



APPLICATION FOR FINANCIAL ASSISTANCE PEST CONTROL INSURANCE FUND

The Pest Control Compact provides that any party state can apply to the Insurance Fund for financial support of pest control or eradication activities which it wishes to have undertaken or intensified in one or more other party or, in limited circumstances, in nonparty states. When a pest is found in another state that constitutes a threat to valuable agricultural or forest crops or products within the applying state, the Insurance Fund can provide financial support for control or eradication measures. State parties to the Compact are expected to maintain their existing pest control programs at normal levels aside from any assistance from the Insurance Fund. This safeguards the soundness of the Fund and assures that it will be used to apply the additional thrust necessary to combat outbreaks, which otherwise would not be controlled.

The Insurance Fund is under the control of the Compact's Governing Board, consisting of an official representative of each party state chosen by that state in accordance with its own laws. An Executive committee, consisting of the chairman and a representative from each of the four regions, is authorized to exercise certain responsibilities for the Governing Board when the Board itself does not meet.

A Technical Advisory Committee has been established to assist the Governing Board with the technical information necessary to make a decision on whether or not the Compact should be invoked on any particular requests. The Technical Advisory Committee is composed of two state plant control officials from each of the four regions of the Plant Boards, together with a representative of the U.S. Animal and Plant Health Inspection Service and a representative of the U.S. Forest Service.

When an application to the Insurance Fund is filed, the request is referred to the ten-member Technical Advisory Committee, which makes a study of the request and a recommendation on the feasibility of the project to the Governing Board. In an emergency, the Committee could make this recommendation within 72 hours or less after receiving the initial request for Compact assistance.

This is a two-part application. All questions must be answered in order for the application to be considered. Attach additional sheets as necessary. Attach letters of support from neighboring Party States, as necessary. The completed application should be submitted to the Executive Director, Interstate Pest Control Compact. A Cooperative Agreement and Final Report Template (with Financial Statement) are also included.

APPLICATION SUMMARY

Requesting State(s):	New Mexico
Responding State: <i>(State where requested action will take place)</i>	Texas
Pest:	Diaprepes root weevil, <i>Diaprepes abbreviatus</i> (Coleoptera: Curculionidae)
Type of Program: <i>(Quarantine, eradication, suppression, delimiting survey, etc.)</i>	Eradication
Amount of Request:	\$60,000
Term of Program: <i>(Single-year/Multi-Year)</i>	1 Year
Program Implementation: <i>(Estimated Date)</i>	01 March 2004
Program Completion: <i>(Estimated Date)</i>	28 February 2005

PART I

1. Requesting State(s)

[*Must be a Party (Member) State*]

State and Agency: New Mexico, New Mexico Department of Agriculture

Compact Administrator: I. Miley Gonzalez, Ph.D.

Mailing Address: NMDA, MSC, 3BA, PO Box 30005, Las Cruces, NM 88003-0005

Telephone: 505-646-3008

Fax: 505-646-5477

Email: Mgonzalez@nmda.nmsu.edu

(*Continue list for each requesting state, if applicable*)

2. Responding State

[*State where requested action will take place*]

State and Agency: Texas, Texas Department of Agriculture

Compact Administrator: Susan Combs

Mailing Address: PO Box 12847, Austin, TX 78711

Telephone: 512-463-4578

Fax: 512-463-6072

Email: susan.combs@agr.state.tx.us

Is responding state a Compact member? (Yes)

Is responding state in agreement with this application? (Yes)

3. Pest Involved

A. Common and scientific name: Diaprepes root weevil, *Diaprepes abbreviatus*

B. Is pest native, or introduced from outside the continental U.S.? Introduced

C. Major means of dispersal or transmission: Long range dispersal depends heavily on commerce, with all life stages being transported in host plant root balls, containerized media, and in contaminated soil transported by vehicles. Local distribution is by short-range (less-than 300 m) reproductive flights.

D. Known geographical range: *In Texas* it is confined to ca. 10 acres, consisting of two quarantined citrus groves in McAllen, Hidalgo County, 0.20 miles West of the intersection of Hobbs Drive and North 2nd Street and some residential yards within 300-yards surrounding the groves. *In Florida*, it occurs in Broward, Dade, DeSoto, Collier, Glades, Hendry, Highlands, Hillsborough, Indian River, Lake, Lee, Manatee, Marion, Martin, Orange, Osceola, Palm Beach, Pasco, Polk, Seminole, St Lucie, Sumter, and Volusia Counties. *Outside the U.S.*, it is found in Puerto Rico, Jamaica, Dominican Republic, Lower Antilles, and the West Indies.

E. Potential geographical range in U.S.: Gulf Coast States and California, conservatively. Its northern range limit is untested, as is its drought tolerance. It

might proceed up Atlantic coast, perhaps to warmer parts of South or North Carolina.

- F. Type of damage caused by the pest: The species is highly polyphagous, with about 270 known hosts including citrus, sugarcane, vegetables, corn, cotton, onions, ground nuts, potatoes, peppers, woody field-grown ornamentals, sweet potatoes, papaya, guava, mahogany, containerized ornamentals, and non-cultivated wild plants. The larvae feed on roots, often girdling and killing the taproot. This feeding impedes water and nutrient uptake, provides entry for root rot fungi (*Phytophthora*), and results in host mortality. A single larva can kill young host and even older, established hosts will decline from the effects of multiple larvae. Adults cause some damage by notching leaves.

