.	0	500	97
	Hawaiian beet webworm	do.	Beet	0	500	100
	Imported cabbage worm	do.	Collards	0	260	100
	Rice weevil	Adult	(Treated wheat)	-	1:1000	4
	Southern armyworm	Sixth	Collards	0	180	100
	Southern beet webworm	Fifth	Beet	0	500	100
MONS 045361	Termites	Adult	(Treated soil)	-	1:1000	(24) 100
	do.	do.	do.	-	1:5000	98
	do.	do.	do.	-	1:10,000	42
	Yellow woolly bear	Fourth	Collards	0	496	100
Pentaerythrityl bromide $(CH_2Br)_2C(CH_2Br)_2$	American cockroach	1/2 grown	—	-	610	0
	Cabbage looper	First	Collards	0	146	100
	do.	Fourth	do.	2	220	3
	Colorado potato beetle	do.	Eggplant	2	200	50

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Dosage[3]	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
Pentaerythrityl bromide (Cont.)	Cross-striped cabbage worm	First	Collards	0	185	100
	do.	Third	do.	1	125	97
	do.	Fifth	do.	2	125	25
	Greenhouse leaf tier	do.	do.	2	450	7
	Hawaiian beet webworm	do.	Beet	2	200	76
	Melon worm	do.	Pumpkin	2	375	80
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	First	Collards	0	185	100
	do.	Fifth	do.	1	125	70
	Southern beet webworm	Fourth	Beet	1	220	40
	Termites	Adult	(Treated soil)	-	1:1000	100
	do.	do.	do.	-	1:5000	60
	Yellow woolly bear	Fourth	Collards	2	510	35
Phenazine $C_6H_4NC_6H_4N$	American cockroach	3/4 grown	—	-	835	15
	Cabbage looper	Fourth	Collards	2	170	20
	Colorado potato beetle	do.	Eggplant	1	330	0
	Cross-striped cabbage worm	Third	Collards	0	170	70
	do.	Fifth	do.	1	170	16
	Cowpea weevil	Adult	(Treated peas)	-	1:1000	12
	Greenhouse leaf tier	Fifth	Collards	2	340	7
	Hawaiian beet webworm	do.	Beet	1	330	73
	Imported cabbage worm	First	Collards	0	170	100
	Melon worm	Fourth	Squash	2	125	0
	Southern armyworm	Third	Collards	0	170	73
	do.	Sixth	do.	2	140	30
	Southern beet webworm	Fourth	Beet	1	155	51
	Termites	Adult	(Treated soil)	-	1:1000	100
	do.	do.	do.	-	1:5000	0
	Yellow woolly bear	Fourth	Collards	1	265	88
Phenoxathiin (Phenothioxin) $C_6H_4OC_6H_4S$	American cockroach	3/4 grown	—	-	250	82
	Cross-striped cabbage worm	Fourth	Collards	2	280	13
	Diamondback moth	do.	do.	0	435	100

MONS 045362

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
Phenoxathiin (Phenothioxin) (Cont.)	Greenhouse leaf tier	Fifth	Collards	2	435	13
	Melon worm	Fourth	Squash	2	280	0
	Rice weevil	Adult	(Treated wheat)	-	1:1000	92
	do.	do.	do.	-	1:5000	72
	Termites	do.	(Treated soil)	-	1:1000	(24) 100
	do.	do.	do.	-	1:3000	100
	do.	do.	do.	-	1:10,000	(72) 53
	Yellow woolly bear	Fourth	Collards	1	265	64
Phenoxazine $C_6H_4NHC_6H_4O$	American cockroach	1/2 grown	—	-	230	25
	Colorado potato beetle	Fourth	Eggplant	1	110	90
	Cross-striped cabbage worm	First	Collards	0	140	100
	do.	Third	do.	3	105	0
	Greenhouse leaf tier	Fifth	do.	2	250	0
	Hawaiian beet webworm	Fourth	Beet	1	230	12
	Melon worm	do.	Squash	1	275	46
	Southern armyworm	First	Collards	0	140	100
	do.	Third	do.	1	105	56
	do.	Sixth	do.	3	115	0
	Southern beet webworm	Fourth	Beet	1	230	24
p-Phenylazodiphenylamine $C_6H_5N{:}NC_6H_4C_6H_5$	Cross-striped cabbage worm	Fourth	Collards	2	135	26
	Diamondback moth	do.	do.	2	145	77
	Greenhouse leaf tier	Fifth	do.	0	145	100
	Hawaiian beet webworm	do.	Beet	2	280	20
	Southern armyworm	Sixth	Collards	3	135	0
	Southern beet webworm	Fifth	Beet	2	280	60
1-Phenylazo-2-naphthylamine $C_6H_5NNC_{10}H_6NH_2$	Cabbage looper	First	Turnip	1	75	50
	Cabbage webworm	do.	do.	1	90	100
	Cross-striped cabbage worm	do.	do.	0	90	100
	do.	Second	Collards	2	60	90
	do.	Third	do.	3	60	48
	Diamondback moth	First	Turnip	1	90	40
	Imported cabbage worm	do.	do.	0	75	96

MONS 045363

Table 2.--(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
1-Phenylazo-2-naphthylamine (Cont.)	Southern armyworm	First	Turnip	1	75	92
	do.	Third	Collards	3	60	10
	do.	Fourth	do.	3	60	3
1-Phenylbenzoxazole $C_6H_4NC(C_6H_5)O$	American cockroach	3/4 grown	—	-	435	85
	Cross-striped cabbage worm	Fourth	Collards	3	170	46
	Diamondback moth	do.	do.	1	200	73
	Greenhouse leaf tier	Fifth	do.	3	200	0
	Hawaiian beet webworm	do.	Beet	2	310	72
	Melon worm	Fourth	Squash	2	170	3
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	First	Collards	0	275	100
	do.	Fourth	do.	1	335	73
	Southern beet webworm	Fifth	Beet	2	380	4
	Termites	Adult	(Treated soil)	-	1:1000	98
	do.	do.	do.	-	1:3000	43
	do.	do.	do.	-	1:5000	28
p-Phenylene-bis(ammonium-2-benzothiazolyl sulfide) $SC_6H_4NCSNH_3)_2C_6H_4$	American cockroach	3/4 grown	—	-	170	0
	Cabbage looper	Fourth	Collards	3	170	0
	Colorado potato beetle	do.	Eggplant	1	125	50
	Cross-striped cabbage worm	do.	Collards	3	290	10
	Greenhouse leaf tier	Fifth	do.	3	340	0
	Hawaiian beet webworm	do.	Beet	3	215	11
	Melon worm	do.	Pumpkin	1	230	20
	Southern armyworm	First	Collards	0	200	100
	do.	Fourth	do.	1	325	0
	Southern beet webworm	do.	Beet	2	155	3
p-Phenylenediamine $C_6H_4(NH_2)_2$	American cockroach	3/4 grown	—	-	900	0
	Cowpea weevil	Adult	(Treated peas)	-	1:1000	42
	Cross-striped cabbage worm	Fourth	Collards	2	310	43
	Diamondback moth	do.	do.	0	230	73
	Greenhouse leaf tier	Fifth	do.	1	230	70
	Hawaiian beet webworm	do.	Swiss chard	1	330	76
	Melon worm	Fourth	Squash	1	310	6

MONS 045364

Table 2.--(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq.cm.	Percent
p-Phenylenediamine (Cont.)	Rice weevil	Adult	(Treated wheat)	-	1:200	90
	do.	do.	do.	-	1:1000	8
	Southern armyworm	Third	Collards	3	110	50
	do.	Fourth	do.	1	225	97
	do.	Fifth	do.	3	110	10
	Southern beet webworm	Fourth	Swiss chard	1	330	69
	Termites	Adult	(Treated soil)	-	1:200	(28) 100
	do.	do.	do.	-	1:1000	0
	Yellow woolly bear	Fourth	Collards	1	385	70
Phenyl ester of p-chlorobenzene-sulfonic acid $C_6H_5OSO_2C_6H_4Cl$	American cockroach	3/4 grown	—	-	510	9
	Colorado potato beetle	Fourth	Potato	2	125	76
	Hawaiian beet webworm	Fifth	Swiss chard	2	355	19
	Melon worm	Fourth	Squash	2	355	75
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	Sixth	Collards	3	310	0
	Southern beet webworm	Fourth	Swiss chard	2	355	60
	Termites	Adult	(Treated soil)	-	1:1000	3
p-Phenylmercaptophenol $C_6H_5C_6H_4SH$	Southern armyworm	First	Collards	1	95	85
Phthalonitrile $C_6H_4(CN)_2$	American cockroach	3/4 grown	—	-	655	0
	Colorado potato beetle	Fourth	Potato	0	300	100
	Cowpea weevil	Adult	(Treated peas)	-	1:1000	57
	Diamondback moth	Fourth	Collards	0	300	100
	Greenhouse leaf tier	Fifth	do.	1	300	87
	Hawaiian beet webworm	do.	Beet	1	157	100
	Imported cabbage worm	do.	Collards	1	115	90
	Melon worm	Fourth	Pumpkin	2	13	100
	Rice weevil	Adult	(Treated wheat)	-	1:2000	(96) 100
	Southern armyworm	Fifth	Collards	1	82	100
	Southern beet webworm	Fourth	Pig weed	1	40	100
	Termites	Adult	(Treated soil)	-	1:1000	(24) 100
	do.	do.	do.	-	1:5000	(72) 96
	Yellow woolly bear	Sixth	Collards	1	300	90

MDNS 045365

Table 2.--(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
p-Propionotoluide $C_2H_5CONHC_6H_4CH_3$	Colorado potato beetle	Fourth	Eggplant	2	250	0
	Greenhouse leaf tier	Fifth	Collards	2	450	40
	Hawaiian beet webworm	do.	Beet	3	250	4
	Melon worm	Fourth	Squash	3	310	3
	Southern armyworm	do.	Collards	1	450	67
	Southern beet webworm	do.	Beet	3	310	0
	Termites	Adult	(Treated soil)	-	1:1000	(24) 13
	do.	do.	do.	-	1:5000	(24) 16
Pyridylphenylthiourea $(C_5H_4N)(CH_2N_2S)(C_6H_5)$	Cross-striped cabbage worm	Fourth	Collards	2	225	20
	Melon worm	do.	Pumpkin	2	250	46
	Rice weevil	Adult	(Treated wheat)	-	1:1000	4
	Southern armyworm	Fifth	Collards	2	235	63
	Southern beet webworm	do.	Swiss chard	2	125	63
	Termites	Adult	(Treated soil)	-	1:1000	0
	do.	do.	do.	-	1:5000	9
N-Sodium N-chloro-p-toluenesulfonamide $CH_3C_6H_4SO_2NClNa$	American cockroach	3/4 grown	—	-	385	0
	Colorado potato beetle	Fourth	Eggplant	1	160	0
	Cross-striped cabbage worm	do.	Collards	1	260	7
	Diamondback moth	do.	do.	1	280	83
	Greenhouse leaf tier	do.	do.	2	380	10
	Hawaiian beet webworm	Fifth	Beet	3	260	0
	Melon worm	do.	Squash	1	170	13
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	Fourth	Collards	3	230	0
	Southern beet webworm	Fifth	Beet	2	260	8
	Termites	Adult	(Treated soil)	-	1:5000	(72) 20
Sodium tetrachlorophenate Cl_4C_6HONa	Diamondback moth	Fourth	Collards	1	110	50
	Greenhouse leaf tier	Fifth	do.	2	110	0
	Hawaiian beet webworm	do.	Beet	2	110	0
	Melon worm	Fourth	Squash	0	390	60
	Southern armyworm	Fifth	Collards	1	190	67
	Southern beet webworm	do.	Beet	1	110	84

