The official rulemaking record is the paper record maintained at the address in ''ADDRESSES'' at the beginning of this document.

The Agency, accordingly, will review and consider all comments received during the comment period in determining whether to issue the emergency exemptions requested by the Pennsylvania Department of Agriculture and the California Department of Pesticide Regulation.

List of Subjects

Environmental protection, Pesticides and pests, Emergency exemptions.

Dated: February 28, 1997.

Peter Caulkins,

Acting Director, Registration Division, Office of Pesticide Programs.

[FR Doc. 97–6013 Filed 3–11–97; 8:45 am]

BILLING CODE 6560–50–F

[PF–721; FRL–5592–7]

BASF Corporation; Pesticide Tolerance Petition Filing

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of filing.

SUMMARY: This notice announces the filing of pesticide petitions proposing the tolerances for residues of the pesticide pyridaben, [2-tert-butyl-5-(4-ter-butylbenzylthio)-4-chloropyridazin-3(2*H*)-one] and its metabolites PB-7 (2-tert-butyl-5-[4-(1-carboxy-1-methylethyl)benzylthio]-4-chloropyridazin-3(2*H*)-one) and PB-9 (2-tert-butyl-4-chloro-5-[4-(1,1-dimethyl-2-hydroxyethyl)benzylthio]-chloropyridazin-3(2*H*)-one). BASF is petitioning EPA for the establishment of tolerances for use of pyridaben to control certain pests on apples, pears, citrus, almonds, peaches (imported commodity), plums (imported commodity), and grapes (imported commodity). The proposed tolerances for pyridaben are: apples at 0.6 ppm, wet apple pomace at 1.0 ppm, pears at 0.75 ppm, citrus at 0.5 ppm, dried citrus pulp at 1.5 ppm, citrus oil at 10.0 ppm, almonds at 0.05 ppm, almond hulls at 4.0 ppm, peaches at 0.05 ppm, plums at 0.05 ppm, and grapes at 0.75 ppm. The proposed tolerances for pyridaben and its metabolites are: milk at 0.01 ppm, meat at 0.05 ppm, meat by-products at 0.05 ppm, and fat at 0.05 ppm. This summary was prepared by the petitioner.

DATES: Comments, identified by the docket control number [PF–721], must be received on or before April 11, 1997.

ADDRESSES: By mail, submit written comments to: Public Response and Program Resources Branch, Field Operations Division (7506C), Office of Pesticide Programs, Environmental Protection Agency, 401 M St., SW, Washington, DC 20460. In person, bring comments to: Rm. 1132 CM #2, 1921 Jefferson Davis Highway, Arlington, VA 22202. Comments and data may also be submitted electronically by sending electronic mail (e-mail) to: opp-docket@epamail.epa.gov. Electronic comments must be submitted as an ASCII file avoiding the use of special characters and any form of encryption. Comments and data will also be accepted on disks in WordPerfect 5.1 file format or in ASCII file format. All comments and data in electronic form must be identified by the docket control number [PF–721]. Electronic comments on this notice may be filed online at many Federal Depository Libraries. Additional information on electronic submissions can be found in Unit II. of this document.

Information submitted as comments concerning this notice may be claimed confidential by marking any part or all of that information as ''Confidential Business Information'' (CBI). The CBI should not be submitted through e-mail. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. A copy of the comment that does not contain CBI must be submitted for inclusion in the public record. Information not marked confidential may be disclosed publicly by EPA without prior notice. All written comments will be available for public inspection in Rm. 1132 at the address given above, from 8:30 a.m. to 4 p.m., Monday through Friday, excluding legal holidays.

FOR FURTHER INFORMATION CONTACT: Richard Keigwin, Product Manager (PM) 10, Registration Division (7505C), Office of Pesticide Programs, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. Office location, telephone number, and e-mail: Crystal Mall #2, Rm. 210, 1921 Jefferson Davis Highway, Arlington, VA 22202, 703–305–6788, e-mail: keigwin.richard@epamail.epa.gov.