MONS 045366

Table 2.—A (Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
Tetrabromo-o-cresol $C_6Br_4(CH_3)OH$	American cockroach	3/4 grown	—	-	800	30
	Cross-striped cabbage worm	Fourth	Collards	1	785	100
	Diamondback moth	do.	do.	0	340	100
	Greenhouse leaf tier	Fifth	do.	3	340	0
	Hawaiian beet webworm	do.	Swiss chard	1	310	50
	Melon worm	do.	Squash	0	425	23
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	First	Collards	0	400	100
	do.	Fourth	do.	1	435	23
	Southern beet webworm	do.	Swiss chard	0	310	100
	Termites	Adult	(Treated soil)	-	1:1000	10
	do.	do.	do.	-	1:5000	0
	Yellow woolly bear	Fourth	Collards	2	590	12
1,2,3,4-Tetrahydrocarbazole $C_6H_4NHC_6H_8$	Cabbage looper	First	Turnip	1	90	34
	Cross-striped cabbage worm	do.	do.	1	90	68
	do.	Second	Collards	1	55	45
	do.	Third	do.	2	55	53
	Diamondback moth	First	Turnip	1	90	100
	Imported cabbage worm	do.	Cabbage	0	75	72
	Southern armyworm	do.	do.	1	70	100
	do.	Second	Turnip	1	90	0
	do.	Fourth	do.	2	90	0
Thallous malonate $HO_2CCH_2CO_2Tl$	Southern armyworm	First	Collards	0	250	100
	do.	Fourth	do.	1	155	50
Thioacetanilide $C_6H_5NHCSCH_3$	American cockroach	First	—	-	140	88
	Cross-striped cabbage worm	Fourth	Collards	3	140	0
	Southern armyworm	Fifth	do.	0	140	70

MONS 045367

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq.cm.	Percent
Thiocoumarin $C_6H_4CH:CHC(S)O$	American cockroach	3/4 grown	—	-	850	(24) 100
	Cross-striped cabbage worm	Fourth	Collards	1	100	39
	Diamondback moth	do.	do.	1	230	83
	Greenhouse leaf tier	Fifth	do.	0	230	23
	Hawaiian beet webworm	do.	Beet	1	230	64
	Melon worm	Fourth	Squash	0	230	66
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	Third	Collards	0	100	91
	do.	Sixth	do.	0	225	20
	Southern beet webworm	Fifth	Beet	1	230	30
	Termites	Adult	(Treated soil)	-	1:3000	100
	do.	do.	do.	-	1:5000	82
p-Thiocyanobromobenzene BrC_6H_4SCN	Cabbage looper	First	Turnip	1	75	100
	Cabbage webworm	do.	do.	1	75	100
	Cross-striped cabbage worm	do.	Collards	0	100	100
	Diamondback moth	Fourth	do.	0	420	100
	Greenhouse leaf tier	Fifth	do.	1	420	33
	Imported cabbage worm	First	do.	0	100	100
	Southern armyworm	Third	do.	0	100	100
	do.	do.	do.	0	Fumigation	100
p-Thiocyanochlorobenzene ClC_6H_4SCN	Cabbage looper	First	Turnip	1	45	100
	Cabbage webworm	do.	do.	0	45	100
	Cross-striped cabbage worm	Fourth	Collards	0	200	100
	do.	do.	do.	1	Fumigation	100
	Diamondback moth	do.	do.	0	225	100
	do.	do.	do.	0	Fumigation	100
	Greenhouse leaf tier	Fifth	do.	0	225	100
	do.	do.	do.	1	Fumigation	67
	Rice weevil	Adult	—	-	do.	100
	Southern armyworm	First	Turnips	1	75	100
	do.	Fifth	Collards	1	Fumigation	100

MONS 04368

Table 2 —(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
p-Thiocyanatodebenzene IC_6H_4SCN	American cockroach	1/4 grown	—	-	230	100
	do.	3/4 grown	—	-	260	82
	Cross-striped cabbage worm	First	Collards	0	60	100
	do.	Fourth	do.	0	280	76
	Diamondback moth	do.	do.	0	310	100
	Greenhouse leaf tier	Fifth	do.	0	310	77
	Hawaiian beet webworm	do.	Beet	0	230	96
	Imported cabbage worm	Third	Collards	1	60	100
	Melon worm	Fifth	Pumpkin	0	215	40
	Rice weevil	Adult	(Treated wheat)	-	1:10,000	100
	Southern armyworm	Second	Collards	0	60	100
	do.	Sixth	do.	1	280	67
	Southern beet webworm	Fifth	Beet	0	230	96
	Termites	Adult	(Treated soil)	-	1:5000	(4) 100
	do.	do.	do.	-	1:25,000	19
Thio-beta-naphthol $C_{10}H_7SH$	Cross-striped cabbage worm	First	Collards	0	75	98
	do.	Third	do.	1	140	86
	do.	Fifth	do.	3	95	10
	Southern armyworm	First	do.	2	75	61
Thiophenylacetamide $C_6H_5CH_2CSNH_2$	American cockroach	First	—	-	155	88
	Cross-striped cabbage worm	Fourth	Collards	1	160	7
	Southern armyworm	Third	do.	2	160	71
4,4',4''-Triaminotriphenylcarbinol $(NH_2C_6H_4)_3COH$	American cockroach	3/4 grown	—	-	220	0
	Cross-striped cabbage worm	Fourth	Collards	2	180	59
	Diamondback moth	do.	do.	2	155	3
	Greenhouse leaf tier	Fifth	do.	3	155	0
	Hawaiian beet webworm	do.	Beet	2	230	32
	Melon worm	Fourth	Squash	2	200	47
	Rice weevil	Adult	(Treated wheat)	-	1:1000	4
	Southern armyworm	Sixth	Collards	2	375	80
	Southern beet webworm	Fifth	Beet	2	230	12
	Termites	Adult	(Treated soil)	-	1:1000	10
	do.	do.	do.	-	1:5000	6

MONS 045369

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq. cm.	Percent
1,3,5-Tribromobenzene $C_6H_3Br_3$	American cockroach	3/4 grown	—	-	610	0
	Cross-striped cabbage worm	Fourth	Collards	3	185	40
	Diamondback moth	do.	do.	1	290	83
	Greenhouse leaf tier	Fifth	do.	3	290	3
	Hawaiian beet webworm	do.	Swiss chard	3	385	60
	Melon worm	Fourth	Squash	2	385	100
	Rice weevil	Adult	(Treated wheat)	-	1:1000	91
	do.	do.	do.	-	1:5000	10
	Southern armyworm	Third	Collards	1	400	100
	do.	Sixth	do.	2	385	47
	Southern beet webworm	Fourth	Swiss chard	2	385	100
	Termites	Adult	(Treated soil)	-	1:1000	3
	Yellow woolly bear	Fourth	Collards	2	465	92
2,4,5-Trichloro-6-nitrophenol $Cl_3C_6H(NO_2)OH$	Southern armyworm	Fifth	Collards	0	315	93
	do.	Sixth	do.	1	155	83
2,4,6-Triiodophenol $C_6H_2(I_3)OH$	Colorado potato beetle	Fourth	Eggplant	1	270	73
	Cross-striped cabbage worm	do.	Collards	1	270	63
	Diamondback moth	do.	do.	0	510	100
	Fall webworm	Fifth	Pecan	3	310	0
	Greenhouse leaf tier	do.	Collards	3	510	13
	Hawaiian beet webworm	do.	Beet	2	320	60
	Melon worm	do.	Squash	1	335	20
	Southern armyworm	Fourth	Collards	1	465	20
	Southern beet webworm	Fifth	Beet	1	320	48
2,4,6-Trinitro-m-cresol $C_6H(NO_2)_3(CH_3)OH$	American cockroach	3/4 grown	—	-	470	30
	Cross-striped cabbage worm	Fourth	Collards	1	390	97
	Diamondback moth	do.	do.	1	435	83
	Greenhouse leaf tier	Fifth	do.	1	435	70
	Hawaiian beet webworm	do.	Beet	1	310	80
	Melon worm	do.	Squash	1	425	80
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0

MONS 045370

Table 2.— (Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq.cm.	Percent
2,4,6-Trinitro-m-cresol (Cont.)	Southern armyworm	First	Collards	0	140	100
	do.	Fifth	do.	2	230	90
	Southern beet webworm	do.	Beet	1	310	56
	Termites	Adult	(Treated soil)	-	1:1000	15
	Yellow woolly bear	Fourth	Collards	3	465	8
Bis(2,4,6-Trinitrophenyl)-amine $[(NO_2)_3C_6H_2]_2NH$	American cockroach	3/4 grown	—	-	510	73
	Colorado potato beetle	Fourth	Potato	2	125	100
	Cross-striped cabbage worm	do.	Collards	1	130	100
	Diamondback moth	do.	do.	0	400	100
	Greenhouse leaf tier	do.	do.	3	435	7
	Hawaiian beet webworm	Fifth	Beet	2	400	60
	Melon worm	Fourth	Squash	2	230	100
	Rice weevil	Adult	(Treated wheat)	-	1:1000	21
	Southern armyworm	Fourth	Collards	1	465	100
	do.	Sixth	do.	3	420	3
	Southern beet webworm	Fifth	Beet	2	400	90
	Termites	Adult	(Treated soil)	-	1:1000	0
Xanthene $C_6H_4CH_2C_6H_4O$	American cockroach	3/4 grown	—	-	810	(72) 70
	Cross-striped cabbage worm	Fourth	Collards	3	245	10
	Diamondback moth	do.	do.	0	380	100
	Greenhouse leaf tier	Fifth	do.	3	380	3
	Hawaiian beet webworm	do.	Beet	2	350	0
	Melon worm	Fourth	Squash	2	350	11
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	Fifth	Collards	1	245	90
	Southern beet webworm	do.	Beet	2	350	16
	Termites	Adult	(Treated soil)	-	1:5000	(72)100
	do.	do.	do.	-	1:10,000	(72)100

MONS 0453?1

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq.cm.	Percent
Xanthydrol $C_6H_4CHOHC_6H_4O$	American cockroach	3/4 grown	—	-	230	0
	Cross-striped cabbage worm	Fourth	Collards	2	250	0
	Diamondback moth	do.	do.	0	140	80
	Greenhouse leaf tier	Fifth	do.	3	140	0
	Hawaiian beet webworm	do.	Beet	1	185	60
	Melon worm	Fourth	Squash	0	250	0
	Rice weevil	Adult	(Treated wheat)	-	1:1000	0
	Southern armyworm	Sixth	Collards	2	115	60
	Southern beet webworm	Fifth	Beet	0	185	0
	Termites	Adult	(Treated soil)	-	1:1000	(72)100
	do.	do.	do.	-	1:5000	(72) 3
2,6-Xylenol $(CH_3)_2C_6H_3OH$	American cockroach	3/4 grown	—	-	170	0
	Cross-striped cabbage worm	Fourth	Collards	0	185	100
	do.	do.	do.	1	Fumigation	100
	Diamondback moth	do.	do.	0	230	100
	Greenhouse leaf tier	Fifth	do.	3	230	0
	Hawaiian beet webworm	do.	Beet	0	160	100
	do.	do.	Swiss chard	0	Fumigation	100
	Melon worm	Fourth	Squash	0	140	100
	Rice weevil	Adult	(Treated wheat)	-	1:1000	100
	Southern armyworm	Fourth	Collards	0	280	80
	Southern beet webworm	Fifth	Beet	0	160	100
	do.	Fourth	Swiss chard	0	Fumigation	100
	Termites	Adult	(Treated soil)	-	1:5000	100
	do.	do.	do.	-	1:50,000	(72)100
N(2,6-Xylyl)-formamide $HCONHC_6H_3(CH_3)_2$	Hawaiian beet webworm	Fifth	Swiss chard	1	365	36
	Melon worm	Fourth	Squash	1	355	51
	Southern armyworm	do.	Collards	3	460	0
	Southern beet webworm	do.	Swiss chard	1	355	45
	Yellow woolly bear	do.	Collards	1	460	20

MONS 045372

Table 2.—(Continued)