SUPPLEMENTARY INFORMATION: EPA has received pesticide petitions (PP) 5F4543 (on citrus), 4E4370 (on imported commodities) and 6F4651 (apples), 6F4741 (almonds), and 6F4721 (pears) from BASF Corporation, Agricultural Products, PO Box 13528, Research Triangle Park, NC 27709. The petition proposes, pursuant to section 408 of the Federal Food, Drug and Cosmetic Act (FFDCA), 21 U.S.C section 346a, to amend 40 CFR part 180 to establish tolerances for the pesticide pyridaben [2-tert-butyl-5-(4-ter-butylbenzylthio)-4-chloropyridazin-3(2*H*)-one] in or on the raw agricultural commodities: apples, wet apple pomace, pears, citrus, dried citrus pulp, citrus oil, almonds, almond hulls, peaches, plums, and grapes, respectively. The petition also proposes to establish tolerances for pyridaben and its metabolites PB-7 (2-tert-butyl-5-[4-(1-carboxy-1-methylethyl)benzylthio]-4-chloropyridazin-3(2*H*)-one) and PB-9 (2-tert-butyl-4-chloro-5-[4-(1,1-dimethyl-2-hydroxyethyl)benzylthio]-chloropyridazin-3(2*H*)-one) in or on the raw agricultural commodities: milk, meat, meat-by-products, and fat. EPA has determined that the petitions contain data or information regarding the elements set forth in section 408(d)(2) of the FFDCA; however, EPA has not fully evaluated the sufficiency of the submitted data at this time or whether the data supports granting of this petition. Additional data may be needed before EPA rules on the petition.

As required by section 408(d) of the FFDCA, as recently amended by the Food Quality Protection Act (FQPA), Pub. L. 104–170, BASF included in the petition a summary of the petition and authorization for the summary to be published in the Federal Register in a notice of receipt of the petition. The summary represents the views of BASF. EPA is in the process of evaluating the petition. As required by section 408(d)(3) of the FFDCA, EPA is including the summary as a part of the notice of filing. EPA may have made minor edits to the summary for the purpose of clarity.

I. Petition Summary

A. Plant and Animal Metabolism

BASF Corporation notes that metabolism in plants and animals is understood.

B. Analytical Method

The proposed analytical method involves extraction, partition, clean-up and detection of residues by gas chromatography/electron capture detector (gc/ecd).

C. Magnitude of the Residues

Nine pear residue trials were conducted in six states. Residues of pyridaben were measured by gc/ecd. The method of detection had a limit of detection of 0.05 parts per million (ppm). Residues ranged from 0.07 to 0.58 ppm.

Twelve apple residue trials were conducted in six states. Residues of

pyridaben were measured by gc/ecd. The method of detection had a limit of detection of 0.05 ppm. Residues ranged from 0.08 to 0.44 ppm.

Nineteen citrus residue trials were conducted in four states. Residues of pyridaben were measured by gc/ecd. The method of detection had a limit of detection of 0.05 ppm. Residues ranged from 0.05 to 0.42 ppm.

Eight almond residue trials were conducted in California. Residues of pyridaben were measured by gc/ecd. The method of detection had a limit of detection of 0.05 ppm. Residues were < 0.05 ppm in all trials.

Eight peach residue trials were conducted in Chile. Residues of pyridaben were measured by gc/ecd. The method of detection had a limit of detection of 0.05 ppm. Residues were < 0.05 ppm in all trials.

Six plum residue trials were conducted in Chile. Residues of pyridaben were measured by gc/ecd. The method of detection had a limit of detection of 0.05 ppm. Residues were < 0.05 ppm in all trials.

Eight grape residue trials were conducted in Chile. Residues of pyridaben were measured by gc/ecd. The method of detection had a limit of detection of 0.05 ppm. Residues ranged from < 0.05 to 0.22 ppm.

D. Toxicological Profile

1. *Acute toxicity testing. a. Acute oral toxicity (rat):* LD_{50} = 1100 milligrams/kilogram (mg/kg) in males; 570 mg/kg in females. Tox Category: III

b. Acute oral toxicity (mouse): LD_{50} = 424 mg/kg in males; 383 mg/kg in females. Tox Category: II

c. Acute dermal toxicity (rat): LD_{50} = > 2000 mg/kg in males and females. Tox Category: III

d. Acute inhalation toxicity (rat): LC_{50} = 0.66 mg/l in males; 0.62 mg/l in females. Tox Category: III

e. Primary eye irritation (rabbit): Pyridaben is a slight ocular irritant. Tox Category: III

f. Primary dermal irritation (rabbit): Pyridaben is not a dermal irritant. Tox Category: IV

g. Dermal sensitization (guinea pig): Pyridaben is not a dermal sensitizer.

2. *Acute neurotoxicity (rat):* Rats were dosed once with 0, 50, 100 and 200 mg/kg. The no observed effect level (NOEL) for systemic toxicity was determined to be 50 mg/kg for both males and females. The lowest observed effect level (LOEL) for systemic effects was determined to be 100 mg/kg in both sexes based on decreased food consumption, decreased body weight gain and increased clinical signs. The LOEL for neurobehavioral effects was determined to be 200 mg/kg in males and >200 mg/kg in females.

3. *Subchronic toxicity testing. a. 21–Day dermal (rat):* Rats were repeatedly dosed with pyridaben at 0, 30, 100, 300 and 1000 mg/kg/day for 21 days. The NOEL was determined to be 100 mg/kg/day and the LOEL 300 mg/kg/day based on decreased body weight gain in females.

b. 90–Day rodent (rat): CD rats were dosed with pyridaben at 0, 30, 65, 155 and 350 ppm in the diet for 13 weeks. The NOEL was determined to be 65 ppm (4.94 mg/kg/day) for males and 30 ppm (2.64 mg/kg/day) in females. The LOEL for males was determined to be 155 ppm (11.55 mg/kg/day) based on reduced body weight gain, reduced food consumption, reduced food efficiency, and altered clinical pathology parameters. The LOEL for females was determined to be 65 ppm (5.53 mg/kg/day) based on reduced body weight gain and reduced food efficiency.

c. 90–Day non-rodent (dog): Beagle dogs were dosed with pyridaben at 0, 0.5, 1, 4, and 16 mg/kg/day in the diet for 13 weeks. The NOEL was determined to be 1 mg/kg/day and the LOEL determined to be 4 mg/kg/day based on reduced body weight gain and an increase in clinical signs in both sexes.

d. 90–Day neurotoxicity (rat): Rats were dosed with pyridaben at 0, 30, 100, and 350 ppm in the diet for 13 weeks. The systemic NOEL was determined to be 100 ppm (equivalent to 8.5 mg/kg/day in males and 9.3 mg/kg/day in females). The systemic LOEL was determined to be 350 ppm (equivalent to 28.8 mg/kg/day in males and 31.1 mg/kg/day in females) based on decreased body weight gain, decreased food consumption and decreased food efficiency. No neuropathological effects were noted in the study.

4. *Chronic toxicity testing.* a. 1–Year non-rodent (dog): Two studies were run. In the first, beagle dogs were dosed with pyridaben at 0, 1, 4, 16 and 32 mg/kg/day in the diet for one year. In the second, beagle dogs were dosed with pyridaben at 0 and 0.5 mg/kg/day in the diet for 1 year. The NOEL was determined to be <0.5 ppm and LOEL determined to be 0.5 mg/kg/day based on increased clinical signs and decreased body weight gain in both sexes.

b. Combined rodent chronic toxicity/carcinogenicity (rat): Wistar rats were fed 0, 4, 10, 28 and 80 ppm pyridaben in the diet to assess carcinogenicity and 0, 4, 10, 28 and 120 ppm in the diet to assess chronic toxicity for 104 weeks. The NOEL was determined to be 28 ppm in both sexes (equivalent to 1.13 mg/kg/day in males and 1.46 mg/kg/day in females). The LOEL was determined to be 120 ppm in both sexes (equivalent to 5.0 mg/kg/day in males and 6.52 mg/kg/day in females) based on decreased body weight gain in both sexes and decreased alanineamino transferase (ALT) levels in males. Pyridaben was not carcinogenic under the conditions of the test.

c. Carcinogenicity in the rodent (mouse): CD-1 mice were fed 0, 2.5, 8.0, 25 and 80 ppm pyridaben in the diet for 78 weeks. The NOEL was determined to be 25 ppm in both sexes (equivalent to 2.78 mg/kg/day in both sexes). The LOEL was determined to be 80 ppm in both sexes (equivalent to 8.88 mg/kg/day in males and 9.74 mg/kg/day in females) based on decreased body weight gain, decreased food efficiency and changes in organ weights and histopathology. Pyridaben was not carcinogenic under the conditions of the test.