Compound	Insect	Stage[1]	Foliage	Feeding[2]	Deposit	Kill after 48 hours[3]
					Micrograms per sq.cm.	Percent
Zinc mercury thiocyanate $ZnHg(SCN)_4$	Cabbage looper	Fourth	Collards	1	150	10
	Cross-striped cabbage worm	Third	do.	0	350	63
	do.	Fifth	do.	1	350	6
	Imported cabbage worm	First	do.	0	250	100
	Melon worm	Fifth	Squash	0	230	60
	Southern armyworm	Third	Collards	0	350	94
	do.	Fifth	do.	1	131	77
	do.	Sixth	do.	1	495	100
	Southern beet webworm	Fourth	Beet	1	150	42

MDNS 04573

Table 3.— Experimental materials that were found to be nontoxic to the insects against which they were tested

Compound	Insect	Stage[1]
Acetaldehyde ammonia $CH_3CH(OH)NH_2$	Cross-striped cabbage worm Southern armyworm	Fourth Fifth
Acetamide CH_3CONH_2	Colorado potato beetle Greenhouse leaf tier Melon worm Southern armyworm Southern beet webworm	Fourth Fifth Fourth do. do.
m-Acetamidobenzoic acid $CH_3CONHC_6H_4COOH$	Greenhouse leaf tier Hawaiian beet webworm Melon worm Southern armyworm Southern beet webworm	Fourth Fifth Fourth Third Fourth
2-Acetamidofluorene $C_6H_4CH_2C_6H_3NHCOCH_3$	American cockroach Cabbage looper Colorado potato beetle Cross-striped cabbage worm Greenhouse leaf tier Hawaiian beet webworm Melon worm Rice weevil Southern armyworm do. Southern beet webworm Termites do. do.	3/4 grown Fourth do. do. Fifth do. Fourth Adult First Fifth Fourth Adult do. do.
p-Acetaminobenzenesulfonanilide $CH_3CONHC_6H_4SO_2NHC_6H_5$	Colorado potato beetle Cross-striped cabbage worm Melon worm Southern armyworm do.	Fourth First Fifth First Sixth
p-Acetamino-N-m-nitrophenylbenzene-sulfonamide $CH_3CONHC_6H_4SO_2NHC_6H_4NO_2$	Colorado potato beetle Cross-striped cabbage worm	Fourth do.

[1] Numbers refer to instar.

MONS 045374

Table 3.— (Continued)

Compound	Insect	Stage[1]
p-Acetamino-N-o-nitrophenylbenzene-sulfonamide $CH_3CONHC_6H_4SO_2NHC_6H_4NO_2$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. do.
N(p-Acetaminophenylsulfonyl)-morpholine $CH_3CONHC_6H_4SO_2N(CH_2CH_2)_2O$	Colorado potato beetle Cross-striped cabbage worm Melon worm Southern armyworm	Fourth do. Fifth Third
1-Acetanilidobenzoxazole $OC_6H_4NCN(COCH_3)C_6H_5$	do.	Sixth
m-Acetaniside $CH_3CONHC_6H_4OCH_3$	Greenhouse leaf tier Hawaiian beet webworm Melon worm Southern armyworm Southern beet webworm	Fourth Fifth Fourth Third Fourth
o-Acetaniside $CH_3CONHC_6H_4OCH_3$	Hawaiian beet webworm Melon worm Southern beet webworm	Fifth Fourth do.
p-Acetaniside $CH_3CONHC_6H_4OCH_3$	Greenhouse leaf tier Hawaiian beet webworm Melon worm Southern armyworm Southern beet webworm	Fourth Fifth Fourth Third Fourth
Acetoacetanilide $CH_3COCH_2CONHC_6H_5$	Cross-striped cabbage worm Southern armyworm	Fourth Sixth
Acetoacet-2,5-dichloroanilide $Cl_2C_6H_3NHCOCH_2COCH_3$	Cabbage looper Cross-striped cabbage worm Southern armyworm do. do. do.	First do. do. Third Fifth Sixth
m-Acetotoluide o-Acetotoluide $CH_3CONHC_6H_4CH_3$	Colorado potato beetle Greenhouse leaf tier Hawaiian beet webworm Melon worm Southern armyworm Southern beet webworm	Fourth Fifth do. Fourth do. do.
2-Acetoxyfluorenone $C_6H_4COC_6H_3OCOCH_3$	Southern armyworm	First
N-Acetyl-p-aminobensoic acid $CH_3CONHC_6H_4COOH$	Colorado potato beetle Cross-striped cabbage worm do. Southern armyworm	Fourth First Fourth First

MONS 045375

Table 3.--(Continued)

Compound	Insect	Stage[1]
N-Acetylanthranilic acid $CH_3CONHC_6H_4COOH$	Greenhouse leaf tier	Fourth
	Hawaiian beet webworm	Fifth
	Melon worm	Fourth
	Southern armyworm	Third
	Southern beet webworm	Fourth
Acetylbenzoin $C_6H_5COCH(OOCH_3)C_6H_5$	Cabbage webworm	Fourth
	Cross-striped cabbage worm	do.
	Diamondback moth	do.
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	do.
	Southern armyworm	Fourth
	Southern beet webworm	Fifth
9-Acetylcarbazole $C_{12}H_8NOOCH_3$	Southern armyworm	First
	do.	Third
	do.	Fifth
Acetyldibenzofuran $CH_3OOC_6H_3OC_6H_4$	Diamondback moth	Fourth
	Greenhouse leaf tier	Fifth
10-Acetyl-5,5-dimethylacridan $C_6H_4N(OOCH_3)C_6H_4C(CH_3)_2$	Cross-striped cabbage worm	First
	Southern armyworm	do.
Acetyl-4,6-dinitro-o-crosol $(NO_2)_2C_6H_2(OOOCH_3)CH_3$	do.	Fifth
Acetyldiphenylamine $(C_6H_5)_2NOOCH_3$	do.	Second
2-Acetyldiphenylene oxide $C_6H_4OC_6H_3COCH_3$	Hawaiian beet webworm	Fifth
	Melon worm	Fourth
	Southern armyworm	First
	do.	Sixth
	Southern beet webworm	Fifth
N-Acetyl-alpha-naphthylamine $CH_3CONHC_{10}H_7$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	First
	Imported cabbage worm	do.
	Southern armyworm	do.
	do.	Third
N-Acetyl-beta-naphthylamine $CH_3CONHC_{10}H_7$	Cross-striped cabbage worm	Fourth
	Southern armyworm	Fifth

MONS 045376

Table 3.— (Continued)

Compound	Insect	Stage[1]
Acetyl-p-phenetidine $CH_3CONHC_6H_4OC_2H_5$	Southern armyworm do.	Fifth Sixth
6-Acetylphenothiazine $SC_6H_4NHC_6H_3COCH_3$	do.	Third
N-Acetylsulfanilamide $CH_3CONHC_6H_4SO_2NH_2$	Cross-striped cabbage worm Southern armyworm	First do.
N-Acetylsulfanil-alpha-naphthylamide $CH_3CONHC_6H_4SO_2NHC_{10}H_7$	Cross-striped cabbage worm Southern armyworm	First do.
N-Acetylsulfanil-p-nitroanilide $CH_3CONHC_6H_4SO_2NHC_6H_4NO_2$	Cross-striped cabbage worm do. Imported cabbage worm Melon worm Southern armyworm	First Fourth First Fifth First
7-Acetyl-1,2,3,4-tetrahydrodiphenylene oxide $CH_3COC_6H_3OC_6H_8$	do.	Sixth
Acetylurea $NH_2CONHCOCH_3$	Southern armyworm	First
N-Acetyl-2,4-xylidine $CH_3CONHC_6H_3(CH_3)_2$	Cross-striped cabbage worm Southern Armyworm	First do.
Acridan $C_6H_4CH_2C_6H_4NH$	Cross-striped cabbage worm Melon worm Southern armyworm	Fourth Fifth Sixth
Acridone $C_6H_4COC_6H_4NH$	Cross-striped cabbage worm Imported cabbage worm Southern armyworm	First do. do.
Alizarin $C_6H_2(OH)_2(CO)_2C_6H_4$	Cabbage webworm Cross-striped cabbage worm Diamondback moth Greenhouse leaf tier Melon worm Southern armyworm Southern beet webworm	Fourth do. Third Fourth Fifth Third Fourth
Alkali blue $(C_6H_5NHC_6H_4)_2C(OH)C_6H_4NHC_6H_4SO_3Na$	Southern armyworm	First
Allantoin $NH_2CONHCHNHCONHCO$	do.	Sixth

MONS 045377

Table 3.— (Continued)

Compound	Insect	Stage[1]
Allyl thiourea $CH_2{:}CHCH_2NHCSNH_2$	Cross-striped cabbage worm	First
	do.	Fourth
	Imported cabbage worm	First
	Southern armyworm	do.
	do.	Fifth
	do.	Sixth
2-Aminoacridone 4-Aminoacridone $C_6H_4CONC_6H_3(NH_2)NH$	Cross-striped cabbage worm	First
	Southern armyworm	do.
	Imported cabbage worm	do.
beta-Aminoanthraquinone $NH_2C_6H_3(CO)_2C_6H_4$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	First
	Imported cabbage worm	do.
	Southern armyworm	do.
	do.	Sixth
2-Amino-5-azoanisole $CH_3OC_6H_3(NH_2)N{:}NC_6H_5$	Diamondback moth	Fourth
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Southern armyworm	First
	Southern beet webworm	Fifth
Aminoazobenzenesulfonic acid $C_6H_5N{:}NC_6H_4NH_2SO_3H$	Southern armyworm	First
2-Amino-5-azotoluene hydrochloride $CH_3C_6H_4NNC_6H_3(CH_3)NH_2.HCl$	Cross-striped cabbage worm	Fourth
	Melon worm	Fifth
	Southern armyworm	Third
p-Aminobenzenesulfonanilide $NH_2C_6H_4SO_2NHC_6H_5$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	First
	Southern armyworm	do.
p-Aminobenzenesulfonylamide $NH_2C_6H_4SO_2NH_2$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	First
	Southern armyworm	do.
	do.	Sixth
m-Aminobenzoic acid p-Aminobenzoic acid $NH_2C_6H_4COOH$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Southern armyworm	do.
p-Aminobenzophenone $C_6H_5COC_6H_4NH_2$	Cross-striped cabbage worm	Fourth
	Melon worm	Fifth
	Southern armyworm	Third

MONS 045378

Table 3.—(Continued)

Compound	Insect	Stage[1]
4-Aminodiphenylamine sulfate $C_6H_5NHC_6H_4NH_2 \cdot H_2SO_4$	Cross-striped cabbage worm Melon worm Southern armyworm	Fourth Fifth Fourth
6-Amino-2,3-diphenylquinoxaline $NH_2C_6H_3NC(C_6H_5)C(C_6H_5)N$	Cross-striped cabbage worm Southern armyworm	First do.
2-Amino-9-fluorenol $C_6H_4(CHOH)C_6H_3NH_2$	Cabbage looper Southern armyworm do.	Fifth First Fourth
2-Aminofluorenone $C_6H_4COC_6H_3NH_2$	do. do.	First Fifth
2-Aminophenazine $C_6H_4N_2C_6H_3NH_2$	do. do. do.	First Third Fifth
m-Aminophenol o-Aminophenol $HOC_6H_4NH_2$	do.	First
p-Aminophenol $HOC_6H_4NH_2$	Imported cabbage worm Southern armyworm do.	Fifth First Fifth
5-Amino-1-phenylbenzothiazole $NH_2C_6H_3C(C_6H_5)S$	Southern armyworm do.	First Fifth
7-Amino-1,2,3,4-tetrahydrodiphenylene oxide $NH_2C_6H_3OC_6H_8$	do.	Sixth
Aniline salt of 2,4-dinitrodiphenylamine-6-carboxylic acid $C_6H_5NHC_6H_2(NO_2)_2COOH \cdot NH_2C_6H_5$	Cross-striped cabbage worm Southern armyworm	Fourth Fifth
1-Anilinobenzothiazole $SC_6H_4N:CNHC_6H_5$	do.	Second
1-Anilinobenzoxazole $OC_6H_4NCNHC_6H_5$	do.	First
3-Anilinophenothiazine $C_6H_5NHC_6H_3SC_6H_4NH$	Cross-striped cabbage worm Imported cabbage worm Southern armyworm	First do. do.

MONS 045379

Table 3.— (Continued)

Compound	Insect	Stage 3/
Anisal cinnamal acetone $CH_3OC_6H_4CH:CHCOCH:CHCH:CHC_6H_5$	Cross-striped cabbage worm Melon worm Southern armyworm	Fourth Fifth Third
1-(o-Anisylazo)-2-naphthol $CH_3OC_6H_4NNC_{10}H_6OH$	Southern armyworm do.	First Sixth
Anthracene $C_6H_4(CH)_2C_6H_4$	do.	Third
Anthragallol $C_{14}H_5O_2(OH)_3$	Cabbage webworm Cross-striped cabbage worm Diamondback moth Greenhouse leaf tier Melon worm do. Southern armyworm do. Southern beet webworm	Fourth do. Third Fourth do. Fifth Third Fourth do.
Anthrahydroquinone diacetate $C_6H_4(OCOCH_3)_2C_6H_4$	Cross-striped cabbage worm Melon worm Southern armyworm	Fourth Fifth Fourth
Anthraquinone $(C_6H_4)_2(CO)_2$	Cabbage webworm Cross-striped cabbage worm Diamondback moth Greenhouse leaf tier Melon worm do. Southern armyworm Southern beet webworm	Fourth do. Third Fourth do. Fifth Fourth do.
Anthraquinone-beta-sulfonic acid $C_6H_4(CO)_2C_6H_4SO_3H$	Cabbage webworm Cross-striped cabbage worm Diamondback moth Greenhouse leaf tier Melon worm Southern armyworm Southern beet webworm	Fourth do. do. Fifth do. Fourth Fifth
Anthranilic acid $NH_2C_6H_4COOH$	Southern armyworm	Fourth
Anthrone $C_6H_4\underline{COC_6H_4}CH_2$	do. do.	First Sixth

MONS 045380

Table 3.—(Continued)

Compound	Insect	Stage[1]
Atoxyl (sodium arsanilate) $NH_2C_6H_4AsO_3HNa$	Southern armyworm	Fifth
4,4'-Azobis(o-anisidine) $CH_3OC_6H_3(NH_2)N:NC_6H_3(NH_2)OCH_3$	Cross-striped cabbage worm Southern armyworm	Fourth Sixth
p,p'-Azobis(benzoic acid) $HOOCC_6H_4N:NC_6H_4COOH$	Colorado potato beetle Cross-striped cabbage worm Melon worm Southern armyworm	Fourth do. Fifth do.
p,p'-Azobisbiphenyl $C_6H_5C_6H_4N:NC_6H_4C_6H_5$	Colorado potato beetle Cross-striped cabbage worm Melon worm Southern armyworm	Fourth do. Fifth do.
p,p'-Azobisphenetole $C_2H_5OC_6H_4N:NC_6H_4OC_2H_5$	Colorado potato beetle Cross-striped cabbage worm Melon worm Southern armyworm	Fourth do. do. Fifth
p,p'-Azobisphenol $HOC_6H_4N:NC_6H_4OH$	Colorado potato beetle Cross-striped cabbage worm Melon worm Southern armyworm	Fourth do. Fifth do.
Azochloramide $C_2H_4Cl_2N_6$	do.	do.
o-Azothioanisole $(CH_3SC_6H_4N)_2$	Cross-striped cabbage worm Southern armyworm	Fourth Sixth
p,p'-Azoxybis(benzoic acid) $HOOCC_6H_4NONC_6H_4COOH$	Colorado potato beetle Cross-striped cabbage worm Melon worm Southern armyworm	Fourth do. Fifth do.
Barium sulfoleate $Ba(C_{18}H_{33}O_2S)_2$	do.	First
Benzalacetophenone(Chalcone) $C_6H_5CH:CHCOC_6H_5$	Cabbage webworm Colorado potato beetle Cross-striped cabbage worm Diamondback moth Greenhouse leaf tier Hawaiian beet webworm Melon worm Southern armyworm Southern beet webworm	Third Fourth do. do. Fifth do. do. Fourth Fifth

MONS 045381

Table 3.— (Continued)

Compound	Insect	Stage[1]
Benzalacetophenone dibromide $C_6H_5CHBrCHBrCOC_6H_5$	Cabbage webworm	Fourth
	Cross-striped cabbage worm	do.
	Diamondback moth	do.
	Fall webworm	do.
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	do.
	Southern armyworm	Fourth
	Southern beet webworm	Fifth
5-Benzalamino-2-cresol $C_6H_5CHNC_6H_3(OH)CH_3$	Cabbage webworm	Third
	Cross-striped cabbage worm	Fourth
	Diamondback moth	do.
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	do.
	Southern armyworm	Fourth
	Southern beet webworm	Fifth
p-Benzalaminophenol $C_6H_5CHNC_6H_4OH$	Cabbage webworm	Third
	Cross-striped cabbage worm	Fourth
	Diamondback moth	do.
	Fall webworm	do.
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	do.
	Southern armyworm	Fourth
	Southern beet webworm	Fifth
p,p'-Benzalbis(N,N-dimethylaniline) $C_6H_5CH[C_6H_4N(CH_3)_2]_2$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Southern armyworm	do.
Benzalbis(1-pyridylamine) $C_6H_5CH(C_5H_3NNH_2)_2$	Southern armyworm	Fifth
Benzaldehyde phenylhydrazone $C_6H_5CH:NNHC_6H_5$	Cabbage webworm	Third
	Cross-striped cabbage worm	Fourth
	Diamondback moth	do.
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	do.
	Southern armyworm	Fourth
	Southern beet webworm	Fifth

MONS 045382

Table 3.—(Continued)

Compound	Insect	Stage[1]
Benzaldehyde semicarbazone $C_6H_5CHNNHCONH_2$	Cross-striped cabbage worm Southern armyworm	Fourth Fifth
9-Benzalfluorene $C_6H_4C(CHC_6H_5)C_6H_4$	do.	First
Benzal-4-methyloxythianaphthene $CH_3C_6H_3COC(CHC_6H_5)S$	Imported cabbage worm Southern armyworm	Fourth Third
Benzamide $C_6H_5CONH_2$	do.	Third
Benzanilide $C_6H_5CONHC_6H_5$	do.	do.
Benzeneazo-o-cresol $C_6H_5NNC_6H_3(CH_3)OH$	American cockroach Cabbage webworm Cross-striped cabbage worm Diamondback moth Greenhouse leaf tier Hawaiian beet webworm Melon worm Rice weevil Southern armyworm do. Southern beet webworm Termites do.	3/4 grown Third Fourth do. Fifth do. do. Adult First Fourth Fifth Adult do.
Benzeneazoresorcinol $C_6H_5NNC_6H_3(OH)_2$	Southern armyworm	First
Benzidine $NH_2C_6H_4C_6H_4NH_2$	do. do.	Third Sixth
Benzil $(C_6H_5CO)_2$	do.	do.
alpha-Benzildioxime $C_6H_5C(NOH)C(NOH)C_6H_5$	Cross-striped cabbage worm Melon worm Southern armyworm	Fourth Fifth Sixth
beta-Benzildioxime $C_6H_5C(NOH)C(NOH)C_6H_5$	American cockroach Cross-striped cabbage worm Melon worm Southern armyworm	First Fourth Fifth Sixth

MONS 045383

Table 3.—(Continued)

Compound	Insect	Stage[1]
gamma-Benzildioxime $C_6H_5C(NOH)C(NOH)C_6H_5$	Colorado potato beetle Cross-striped cabbage worm Melon worm Southern armyworm	Fourth do. Fifth Sixth
Benzilic acid $(C_6H_5)_2C(OH)COOH$	Cross-striped cabbage worm Southern armyworm	First do.
alpha-Benzilmonoxime beta-Benzilmonoxime $C_6H_5C(NOH)COC_6H_5$	Cross-striped cabbage worm Melon worm Southern armyworm	Fourth Fifth Sixth
Benzohydrol $C_6H_5CH(OH)C_6H_5$	Colorado potato beetle Cross-striped cabbage worm Melon worm Southern armyworm	Fourth do. Fifth Sixth
alpha-Benzoinoxime beta-Benzoinoxime $C_6H_5CH(OH)C(NOH)C_6H_5$	American cockroach Colorado potato beetle Cross-striped cabbage worm Southern armyworm	First Fourth do. Sixth
Benzophenone $C_6H_5COC_6H_5$	do.	Fourth
1-Benzothiazolyl-p-bromobenzyl sulfide $SC_6H_4N:CSCH_2C_6H_4Br$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. Sixth
1-Benzothiazolyl-cyclohexylammonium sulfide $SC_6H_4NCSNH_3C_6H_{11}$	Southern armyworm	First
1-Benzothiazolyl-p-nitrobenzyl sulfide $C_6H_4N:CSCH_2C_6H_4NO_2$	do.	do.
Benzothiazyldisulfide $[NC_6H_4SCS]_2$	do.	Fifth

MONS 045384

Table 3.— (Continued)

Compound	Insect	Stage[1/]
m-Benzotoluide	Cabbage webworm	Fourth
o-Benzotoluide	Colorado potato beetle	do.
p-Benzotoluide	Cross-striped cabbage worm	do.
$CH_3C_6H_4NHCOC_6H_5$	Diamondback moth	do.
	Greenhouse leaf tier	do.
	Hawaiian beet webworm	do.
	Melon worm	do.
	Southern armyworm	Third
	Southern beet webworm	Fourth
	Yellow woolly bear	Sixth
N-(1-Benzoxazolyl)-cyclohexylamine	Southern armyworm	First
$[OC_6H_4N:]CC_6H_{11}$		
2-Benzoyl-1-mercaptobenzothiazole	Cross-striped cabbage worm	Fourth
$[SC_6H_4N:]CSCOC_6H_5$	Southern armyworm	Fifth
9-Benzoyl-3-nitrocarbazole	do.	First
$[C_6H_4N(COC_6H_5)]C_6H_3NO_2$		
alpha-Benzoyl-beta-(m-nitrophenyl)ethylene oxide	Cross-striped cabbage worm	Fourth
	Greenhouse leaf tier	Fifth
$C_6H_5COCHOCHC_6H_4NO_2$	Melon worm	do.
	Southern armyworm	Fourth
	Southern beet webworm	do.
alpha-Benzoyl-beta-phenyl ethylene oxide	Cabbage looper	Fourth
	Cross-striped cabbage worm	do.
$C_6H_5COCHOCHC_6H_5$	Greenhouse leaf tier	Fifth
	Melon worm	do.
	Southern armyworm	Fourth
	Southern beet webworm	do.
Benzoyltrithiovanillin	Southern armyworm	First
$[C_6H_5CO_2C_6H_3(OCH_3)CHS]_3$		
N-Benzylacetamide	Colorado potato beetle	Fourth
$C_6H_5CH_2NHCOCH_3$	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	do.

MONS 045385

Table 3.— (Continued)

Compound	Insect	Stage[1]
p-(Benzylamino)-benzenesulfonamide $C_6H_5CH_2NHC_6H_4SO_2NH_2$	American cockroach	First
	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Melon worm	Fifth
	Southern armyworm	Sixth
n-Benzylbenzamide $C_6H_5CH_2NHCOC_6H_5$	Colorado potato beetle	Fourth
	Diamondback moth	do.
	Greenhouse leaf tier	do.
	Hawaiian beet webworm	do.
	Melon worm	do.
	Southern armyworm	Third
	Southern beet webworm	Fourth
	Yellow woolly bear	Sixth
n-Benzylformamide $HCONHCH_2C_6H_5$	Colorado potato beetle	Fourth
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	do.
n-Benzyllauramide $C_{11}H_{23}CONHCH_2C_6H_5$	Colorado potato beetle	Fourth
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	do.
Benzylmercaptomannose $C_6H_{12}O_5(SCH_2C_6H_5)_2$	Southern armyworm	First
N-Benzylpalmitamide $C_{15}H_{31}CONHCH_2C_6H_5$	Colorado potato beetle	Fourth
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	do.
n-Benzylpropionamide $C_2H_5CONHCH_2C_6H_5$	Colorado potato beetle	Fourth
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	do.