5. *Developmental toxicity testing. a. Developmental toxicity (rat):* Sprague-Dawley rats were dosed with 0, 2.5, 5.7, 13 and 30 mg/kg/day pyridaben in the diet from days 6 through 15 of gestation. The maternal NOEL was determined to be 4.7 mg/kg/day and the maternal LOEL was determined to be 13 mg/kg/day based on decreased body weight gain, and decreased food consumption during the dosing period. The developmental NOEL was determined to be 13 mg/kg/day and the developmental LOEL was determined to be 30 mg/kg/day based on decreased fetal body weight and an increase in incomplete ossification in selected bones.

b. Developmental toxicity (rabbit): New Zealand white rabbits were dosed with 0, 1.5, 5, and 15 mg/kg/day pyridaben in the diet from days 6 through 19 of gestation. The maternal NOEL was determined to be 5 mg/kg/day and the maternal LOEL was determined to be 15 mg/kg/day based on decreased body weight gain, and decreased food consumption during the dosing period. The developmental NOEL was determined to be <15 mg/kg/day and the developmental LOEL was determined to be <15 mg/kg/day.

c. Developmental toxicity (rabbit): Himalayan rabbits were dosed, by dermal application, with 0, 70, 170 and 450 mg/kg/day pyridaben from days 6 through 19 of gestation. The maternal systemic NOEL was determined to be 70 mg/kg/day and the maternal LOEL was determined to be 170 mg/kg/day based on decreased body weight gain, and decreased food consumption during the dosing period. The developmental NOEL was determined to be 170 mg/kg/day and the LOEL determined to be 450

mg/kg/day based on decreased ossification of the skull.

6. *Reproductive toxicity testing.* Multi-generation reproduction (rat): CD rats were dosed with 0, 10, 28 and 80 ppm pyridaben in the diet. The parental/systemic NOEL was determined to be 28 ppm in both sexes (equivalent to 2.20 mg/kg/day in males and 2.41 mg/kg/day in females). The parental/systemic LOEL was determined to be 80 ppm (equivalent to 6.31 mg/kg/day in males and 7.82 mg/kg/day in females) based on decreased body weight, decreased body weight gain and decreased food efficiency. The reproductive NOEL and LOEL were both determined to be >80 ppm in males and females.

7. *Mutagenicity testing. a.* Ames Testing: Negative

b. In vitro cytogenicity (Chinese hamster lung cells): Negative

c. In vivo micronucleus assay (mouse): Negative

d. DNA damage/repair (*E. coli*): Negative

E. Threshold Effects

Based on the available chronic toxicity data, EPA has established the Reference Dose (RfD) for pyridaben at 0.005 mg/kg/day. The RfD for pyridaben is based on a 1-year feeding study in dogs with a threshold LOEL of 0.5 mg/kg/day based on increased clinical signs and decreased body weight gain in both sexes and an uncertainty factor of 100.

F. Non-Threshold Effects

Using its Guidelines for Carcinogenic Risk Assessment, EPA has classified pyridaben as Group ''E '' for carcinogenicity (no evidence of carcinogenicity) based on the results of carcinogenicity studies in two species. There was no evidence of carcinogenicity in an 18-month feeding study in mice and a 2-year feeding study in rats at the dosage levels tested. The doses tested were adequate for identifying a cancer risk. Thus, a cancer risk assessment is not necessary.

G. Aggregate Exposure

1. *Dietary exposure.* Since pyridaben is regulated based upon non-carcinogenic chronic toxicity, BASF conducted a DRES analysis based on anticipated residue levels determined by EPA. The anticipated residue levels were derived from the average residue levels from field trials conducted at the maximum proposed use rate and minimum pre-harvest interval, and a correction factor of 2.3 to account for all organosoluble residues as determined by EPA. This analysis demonstrates that the exposure to non-nursing infants < 1 year, the most sensitive subpopulation is approximately 73.4 percent of the RfD and to the general population exposure is approximately 11.3 percent of the RfD.

2. *''Other'' exposure.* Other potential sources of exposure of the general population to residues of pesticides are residues in drinking water and exposure from non-occupational sources. Based on the studies submitted to EPA for assessment of environmental risk, BASF does not anticipate exposure to residues of pyridaben in drinking water. There is no established maximum concentration level for residues of pyridaben in drinking water under the Safe Drinking Water Act. BASF has not estimated non-occupational exposure for pyridaben since the current registration for pyridaben is limited to commercial greenhouse use for non-food ornamental plants and the only other domestic use will be for commercial apple, pear, citrus and almond production. The potential for non-occupational exposure to the general population is considered to be insignificant.