MONS 045386

Table 3.— (Continued)

Compound	Insect	Stage1/
Benzylthioxanthic disulfide $[C_6H_5CH_2C(S)S]_2$	Cross-striped cabbage worm	Fourth
	Southern armyworm	Sixth
Bis(p-bromophenyl)-sulfone $BrC_6H_4SO_2C_6H_4Br$	Colorado potato beetle	Fourth
	Greenhouse leaf tier	do.
	Hawaiian beet webworm	Fifth
	Melon worm	Fourth
	Southern beet webworm	do.
9,9-Bis(1-hydroxy-2-naphthyl)-fluorene anhydride $C_{10}H_6OC_{10}H_6OC_6H_4C_6H_4$	Greenhouse leaf tier	Fifth
	Southern armyworm	First
(Other compounds beginning with "bis" entered under radical that follows.)		
Borneol $C_{10}H_{17}OH$	do.	Fourth
p-Bromobenzenesulfonanilide $BrC_6H_4SO_2NHC_6H_5$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Southern armyworm	do.
p-Bromo-N,N-dibenzylbenzenesulfonamide $BrC_6H_4SO_2N(CH_2C_6H_5)_2$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Melon worm	Fifth
	Southern armyworm	Third
2-Bromofluorene $C_6H_4CH_2C_6H_3Br$	Cabbage webworm	Third
	Cross-striped cabbage worm	Fourth
	Diamondback moth	do.
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	Fourth
	Rice weevil	Adult
	Southern armyworm	Fourth
	Southern beet webworm	Fifth
	Termites	Adult
	do.	do.
2-Bromo-9-fluorenol $C_6H_4CH(OH)C_6H_3Br$	Cross-striped cabbage worm	Fourth
	Hawaiian beet webworm	Fifth
	Melon worm	do.
	Rice weevil	Adult
	Southern armyworm	Fourth
	Southern beet webworm	do.
	Termites	Adult
	do.	do.

MONS 045387

Table 3.— (Continued)

Compound	Insect	Stage[1/]
2-Bromo-9-fluorenone $C_6H_4OCC_6H_3Br$	Cross-striped cabbage worm	Fourth
	Melon worm	Fifth
	Southern armyworm	Sixth
p-Bromo-N-methyl-N-phenylbenzenesulfonamide $BrC_6H_4SO_2N(CH_3)C_6H_5$	Cross-striped cabbage worm	Fourth
	Melon worm	Fifth
	Southern armyworm	Sixth
p-Bromo-N-1-naphthylbenzenesulfonamide $BrC_6H_4SO_2NHC_{10}H_7$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Southern armyworm	Sixth
2-Bromo-7-nitrofluorene $BrC_6H_3CH_2C_6H_3NO_2$	Cross-striped cabbage worm	Fourth
	Melon worm	Fifth
	Southern armyworm	Sixth
2-Bromo-1-nitronaphthalene $C_{10}H_7(NO_2)Br$	do.	do.
p-Bromophenol BrC_6H_4OH	do.	Fourth
p-(p-Bromophenylazo)-phenol $BrC_6H_4N:NC_6H_4OH$	Diamondback moth	First
	Southern armyworm	do.
4-(p-Bromophenylazo)-resorcinol $BrC_6H_4N:NC_6H_3(OH)_2$	Cabbage looper	do.
	Cabbage webworm	do.
	Cross-striped cabbage worm	do.
	Imported cabbage worm	do.
	Melon worm	Fifth
	Southern armyworm	First
	do.	Sixth
4-(p-Bromophenylazo)-5,6,7,8-tetrahydro-1-naphthol $BrC_6H_4N:NC_{10}H_{11}$	Bean leaf roller	First
	Cabbage looper	Second
	Diamondback moth	First
	Imported cabbage worm	do.
	Southern armyworm	do.
	do.	Fourth
2-Bromo-5-phenyl-2,3-cyclohexenone $BrC:CHCH_2CH(C_6H_5)CH_2C:O$	do.	First

MONS 045388

Table 3.-(Continued)

Compound	Insect	Stage[1]
N-p-Bromophenylsulfonyl-morpholine $BrC_6H_4SO_2N(CH_2CH_2)_2O$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. Third
2,3-Butanedione-3-monoxime $CH_3COC(NOH)CH_3$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. do.
Butyl allophanate $NH_2CONHCO_2C_4H_9$	do.	First
N-n-Butyl-p-toluenesulfonamide $CH_3C_6H_4SO_2NHC_4H_9$	Diamondback moth Greenhouse leaf tier Hawaiian beet webworm Southern armyworm Southern beet webworm	Fourth do. Fifth Fourth Fifth
Calcium salt of chlorinated sulfoleic acid	Colorado potato beetle Greenhouse leaf tier Hawaiian beet webworm Melon worm Southern armyworm Southern beet webworm	Fourth do. Fifth Fourth Third Fourth
Calcium sulfoleate $Ca(C_{18}H_{33}SO_2)_2$	Southern armyworm	First
N-(o-Carboxyphenyl)glycine $HOOCC_6H_4NHCH_2COOH$	Cross-striped cabbage worm Southern armyworm	do. do.
Catechol $C_6H_4(OH)_2$	do.	Sixth
Chloroacetyldiphenylamine $CH_2ClCOC_6H_4NHC_6H_5$	do.	Third
2-Chloroacridone 4-Chloroacridone $NHC_6H_4COC_6H_3Cl$	Cross-striped cabbage worm Imported cabbage worm Southern armyworm	First do. do.
4-Chloro-2-amino-1-diphenylamine $C_6H_5NHC_6H_3ClNH_2$	do.	do. Sixth
(4-Chloro-2-aminophenylmercapto)-acetic acid $ClC_6H_3(NH_2)SCH_2COOH$	Cross-striped cabbage worm Southern armyworm	Fourth Sixth

MONS 045389

Table 3.-(Continued)

Compound	Insect	Stage 1/
alpha-(p-Chlorobenzoyl)-beta-(m-nitrophenyl) ethylene oxide $ClC_6H_4COCHOCHC_6H_4NO_2$	Cross-striped cabbage worm	Fourth
	Greenhouse leaf tier	Fifth
	Melon worm	do.
	Southern armyworm	Fourth
	Southern beet webworm	do.
alpha-(p-Chlorobenzoyl)-beta-phenyl ethylene oxide $ClC_6H_4COCHOCHC_6H_5$	Southern armyworm	First
3-Chlorocarbazole $C_6H_4NHC_6H_3Cl$	do.	do.
	do.	Fifth
2-Chloro-3,5-dinitrobenzoic acid $ClC_6H_2(NO_2)_2COOH$	Cross-striped cabbage worm	Fourth
	Southern armyworm	Fifth
2'-Chlorodiphenylamine-2-carboxylic acid 3'-Chlorodiphenylamine-2-carboxylic acid $ClC_6H_4NHC_6H_4COOH$	do.	Fifth
9-Chlorofluorene $C_6H_4CHClC_6H_4$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Southern armyworm	Sixth
6-Chloro-2-methyl-1,4,2-benzothiazine-3(4)-one $ClC_6H_3SCH(CH_3)C(O):N$	Southern armyworm	First
	do.	Sixth
2-Chloro-4-nitroaniline $ClC_6H_3(NO_2)NH_2$	American cockroach	3/4 grown
	Diamondback moth	Fourth
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	Fourth
	Rice weevil	Adult
	Southern armyworm	Third
	do.	Sixth
	Southern beet webworm	Fifth
	Termites	Adult
	do.	do.
4-Chloro-2-nitrodiphenylamine $C_6H_5NHC_6H_3ClNO_2$	Cross-striped cabbage worm	First
	do.	Second
	do.	Third
	do.	Fourth
	Diamondback moth	First
	do.	Second
	Imported cabbage worm	First
	Southern armyworm	do.
	do.	Second
	do.	Third

MONS 045390

Table 3.—(Continued)

Compound	Insect	Stage[1]
2-Chloro-7-nitrofluorene $NO_2C_6H_4CH_2C_6H_4Cl$	Colorado potato beetle Cross-striped cabbage worm Imported cabbage worm Southern armyworm	Fourth First do. do.
4-Chloro-2-nitrophenyl ester of thiocyanic acid $ClC_6H_3(NO_2)SCN$	Diamondback moth Southern armyworm	do. do.
(4-Chloro-2-nitrophenylmercapto)-acetic acid $ClC_6H_3(NO_2)SCH_2COOH$	Cross-striped cabbage worm Southern armyworm	Fourth Fifth
alpha-(4-Chloro-2-nitrophenylmercapto)-acetophenone $ClC_6H_3(NO_2)SCH_2COC_6H_5$	do.	do.
4-Chloro-2-nitrophenylsulfuramine $ClC_6H_3(NO_2)SNH_2$	Cross-striped cabbage worm Southern armyworm	Fourth Fifth
4-Chloro-2-nitrophenyl sulfur bromide $ClC_6H_3(NO_2)SBr$	do.	do.
4-Chloro-phenaziminobenzene $ClC_6H_3N{:}NC_6H_5$	do.	Sixth
o-Chlorophenyl ester of p'-toluenesulfonic acid p-Chlorophenyl ester of p'-toluenesulfonic acid $ClC_6H_4OSO_2C_6H_4CH_3$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. Sixth
4-Chloro-m-tolyl ester of p'-toluenesulfonic acid $ClC_6H_3(CH_3)OSO_2C_6H_4CH_3$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. Third
p-Chlorophenyl furfuralmethyl ketone $(C_4H_3O)CH{:}CHCOC_6H_4Cl$	do.	Fifth
Chrysene $C_{18}H_{12}$	do.	First
Chrysylamine $C_{18}H_{11}NH_2$	do.	do.

MONS 045391

Table 3.-(Continued)

Compound	Insect	Stage[1]
p-Cresyl furoate $(C_4H_3O)COOC_6H_3(CH_3)OH$	Southern armyworm	Fifth
Cyanuric acid $HOC:NC(OH):NC(OH):N$	do.	First
2-(alpha-(2-Hydroxy-6-oxo-4,4-dimethyl-delta'-cyclohexenyl)-ethyl)-5,5-dimethyl-1,3-cyclohexanedione $(CH_3)_2CCH_2COCHCOCH_2$ $CH(CH_3)$ $COCOCH_2C(CH_3)_2CH_2COH$	do.	do.
2-(2-Hydroxy-6-oxo-4,4-dimethyl-delta'-cyclohexenylmethyl)-5,5-dimethyl-1,3-cyclohexanedione $OCCH_2C(CH_3)_2CH_2COCHCH_2COCH_2C(CH_3)_2CH_2COH$	do.	do.
n-Cyclohexylacetamide $CH_3CONHC_6H_{11}$	Colorado potato beetle Southern armyworm	Fourth do.
n-Cyclohexylbenzamide $C_6H_5CONHC_6H_{11}$	Cross-striped cabbage worm Southern armyworm	do. Fifth
n-Cyclohexylmyristamide $C_{11}H_{23}CONHC_6H_{11}$	Hawaiian beet webworm Melon worm Southern armyworm Southern beet webworm Yellow woolly bear	do. Fourth do. do. do.
n-Cyclohexylpalmitamide $C_{15}H_{31}CONHC_6H_{11}$	Hawaiian beet webworm Melon worm Southern armyworm Southern beet webworm Yellow woolly bear	Fifth Fourth do. do. do.
o-Cyclohexylphenol $C_6H_{11}C_6H_4OH$	Southern armyworm do. do.	First Third Fifth
p-Cyclohexylphenol $HOC_6H_4C_6H_{11}$	Colorado potato beetle do. Cross-striped cabbage worm Fall webworm Southern armyworm do.	Fourth do. do. Fifth First Sixth

MONS 045392

Table 3.--(Continued)

Compound	Insect	Stage[1/]
N-Cyclohexylpropionamide $C_2H_5CONHC_6H_{11}$	Hawaiian beet webworm	Fifth
	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	do.
	Yellow woolly bear	do.
1,8-Diaminonaphthalene $C_{10}H_6(NH_2)_2$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Melon worm	Fifth
	Southern armyworm	Fourth
	do.	Sixth
2,3-Diaminophenazine $C_6H_4N_2C_6H_2(NH_2)_2$	do.	First
	do.	Sixth
Dianisalcyclopentanone $CH_3OC_6H_4CH[COCH_2CH_2C(CHC_6H_4OCH_3)]CO$	American cockroach	3/4 grown
	Melon worm	Fourth
	Southern armyworm	Fifth
	Southern beet webworm	do.
Dibenzodioxin $[C_6H_4OC_6H_4O]$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Melon worm	Fifth
	Southern armyworm	First
	do.	Sixth
Dibenzalcyclopentanone $C_6H_5CH:[OCH_2CH_2C(:CHC_6H_5)]CO$	Hawaiian beet webworm	Fifth
	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	Fifth
1,2,3,4-Dibenzophenazine $[C_6H_4NC_{14}H_7N]$	Southern armyworm	First
Dibenzophenothioxin $[OC_{10}H_6SC_{10}H_6]$	do.	Fifth
2,3,6,7-Dibenzoxanthone $[OC_{10}H_6COC_{10}H_6]$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	First
	Imported cabbage worm	do.
p-Dibromdiphenyl $BrC_6H_4C_6H_4Br$	Southern armyworm	do.
9,10-Dibromoanthracene $C_6H_4(CBr)_2C_6H_4$	do.	do.

MQNS 045393

Table 3.— (Continued)

Compound	Insect	Stage[1]
2,7-Dibromo-9-benzalfluorene $BrC_6H_3C(CHC_6H_5)C_6H_3Br$	Southern armyworm	First
alpha, alpha'-Dibromobibenzyl (stilbene dibromide) $C_6H_5CHBrCHBrC_6H_5$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. Sixth
2,7-Dibromo-9(o-chlorobenzal)-fluorene $BrC_6H_3C(CHC_6H_4Cl)C_6H_3Br$	do.	First
Dibromo-o-cresolsulfonphthalein $OSO_2C_6H_4C:[C_6H_2Br_2(CH_3)OH]_2$	Southern armyworm	do.
2,3-Dibromo-1,3-diphenyl-1-propanone $C_6H_5CHBrCHBrCOC_6H_5$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. Sixth
2,7-Dibromofluorene $BrC_6H_3CH_2C_6H_3Br$	Southern armyworm	First
2,7-Dibromo-9-furalfluorene $BrC_6H_3C[CH(C_4H_3O)]C_6H_3Br$	do.	do.
alpha,beta-Dibromohydrocinnamic acid $C_6H_5CHBrCHBrCOOH$	Colorado potato beetle Cross-striped cabbage worm	Fourth do.
3,4-Dibromo-4-phenyl-2-butanone $C_6H_5CHBrCHBrCOCH_3$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	do. do. Sixth
4,4'-Dibromophenylsulfone $Br-C_6H_4SO_2C_6H_4Br$	Cross-striped cabbage worm Melon worm Southern armyworm	Fourth Fifth Sixth
Di-n-Butylthiourea $C_9H_{20}N_2S$	Cross-striped cabbage worm Southern armyworm	Fourth Fifth
p,p'-Dichloroazoxybenzene $ClC_6H_4NONC_6H_4Cl$	do.	do.
p-Dichlorobenzene ClC_6H_4Cl	Cross-striped cabbage worm Southern armyworm	Fourth Fifth
4,4'-Dichloro-2,2'-dinitrobiphenyl $Cl(NO_2)C_6H_4C_6H_4(NO_2)Cl$	Colorado potato beetle Cross-striped cabbage worm Melon worm Southern armyworm	Fourth do. Fifth Sixth

MONS 045394

Table 3.--(Continued)

Compound	Insect	Stage[1/]
2,7-Dichlorofluorene $Cl(C_6H_3CH_2C_6H_3Cl$	Cross-striped cabbage worm	First
	do.	Fourth
	Diamondback moth	do.
	Greenhouse leaf tier	do.
	Hawaiian beet webworm	Fifth
	Imported cabbage worm	First
	Melon worm	Fourth
	Southern armyworm	First
	do.	Fourth
	Southern beet webworm	Fifth
1-(3,5-Dichloro-2-hydroxyphenylazo)-2-naphthol $Cl_2C_6H_2(OH)N:NC_{10}H_6OH$	Southern armyworm	First
	do.	Third
Dichlorophenolsulfonphthalein $OSO_2C_6H_4C:(C_6H_3Cl_2OH)_2$	do.	First
6-(2,5-Dichlorophenylazo)-4-chloro-m-cresol $Cl_2C_6H_3N:NC_6H_2(CH_3)(Cl)OH$	Cross-striped cabbage worm	Fourth
	Southern armyworm	do.
2-(2,5-Dichlorophenylazo)-6-chlorothymol $Cl_2C_6H_3N:NC_6H(Cl)(CH_3)(OH)OH(CH_3)_2$	Cross-striped cabbage worm	do.
	Southern armyworm	do.
4-(2,5-Dichlorophenylazo)-m-cresol $Cl_2C_6H_3N:NC_6H_3(CH_3)OH$	Cabbage looper	First
	Cabbage webworm	do.
	Cross-striped cabbage worm	do.
	Diamondback moth	do.
	Southern armyworm	do.
2-(2,5-Dichlorophenylazo)-p-cresol $Cl_2C_6H_3N:NC_6H_3(CH_3)OH$	Cross-striped cabbage worm	Fourth
	Southern armyworm	do.
4-(2,5-Dichlorophenylazo)-o-cyclohexylphenol $Cl_2C_6H_3N:NC_6H_3(C_6H_{11})OH$	Cabbage looper	First
	Cabbage webworm	do.
	Cross-striped cabbage worm	do.
	Diamondback moth	do.
	Imported cabbage worm	do.
	Southern armyworm	do.
	do.	Sixth

MONS 045395

Table 3.—(Continued)

Compound	Insect	Stage[1/]
1-(2,5-Dichlorophenylazo)-2-naphthol 4-(2,5-Dichlorophenylazo)-1-naphthol $Cl_2C_6H_3N{:}NC_{10}H_6OH$	Cross-striped cabbage worm Southern armyworm	Fourth do.
(4-(2,5-Dichlorophenylazo)-1-naphthylmethyl ether $Cl_2C_6H_3N{:}NC_{10}H_6OCH_3$	Cross-striped cabbage worm Southern armyworm	do. do.
p-(2,5-Dichlorophenylazo)-phenol $Cl_2C_6H_3N{:}NC_6H_4OH$	do.	Sixth
4-(2,5-Dichlorophenylazo)-resorcinol $Cl_2C_6H_3N{:}NC_6H_3(OH)_2$	Cabbage looper Cabbage webworm Cross-striped cabbage worm Southern armyworm	First do. do. do.
4-(2,5-Dichlorophenylazo)-thymol $Cl_2C_6H_3N{:}NC_6H_2(CH_3)(OH)CH(CH_3)_2$	Cross-striped cabbage worm Southern armyworm	Fourth do.
4-(2,5-Dichlorophenylazo)-2,5-xylenol $Cl_2C_6H_3N{:}NC_6H_2(CH_3)_2OH$	Cross-striped cabbage worm Southern armyworm	do. do.
4-(2,5-Dichlorophenylazo)-2,6-xylenol $Cl_2C_6H_3N{:}NC_6H_2(CH_3)_2OH$	do.	First
2,4-Dichlorophenyl ester of 3',4'-dichlorobenzenesulfonic acid $Cl_2C_6H_2OSO_2C_6H_3Cl_2$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. Sixth
2,4-Dichlorophenyl ester of p'-toluenesulfonic acid $Cl_2C_6H_3OSO_2C_6H_4CH_3$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. Third
1,3-Bis(2,5-dichlorophenyl)-triazene $(Cl_2C_6H_4)_2C_2HN_3$	Cross-striped cabbage worm Southern armyworm	Fourth do.
Di-m-cresyl carbonate Di-o-cresyl carbonate Di-p-cresyl carbonate $(HOCH_3C_6H_3)_2CO_3$	Southern armyworm	First
Dicyanodiamide $HN{:}C(NH_2)NHCN$	Colorado potato beetle Cross-striped cabbage worm Fall webworm Imported cabbage worm Southern armyworm	Fourth First Fifth First do.

MONS 045396

Table 3.—(Continued)

Compound	Insect	Stage[1]
2,5-Dicyclopentylidene-cyclopentanone $(C_5H_8)_2C_5H_4O$	Colorado potato beetle	Fourth
	Diamondback moth	do.
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	do.
	Yellow woolly bear	Sixth
Diethyl ester of ethylenediamine-N,N'-beta,beta'-bis(crotonic acid) $(C_2H_5OOCH=C(CH_3)NHCH_2-)_2$	Cross-striped cabbage worm	First
	Southern armyworm	do.
N,N-Diethyl-2-naphthalenesulfonamide $C_{10}H_7SO_2N(C_2H_5)_2$	American cockroach	do.
	Cross-striped cabbage worm	Fourth
	Melon worm	Fifth
	Southern armyworm	Sixth
N,N-Diethyl-p-nitrosoaniline $ONC_6H_4N(C_2H_5)_2$	Cabbage looper	Fifth
	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Melon worm	Fifth
	Southern armyworm	Fourth
Difuralcyclopentanone $C_{15}H_{12}O_3$	Southern armyworm	First
9,10-Dihydroanthracene $C_6H_4(CH_2)_2C_6H_4$	Cross-striped cabbage worm	Fourth
	Melon worm	Fifth
	Southern armyworm	Sixth
2,3-Dihydroquinidine-12-carboxylic acid $C_6H_4O(OOCH)C(CH_2CH_2CH_2)CH$	American cockroach	3/4 grown
	Melon worm	Fourth
	Southern armyworm	Fifth
	Southern beet webworm	do.
2,7-Dihydroxynaphthalene $HOC_{10}H_6OH$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Southern armyworm	do.
9,9-Di(p-hydroxyphenyl)-fluorene $C_6H_4C(C_6H_4OH)_2C_6H_4$	Colorado potato beetle	do.
	Cross-striped cabbage worm	do.
	Southern armyworm	Sixth

MONS 045397

Table 3.--(Continued)

Compound	Insect	Stage[1]
p,p'-Diiodoazoxybenzene $IC_6H_4NONC_6H_4I$	Cross-striped cabbage worm	Fourth
	Melon worm	Fifth
	Southern armyworm	do.
p-Diiodobenzene $C_6H_4I_2$	Cross-striped cabbage worm	Fourth
	Southern armyworm	First
	do.	Sixth
p,p'-Diiododiphenyl $IC_6H_4C_6H_4I$	do.	First
2,6-Diiodo-4-nitroaniline $I_2C_6H_3NH_2$	do.	do.
Di-p-methoxydiphenylamine $CH_3OC_6H_4NHC_6H_4OCH_3$	do.	do.
p-Dimethylaminobenzaldehyde $(CH_3)_2NH_6H_4CHO$	do.	do.
	do.	Sixth
p-Dimethylaminoazobenzene $(CH_3)_2NC_6H_4N:NC_6H_5$	do.	First
4-Dimethylaminobenzene-1-azo-1-naphthalene 4-Dimethylaminobenzene-1-azo-2-naphthalene $(CH_3)_2NC_6H_4N:NC_{10}H_7$	do.	do.
p,p'-Bis(dimethylamino)-benzophenone $[(CH_3)_2NC_6H_4]_2CO$	Greenhouse leaf tier	Fourth
	Hawaiian beet webworm	Fifth
	Melon worm	Fourth
	Southern armyworm	Third
	Southern beet webworm	Fourth
o-(p-Dimethylaminophenylazo)-benzoic acid $(CH_3)_2NC_6H_4N:NC_6H_4COOH$	Southern armyworm	First
alpha,alpha-Bis((p-(N,N-dimethylamino)-phenyl))-p-cresol $[(CH_3)_2NC_6H_4]_2CHC_6H_4OH$	Colorado potato beetle	Fourth
	Southern armyworm	Third
alpha,alpha-Bis((p-(N,N-dimethylamino)-phenyl))-p-methylanisole $[(CH_3)_2NC_6H_4]_2CHC_6H_4OCH_3$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Southern armyworm	Third
p-Dimethylaminophenyl-1-naphthoquinonimine $(CH_3)_2NC_6H_4N:C_{10}H_6O$	Cross-striped cabbage worm	First
	Southern armyworm	do.