3. *Cumulative exposure.* BASF also considered the potential for cumulative effects of pyridaben and other substances that have a common mechanism of toxicity. BASF has concluded that consideration of a common mechanism of toxicity is not appropriate at this time since there is no reliable information to indicate that toxic effects produced by pyridaben would be cumulative with those of any other chemical compounds.

H. Determination of Safety for U.S. Population

Using the exposure assumptions described in Unit I.G. of this document, BASF concludes that aggregate exposure to pyridaben will utilize approximately 11.3 percent of the RfD for the U.S. population. EPA generally has no concern for exposures below 100 percent of the RfD. Therefore, based on the completeness and reliability of the toxicity data and the conservative exposure assessment, BASF concludes that there is a reasonable certanity that no harm will result from aggregate exposure to residues of pyridaben, including all anticipated dietary exposure and all other non-occupational exposures.

I. Determination of Safety for Infants and Children

Developmental toxicity (delayed ossification) was observed in developmental toxicity studies using rats and rabbits. The NOEL's for developmental effects were established at 13 mg/kg/day in the rat study and 15 mg/kg/day in the rabbit study. The developmental effect observed in these studies is believed to be a secondary effect resulting from maternal stress (decreased body weight gain and food consumption).

In a 2-generation reproduction study in rats, pups from the high dose group, which were fed diets containing 80 ppm (equivalent to 6.31 and 7.82 mg/kg/day in male and females, respectively) gained less weight beginning on lactation day 14. Parental/systemic toxicity including decreased body weights, body weight gains and food efficiency in males, and slightly decreased body weights and body weight gains in females during lactation was also observed in the high dose group. The results of this study indicate that the loss in weight gain in pups from the high dose group was affected by nursing.

No clear scientific consensus yet exists to determine the most appropriate endpoints for assessing risk in children. However, in consideration of the data that show both developmental and reproductive toxicity were effects secondary to parental toxicity, BASF believes that the established RfD of 0.005 mg/kg/day is the most conservative approach for assessing risk in children. Using the exposure assumptions described in Unit I.G. of this document, BASF has concluded that the percent of the RfD that will be utilized by aggregate exposure to residues of pyridaben from the proposed use in citrus, apples, pears, almonds, peaches, plums, and grapes is approximately 73.4 percent for non-nursing infants (<1 year), the most sensitive sub-population. Based on the completeness and reliability of the toxicity data and the conservative exposure assessment, BASF concludes that there is a reasonable certainty that no harm will result in infants and children from aggregate exposure to the residues of pyridaben, including all anticipated dietary exposure and all other non-occupational exposures.

J. Other Considerations

The qualitative nature of the residues in plants and animals is adequately understood. Residues of the parent molecule, pyridaben are the only residues of concern. Residues of pyridaben do not concentrate in the processed commodities apple and citrus juice. There is a practical analytical method for detecting and measuring levels of pyridaben in or on food with a limit of detection that allows monitoring of food with residues at or above the levels set in these tolerances.

K. International Tolerances

A maximum residue level has not been established for pyridaben by the Codex Alimentarius Commission.

II. Public Record

EPA invites interested persons to submit comments on this notice of filing. Comments must bear a notification indicating the docket control number [PF–721]. All written comments filed in response to this petition will be available, in the Public Response and Program Resources Branch, at the address given above from 8:30 a.m. to 4 p.m., Monday through Friday, except legal holidays. A record has been established for this notice under docket control number [PF–721] (including comments and data submitted electronically as described below). A public version of this record, including printed, paper versions of electronic comments, which does not include any information claimed as CBI, is available for inspection from 8:30 a.m. to 4 p.m., Monday through Friday, excluding legal holidays. The public record is located in Rm. 1132 of the Public Response and Program Resources Branch, Field Operations Division (7506C), Office of Pesticide Programs, Environmental Protection Agency, Crystal Mall #2, 1921 Jefferson Davis Highway, Arlington, VA.

Electronic comments can be sent directly to EPA at:
opp-docket@epamail.epa.gov.

Electronic comments must be submitted as an ASCII file avoiding the use of special characters and any form of encryption. The official record for this notice, as well as the public version, as described above, will be kept in paper form. Accordingly, EPA will transfer all comments received electronically into printed, paper form as they are received and will place the paper copies in the official record which will also include all comments submitted directly in writing. The official record is the paper record maintained at the address in ''ADDRESSES'' at the beginning of this document.

Authority: 21 U.S.C. 346a.

List of Subjects

Environmental protection, Administrative practice and procedure, Agricultural commodities, Pesticides and pests, Reporting and recordkeeping requirements.

Dated: March 6, 1997.

Peter Caulkins,
Acting Director, Registration Division, Office of Pesticide Programs.

[FR Doc. 97–6209 Filed 3–11–97; 8:45 am]
BILLING CODE 6560–50–F

[OPP–50827; FRL–5595–2]

Receipt of a Notification to Conduct Small-Scale Field Testing of a Genetically Engineered Microbial Pesticide

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: This notice announces receipt of a notification (352-NMP-L) of intent to conduct small-scale field testing involving a baculovirus, *Autographa californica* Multiple Nuclear Polyhedrosis Virus (AcMNPV), which has been genetically engineered to express a synthetic gene which encodes for an insect-specific toxin from the scorpion *Leiurus quinquestriatus hebraeus*. Dupont intends to test this microbial pesticide on leafy vegetables in six states. Target pests for these field trials include: the cabbage looper, *Trichoplusia ni*, and the diamondback moth, *Plutella xylostella*. The Agency has determined that the notification may be of regional and national significance. Therefore, in accordance with 40 CFR 172.11(a), the Agency is soliciting public comments on this notification.

DATES: Written comments must be submitted to EPA by April 11, 1997.

ADDRESSES: By mail, submit written comments identified by the docket control number [OPP–50827] to: Public Response and Program Resources Branch, Field Operations Divisions (7506C), Office of Pesticide Programs, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. In person, bring comments to: Environmental Protection Agency, Rm. 1132, CM #2, 1921 Jefferson Davis Hwy., Arlington, VA.

Comments and data may also be submitted electronically by sending electronic mail (e-mail) to: opp-docket@epamail.epa.gov. Electronic comments must be submitted as an ASCII file avoiding the use of special characters and any form of encryption. Comments and data will be accepted on disks in Wordperfect 5.1 file format or ASCII file format. All comments and data in electronic form must be identified by the docket control number [OPP–50827]. No Confidential Business Information (CBI) should be submitted through e-mail. Electronic comments on this notice may be filed online at many Federal Depository Libraries. Additional information on electronic submissions can be found below in this document.

Information submitted as a comment concerning this document may be claimed confidential by marking any part or all of that information as CBI. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. A copy of the comment that does not contain CBI must be submitted for inclusion in the public record. Information not marked confidential may be disclosed publicly by EPA without prior notice. All written comments will be available for public inspection in Rm. 1132 at the Virginia address given above from 8:30 a.m. to 4 p.m., Monday through Friday, excluding legal holidays.

FOR FURTHER INFORMATION CONTACT: William R. Schneider, Biopesticides and Pollution Prevention Division (7501W), Office of Pesticide Programs, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. Office location, telephone number, and e-mail address: 5th Floor, CS #1, 2805 Jefferson Davis Hwy., Arlington, VA, (703) 308–8683, e-mail: schneider.william@epamail.epa.gov.

SUPPLEMENTARY INFORMATION: EPA received a notification from DuPont Agricultural Products of Delaware (352-NMP-L). The proposed small-scale field trial involves the introduction of a genetically engineered isolate of the baculovirus, *Autographa californica* Multiple Nuclear Polyhedrosis Virus (AcMNPV), which has been genetically engineered to express a synthetic gene which encodes for an insect-specific toxin from the venom of the scorpion *Leiurus quinquestriatus hebraeus*.

The purpose of the proposed testing will be to assess and compare the efficacy of formulated and unformulated genetically engineered construct, formulated and unformulated wild type AcMNPV, and various controls against the cabbage looper, *Trichoplusia ni*, and the diamondback moth, *Plutella xylostella*. The proposed program will be conducted in spring 1997, and will consist of one trial per site. There will be one site per state in Georgia (0.12 acres), Florida (0.25 acres), Mississippi (0.12 acres), California (0.12 acres), Texas (0.37 acres), and Illinois (0.37 acres). The total amount of AcMNPV for all of the testing will not exceed 2.2E13 occlusion bodies for each of the viruses tested. The test sites will either be 2 rows or 4 rows wide and 50 feet long.