MONS 045398

Table 3.—(Continued)

Compound	Insect	Stage[1]
Bis(p-dimethylaminophenyl)sulfide $[(CH_3)_2NC_6H_4]_2S$	Cross-striped cabbage worm	First
	Imported cabbage worm	do.
	Southern armyworm	do.
5,5-Dimethyl-1,3-cyclohexanedione $CH_2COCH_2COCH_2C(CH_3)_2$	do.	do.
N,N-Dimethyl-p-toluenesulfonamide $CH_3C_6H_4SO_2N(CH_3)_2$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Melon worm	Fifth
	Southern armyworm	Fourth
beta-Dinaphthofuran $C_{10}H_6OC_{10}H_6$	do.	Fifth
Dinaphthylthiourea $(C_{10}H_7NH)_2CS$	do.	First
p-(2,4-Dinitroanilino)-phenol $HOC_6H_4NHC_6H_3(NO_2)_2$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Southern armyworm	Sixth
o-Dinitrobenzene $C_6H_4(NO_2)_2$	do.	First
	do.	Third
4,6-Dinitro-o-cresol methyl ether $(NO_2)_2C_6H_2(CH_3)OCH_3$	do.	Fifth
o,o'-Dinitrodiphenyl $NO_2C_6H_4C_6H_4NO_2$	do.	do.
2,4-Dinitrodiphenylamine $C_6H_5NHC_6H_3(NO_2)_2$	Colorado potato beetle	Fourth
	Southern armyworm	Third
o,o'-Dinitrodiphenylamine $NO_2C_6H_4NHC_6H_4NO_2$	do.	do.
4,4'-Dinitrodiphenyl sulfide $(NO_2C_6H_4)_2S$	Cross-striped cabbage worm	Fourth
2,7-Dinitrofluorene $NO_2C_6H_3CH_2C_6H_3NO_2$	do.	do.
	Melon worm	Fifth
	Southern armyworm	Sixth

MONS 045399

Table 3.—(Continued)

Compound	Insect	Stage[1]
1,5-Dinitronaphthalene $C_{10}H_6(NO_2)_2$	Cabbage looper	First
	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	First
	Imported cabbage worm	do.
	Southern armyworm	do.
1,8-Dinitronaphthalene $C_{10}H_6(NO_2)_2$	Cabbage looper	do.
	Cross-striped cabbage worm	do.
	do.	Third
	Imported cabbage worm	First
	Melon worm	Fifth
	Southern armyworm	First
	do.	Third
3,5-Dinitrophenoxazine $OC_6H_4NHC_6H_2(NO_2)_2$	Cross-striped cabbage worm	First
	Imported cabbage worm	do.
	Southern armyworm	do.
Di-o-nitrophenyl disulfide $NO_2C_6H_4SSC_6H_4NO_2$	Cross-striped cabbage worm	Fourth
	Diamondback moth	do.
	Greenhouse leaf tier	do.
	Hawaiian beet webworm	Fifth
	Melon worm	Fourth
	Southern armyworm	First
	do.	Fourth
	Southern beet webworm	Fifth
Di-p-nitrophenyl disulfide $NO_2C_6H_4SSC_6H_4NO_2$	Southern armyworm	First
4-(2,4-Dinitrophenyl)-morpholine $(NO_2)_2C_6H_3N(CH_2CH_2)_2O$	Cross-striped cabbage worm	Fourth
	Melon worm	Fifth
	Southern armyworm	do.
Di-3-nitrophenyl sulfone $NO_2C_6H_4SO_2C_6H_4NO_2$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Melon worm	Fifth
	Southern armyworm	do.
N,N'-Dinitroso-N,N'-diphenyl-p-phenylenediamine $C_6H_5N(NO)C_6H_4N(NO)C_6H_5$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Southern armyworm	Sixth
Diperinaphthylenethiophene $C_{10}H_6C_4SOC_{10}H_6$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Melon worm	Fifth
	Southern armyworm	Sixth

MONS 045400

Table 3.—(Continued)

Compound	Insect	Stage[1/]
m-Diphenylbenzene o-Diphenylbenzene p-Diphenylbenzene $C_6H_5C_6H_4C_6H_5$	Southern armyworm do.	First Third
Diphenylchloroacetic acid $(C_6H_5)_2ClCOOH$	Cross-striped cabbage worm Southern armyworm	First do.
Diphenylene disulfide $(C_6H_4)_2S_2$	Cross-striped cabbage worm Diamondback moth Greenhouse leaf tier Hawaiian beet webworm Melon worm Southern armyworm Southern beet webworm	Fourth do. Fifth do. Fourth do. Fifth
Diphenylethylenediamine $(C_6H_5NHCH_2)_2$	Southern armyworm	First
N,N'-Diphenylformamidine $C_6H_5NCHNHC_6H_5$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. do.
alpha,gamma-Diphenylguanidine $C_6H_5NHC(NH)NHC_6H_5$	Colorado potato beetle Southern armyworm	do. Sixth
Diphenylmethylene dithioglycolic acid $(C_6H_5)_2C(SCH_2COOH)_2$	do.	Fifth
Diphenyl-p-phenylenediamine $C_6H_5NHC_6H_4NHC_6H_5$	do. do.	First Sixth
1,4-Diphenylpiperazine $C_6H_5N(CH_2CH_2)_2NC_6H_5$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. Third
Diphenylpyridylamine $(C_5H_4N)N(C_6H_5)_2$	do.	do.
Diphenylpyridylguanidine $(C_6H_5NH)_2C:N(C_5H_4N)$	do.	do.
2,3-Diphenylquinoxaline $C_6H_4N:C(C_6H_5)C(C_6H_5):N$	do.	First

MONS 045401

Table 3.—(Continued)

Compound	Insect	Stage[1]
4,4-Diphenylsemicarbazide $(C_6H_5)_2NCONHNH_2$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Melon worm	do.
	Southern armyworm	Third
Diphenylthiocarbazide $C_{13}H_{14}N_4S$	Cross-striped cabbage worm	Fourth
	Southern armyworm	Fifth
2,4-Diphenylthiophene $C_6H_5OCHC(C_6H_5)SCH$	Cross-striped cabbage worm	First
	Imported cabbage worm	do.
	Southern armyworm	do.
sym-Diphenylthiourea $(C_6H_5NH)_2CS$	Cross-striped cabbage worm	Fourth
	Southern armyworm	Fifth
sym-Diphenylurea $(C_6H_5NH)_2CO$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Melon worm	Fifth
	Southern armyworm	Third
Dipiperonalcyclopentanone $CH_2O_2C_6H_3CHCC(O)C(CHC_6H_3O_2CH_2)CH_2CH_2$	American cockroach	3/4 grown
	Melon worm	Fourth
	Southern armyworm	Fifth
	Southern beet webworm	do.
Dipyridylamine $(C_5H_4N)_2NH$	Cross-striped cabbage worm	Fourth
	Southern armyworm	Fifth
alpha,alpha-Dipyridylthiourea $C_{11}H_{10}N_4S$	Cross-striped cabbage worm	Fourth
	Southern armyworm	Fifth
beta,beta-Dipyridylthiourea $C_{11}H_{10}N_4S$	Cross-striped cabbage worm	Fourth
	Southern armyworm	Third
N,N'-Disalicylalethylenediamine $HOC_6H_4CH:NCH_2CH_2N:CHC_6H_4OH$	Cabbage looper	First
	Cross-striped cabbage worm	do.
	Southern armyworm	do.
	do.	Third
	do.	Sixth
Disodium 4-sulfamidophenyl-2-azo-7-acetamino-1-hydroxynaphthalene-3,6-disulfonate $(NaSO_3)_2C_{10}H_3(NHCOCH_3)(OH)NNC_6H_4SO_2NH_2$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	First
	Southern armyworm	do.
	do.	Fourth

MONS 045402

Compound	Insect	Stage[1/]
Disulfurous acid ester of pentaerythritol $CH_2(OCH_2)_2C(CH_2O)_2SO$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. do.
Di-1-tetrahydronaphthylthiourea $(C_{10}H_{11}NH)_2S$	do.	First
Dithiocyanophenothiazine $(C_{12}H_7NS)(SCN)_2$	do.	Fifth
Dithiodihydroxydinaphthyl sulfide $(C_{10}H_6OH)_2S_4$	do.	do.
Dithiooxamide $NH_2C(S)C(S)NH_2$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. Sixth
N,N'-Di-o-tolylethylenediamine N,N'-Di-p-tolylethylenediamine $CH_3C_6H_4NHCH_2CH_2NHC_6H_4CH_3$	Cross-striped cabbage worm Melon worm Southern armyworm	Fourth Fifth Sixth
alpha,gamma-Di-o-tolylguanidine $[CH_3C_6H_4NH]_2C:NH$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. Third
N,N'-Di-o-tolylpiperazine $CH_3C_6H_4N(CH_2CH_2)_2NC_6H_4CH_3$	Cross-striped cabbage worm Melon worm Southern armyworm	Fourth Fifth Sixth
Dixanthylene $C_{26}H_{16}O_2$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. First
Dixanthyl ether $(C_6H_4OC_6H_4CH)_2O$	do.	Sixth
p-Ethoxyhydrazobenzene $C_6H_5NHNHC_6H_4OC_2H_5$	Colorado potato beetle Diamondback moth Fall webworm Greenhouse leaf tier Hawaiian beet webworm Melonworm Southern armyworm Southern beet webworm	Fourth do. Fifth do. do. do. Fourth Fifth
Ethyl p-aminobenzoate $NH_2C_6H_4COOC_2H_5$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. do.
Ethyl ester of 3-acetoxy-2-naphthoic acid $CH_3COOC_{10}H_6COOC_2H_5$	Colorado potato beetle Cross-striped cabbage worm Southern armyworm	Fourth do. Sixth

MONS 045403

Table 3.—(Continued)

Compound	Insect	Stage[1]
Ethyl ester of 4-acetyl-3-hydroxy-2-naphthoic acid $CH_3OC_{10}H_5(OH)CO_2C_2H_5$	American cockroach	First
	Cross-striped cabbage worm	Fourth
	Melon worm	Fifth
	Southern armyworm	do.
Ethyl ester of alpha-(4-chloro-2-nitrophenylmercapto)-acetoacetic acid $ClC_6H_3(NO_2)SCH(COCH_3)CO_2C_2H_5$	Cross-striped cabbage worm	Fourth
	Southern armyworm	Fifth
Ethyl ester of alpha, beta-dibromohydrocinnamic acid $C_6H_5CHBrCHBrCOOC_2H_5$	Australian cockroach	First
	Cross-striped cabbage worm	Fourth
	Melon worm	Fifth
	Southern armyworm	Sixth
Ethyl ester of diphenylcarbamic acid $(C_6H_5)_2NCOOC_2H_5$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Southern armyworm	Third
Ethyl ester of p-hydroxybenzoic acid $HOC_6H_4COOC_2H_5$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Southern armyworm	Third
Ethyl ester of 3-hydroxy-2-naphthoic acid $C_{10}H_6(OH)COOC_2H_5$	Cross-striped cabbage worm	Fourth
	Melon worm	Fifth
	Rice weevil	Adult
	Southern armyworm	Sixth
	Southern beet webworm	Fifth
	Termites	Adult
6-Ethylphenothiazine $SC_6H_4NHC_6H_3C_2H_5$	Southern armyworm	Third
N-Ethyl-p-toluenesulfonamide $CH_3C_6H_4SO_2NHC_2H_5$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Southern armyworm	do.
Ficin	Cross-striped cabbage worm	First
	Imported cabbage worm	do.
	Southern armyworm	do.
2-Fluorene acetate $C_6H_4CH_2C_6H_3OOCCH_3$	do.	do.
9-Fluorenol $C_6H_4CHOHC_6H_4$	do.	do.

MONS 045404

Table 3.— (Continued)

Compound	Insect	Stage[1]
9-Fluorenol acetate $C_6H_4CH(OOCCH_3)C_6H_4$	Cross-striped cabbage worm	Fourth
	Hawaiian beet webworm	do.
	Melon worm	do.
	Southern armyworm	First
	do.	Fourth
	Southern beet webworm	do.
9-Fluorenoneoxime $C_6H_4C(NOH)C_6H_4$	Southern armyworm	Sixth
9-Fluorenoneoxime acetate $C_6H_4C(NOOCCH_3)C_6H_4$	Cross-striped cabbage worm	Fourth
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	Fourth
	Melon worm	do.
	Southern armyworm	First
	do.	Fourth
	Southern beet webworm	do.
9-Fluorenoneoxime benzoyl ester $C_6H_4C(NOOCC_6H_5)C_6H_4$	Cross-striped cabbage worm	do.
	Southern armyworm	Sixth
9-Fluorenonephenylhydrazone $C_6H_4C(NNHC_6H_5)C_6H_4$	Cabbage looper	Fourth
	Cross-striped cabbage worm	do.
	Greenhouse leaf tier	Fifth
	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	do.
Fluorescein $C_{20}H_{12}O_5$	Southern armyworm	First
p-Fluorobenzoic acid FC_6H_4COOH	Southern armyworm	Fifth
N-2-Fluorylbenzamide $C_6H_5CONHC_{13}H_9$	Colorado potato beetle	Fourth
	Diamondback moth	do.
	Greenhouse leaf tier	do.
	Hawaiian beet webworm	Fifth
	Melon worm	Fourth
	Southern armyworm	Third
	Southern beet webworm	Fourth
	Yellow woolly bear	Sixth
N-2-Fluorylformamide $HCONHC_{13}H_9$	Colorado potato beetle	Fourth
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	do.

MONS 045405

Table 3.--(Continued)

Compound	Insect	Stage[1/]
N-2-Fluorylauramide $C_{11}H_{23}CONHC_{13}H_9$	Colorado potato beetle	Fourth
	Diamondback moth	do.
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	do.
	Yellow woolly bear	Sixth
N-2-Fluorylpalmitamide $C_{15}H_{31}CONHC_{13}H_9$	Colorado potato beetle	Fourth
	Diamondback moth	do.
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	do.
	Yellow woolly bear	Sixth
N-2-Fluorylpropionamide $CH_3CH_2CONHC_{13}H_9$	Colorado potato beetle	Fourth
	Diamondback moth	do.
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	do.
	Yellow woolly bear	Sixth
2-Fluorylpyrrolecarboxamide $(C_4H_3O)CONHC_{13}H_9$	Colorado potato beetle	Fourth
	Diamondback moth	do.
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	Fourth
	Southern armyworm	Third
	Southern beet webworm	Fourth
	Yellow woolly bear	Sixth
p-Formotoluide $HCONHC_6H_4CH_3$	Colorado potato beetle	Fourth
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	do.
9-Furalfluorene $C_6H_4C(CHC_4H_3O))C_6H_4$	American cockroach	1/4 grown
	Cross-striped cabbage worm	Fourth
	Greenhouse leaf tier	Fifth
	Melon worm	Fourth
	Southern armyworm	First
	do.	Fifth
	Southern beet webworm	Fourth

NONS 045406

Compound	Insect	Stage[1/]
2-Hydroxy-3,4-dinitrodiphenylamine-6-carboxylic acid $C_{12}H_6(NO_2)_2(OH)COOH$	Cross-striped cabbage worm	Fourth
	Southern armyworm	Fifth
4-(2-Hydroxy-3,5-dinitrophenylazo)-6-m-tolylenediamine $(NO_2)_2C_6H_2(OH)N:NC_6H_2(NH_2)_2CH_3$	do.	First
	do.	Sixth
p-Hydroxydiphenyl $C_6H_5C_6H_4OH$	do.	Fifth
2-Hydroxyfluorenone $C_6H_4COC_6H_3OH$	do.	First
3-Hydroxy-2-naphthamide $C_{10}H_6(OH)CONH_2$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	First
	Imported cabbage worm	do.
	Southern armyworm	do.
3-Hydroxy-2-naphthanilide $C_{10}H_6(OH)CONHC_6H_5$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	First
	Imported cabbage worm	do.
	Southern armyworm	do.
3-Hydroxy-4-nitro-2-naphthoic acid $C_{10}H_5(NO_2)(OH)COOH$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	First
	Imported cabbage worm	do.
	Southern armyworm	do.
2-(alpha-(2-Hydroxy-6-oxo-4,4-dimethyl-)) compounds. See p. 90.		
(p-Hydroxyphenylazo)-pyrogallol $HOC_6H_4N:NC_6H_2(OH)_3$	do.	do.
	do.	Sixth
5-(p-(p-Hydroxyphenyl)-phenylazo)-salicylic acid $HOC_6H_4C_6H_4N:NC_6H_2(OH)COOH$	do.	First
2-(o-Hydroxyphenyl)-1-(o-toluino)-alpha-naphthimidazole $C_{10}H_5NC(C_6H_4OH)NHC_6H_4CH_3$	do.	do.
Indigo $NHC_6H_4CO:COC_6H_4NH$	Colorado potato beetle	Fourth
	Diamondback moth	do.
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	do.
	Yellow woolly bear	Sixth

MONS 045407

Table 3.—(Continued)

Compound	Insect	Stage1/
p,p'-Hydrazobis(benzoic acid) $HOOCC_6H_4NHNHC_6H_4COOH$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Melon worm	Fifth
	Southern armyworm	do.
p,p'-Hydrazobisbiphenyl $C_6H_5C_6H_4NHNHC_6H_4C_6H_5$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	do.
	Melon worm	Fifth
	Southern armyworm	do.
o-Hydrazothioanisole $CH_3SC_6H_4NHNHC_6H_4SCH_3$	Southern armyworm	First
Hydrobenzamide $C_6H_5CH(N:CHC_6H_5)_2$	Cross-striped cabbage worm	do.
	Melon worm	Fifth
	Southern armyworm	First
Hydrocinnamic acid $C_6H_5CH_2CH_2COOH$	do.	do.
p-Hydroxyacetophenone $HOC_6H_4COCH_3$	Cross-striped cabbage worm	do.
	Imported cabbage worm	do.
	Southern armyworm	do.
4-Hydroxyacridone $NHC_6H_4COC_6H_3OH$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	First
	Imported cabbage worm	do.
	Southern armyworm	do.
p-Hydroxybenzaldehyde HOC_6H_4CHO	Colorado potato beetle	Fourth
	Diamondback moth	do.
	Greenhouse leaf tier	do.
	Hawaiian beet webworm	Fifth
	Melon worm	Fourth
	Southern armyworm	Third
	Yellow woolly bear	Sixth
p-Hydroxybenzophenone $C_6H_5COC_6H_4OH$	Cross-striped cabbage worm	Fourth
	Diamondback moth	do.
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Imported cabbage worm	do.
	Melon worm	Fourth
	Southern armyworm	Fifth
	Southern beet webworm	do.

MONS 045408

Compound	Insect	Stage1/
2-Hydroxy-3,4-dinitrodiphenylamine-6-carboxylic acid $C_{13}H_6(NO_2)_2(OH)COOH$	Cross-striped cabbage worm	Fourth
	Southern armyworm	Fifth
4-(2-Hydroxy-3,5-dinitrophenylazo)-6-m-tolylenediamine $(NO_2)_2C_6H_2(OH)N:NC_6H_2(NH_2)_2CH_3$	do.	First
	do.	Sixth
p-Hydroxydiphenyl $C_6H_5C_6H_4OH$	do.	Fifth
2-Hydroxyfluorenone $C_6H_4COC_6H_3OH$	do.	First
3-Hydroxy-2-naphthamide $C_{10}H_6(OH)CONH_2$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	First
	Imported cabbage worm	do.
	Southern armyworm	do.
3-Hydroxy-2-naphthanilide $C_{10}H_6(OH)CONHC_6H_5$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	First
	Imported cabbage worm	do.
	Southern armyworm	do.
3-Hydroxy-4-nitro-2-naphthoic acid $C_{10}H_5(NO_2)(OH)COOH$	Colorado potato beetle	Fourth
	Cross-striped cabbage worm	First
	Imported cabbage worm	do.
	Southern armyworm	do.
2-(alpha-(2-Hydroxy-6-oxo-4,4-dimethyl-)) compounds. See p. 90.		
(p-Hydroxyphenylazo)-pyrogallol $HOC_6H_4N:NC_6H_3(OH)_3$	do.	do.
	do.	Sixth
5-(p-(p-Hydroxyphenyl)-phenylazo)-salicylic acid $HOC_6H_4C_6H_4N:NC_6H_2(OH)COOH$	do.	First
2-(o-Hydroxyphenyl)-1-(o-toluino)-alpha-naphthimidazole $C_{10}H_5N(C_6H_4OH)NHNC_6H_4CH_3$	do.	do.
Indigo $NHC_6H_4CO:COC_6H_4NH$	Colorado potato beetle	Fourth
	Diamondback moth	do.
	Greenhouse leaf tier	Fifth
	Hawaiian beet webworm	do.
	Melon worm	Fourth
	Southern armyworm	do.
	Southern beet webworm	do.
	Yellow woolly bear	Sixth

MONS 045409

Table 3.—(Continued)

Compound	Insect	Stage[1/]
Induline $C_{26}H_{29}ClN_5$	Southern armyworm	First
p-Iodoacetanilide $IC_6H_4NHCOCH_3$	do.	Fifth
p-Iodobenzoic acid IC_6H_4COOH	do.	do.
p-Iododiphenyl $C_6H_5C_6H_4I$	do. do. do.	First Third Fifth
2-Iodofluorene $C_6H_4CH_2C_6H_3I$	Cross-striped cabbage worm Diamondback moth Greenhouse leaf tier Hawaiian beet webworm Imported cabbage worm Melon worm Southern armyworm do. Southern beet webworm	First Fourth do. Fifth First Fourth First Fourth Fifth
2-Iodo-7-nitrofluorene $NO_2C_6H_3CH_2C_6H_3I$	Colorado potato beetle Cross-striped cabbage worm Imported cabbage worm Southern armyworm	Fourth First do. do.
4-(p-Iodophenylazo)-o-cresol $IC_6H_4N:NC_6H_3(CH_3)OH$	Cabbage looper Cabbage webworm Cross-striped cabbage worm	do. do. do.
Isatin NHC_6H_4COCO	Colorado potato beetle Cross-striped cabbage worm Melon worm Southern armyworm	Fourth do. Fifth Sixth
Isonitrosoacetanilide $HON:CHCONHC_6H_5$	do.	First
Isopelletierine hydrochloride $C_8H_{15}NO.HCl$	Cross-striped cabbage worm Southern armyworm	do. do.

MONS 045410