4. Economic Importance

- A. To responding state (for each crop affected list acres produced and value): TOTAL (\$1.532 Billion): citrus (ca. 33,000 acres, \$25 Million), cotton (6 Million acres, \$570 Million), vegetables (120,000 acres, \$377 Million), potatoes (18,000 acres, \$54 Million), sweet potatoes (4,200 acres, \$8 Million), woody containerized ornamentals (NA acres, \$390 Million), woody field-grown ornamentals (NA acres, \$61 Million), sugarcane (45,500 acres, \$57 Million).
- B. To requesting state(s) (for each crop affected list acres produced and value): TOTAL (\$282 Million): vegetables (167,600 acres, \$149 Million), fruits and nuts (>29,622 acres, \$47 Million), greenhouse nursery (NA acres, \$61 Million) cotton (54,000 acres, \$25 Million).
- C. Value of impacted crop(s)/plant resources to the United States: TOTAL (\$43.8 Billion): cotton (\$7 Billion), vegetables and melons (\$15 Billion), nursery (\$8.9 Billion), fruits and nuts (\$11.9 Billion), sugarcane (\$1 Billion).
- D. Estimated potential damage to crop(s)/plant resources in requesting state if Compact is not invoked: Annually, \$28-56 Million to known hosts of the pest, including vegetables, cotton, potatoes, and ornamentals.
- E. Other states which may be adversely impacted: California, New Mexico, Arizona, Georgia, Alabama, Mississippi, Louisiana, Tennessee, South Carolina, North Carolina, etc. Total Adverse Impact (Potential): \$1-5 Billion/year nationally, due to resultant failure of internal quarantine in Texas and increased likelihood of eventual spread to other suitable states. The insect was introduced into the U.S. near Apopka, FL, in 1964. Due to extensive measures to combat it, the insect currently is limited to 23 Florida counties and a quarantined area in Weslaco, TX. The insect's potential rate of increase is immense (5,000 eggs/female/3-4 months), larvae are extremely difficult to control due to their several-foot depth in the soil, the insect exploits at least 270 hosts (many of them heavily-transported around the country), and trapping of adults is extremely inefficient due to lack of a known lure. In the 23 Florida counties currently infested, the insect causes an estimated \$70 Million in damage annually. If the weevil is allowed to expand beyond its current beachhead in Texas, it rapidly will become extremely difficult or impossible to eradicate. As a result, the Texas citrus industry will be significantly impacted, as will its sugarcane industry. Vegetable and ornamentals

production will be impacted both directly (due to damage) and indirectly (due to resultant ornamentals quarantines by other states, such as Arizona and California). If the insect escapes Texas into other states, it easily could have an eventual \$1-5 Billion annual impact nationally, with more severe impact levels possible.

5. Type of Program (i.e., quarantine, eradication, suppression, delimiting survey, etc.)

The currently intact quarantine will be maintained, surveys in the immediate area of the quarantine will be continued, and the eradication program will be able to continue. Delimiting surveys already have established the localized nature of the quarantined infestation. As a precaution, surrounding areas also are surveyed.

6. Will Compact implementation result in an increase or decrease in normal plant pest control activity in the requesting state(s)? If a decrease results, explain how and why.

The compact will neither increase nor decrease normal plant pest control activity in the requesting state. However, it will protect against the necessity of future expenses in such activities.

7. Fund Request

- A. Amount requested from pest insurance fund: \$60,000.
- B. Will State funds supplement this request? If so, how much? The responding state will match the fund with an estimated \$15,000 in-kind contribution, with partial salaries of the program coordinator, regional director, and chief inspector involved in overseeing the program.
- C. Will Federal funds supplement this request? If so, from whom and how much?
No.
- D. Will other funds supplement this request? If so, from whom and how much? No.

8. Term of Program (Single-Year vs. Multi-Year)

- A. To the best of your knowledge, can the conditions which initiated this application for funds be abated, by a program undertaken with these funds, in one year or less? Yes, the problem will be greatly lessened by the funded program. The complete eradication of the quarantined Texas infestation, however, may require another two years, due to the difficulty in getting treatment materials to soil depth where the pest is located.
- B. If not, is this request for an installment in a program which is likely to continue for a longer period of time? How long? (Please see preceding answer)

9. Target dates

- A. Program implementation: 01 March 2004
 - B. Program completion: 28 February 2005
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PART II

10. Detail exactly what work will be performed and what will be accomplished with the funding request from the insurance fund. (Work Plan)

Please see Attachments A and B.

11. Detail the circumstances that occasion this request for the invoking of the Compact. Include information on how and why the situation is serious, whether or not an emergency exists, and the reasons why financial assistance is needed.

How and why the situation is serious: A quarantine, survey and eradication program instituted in the spring of 2001, when the highly localized Texas infestation first was discovered, has expended all its funds. The target infestation has been contained and diminished significantly during the past two years, under the program this request seeks to continue; however, it has not yet been eliminated. A lapse in the program will result in the insect escaping irrevocably from the quarantine.

Emergency status: If action is not taken this spring, the insect will colonize beyond the quarantined area and will escape into an area of intense vegetable, citrus, ornamentals, and sugarcane production, which will suffer permanent economic damage as a result. From there, it will expand into the rest of the state, as a result of dispersal by commerce and the insect's own reproductive flights. Also, Texas' ornamentals industry promptly will become the object of quarantines by other states (including principal trading partners) seeking to avoid infestation.

Why financial assistance is needed: Internal funding cannot be found, due to the current budget crisis in Texas. The federal Specialty Crops Grant fund used toward eradication of this pest no longer is available. Furthermore, Texas growers already have been severely hurt by current economic conditions and are unable to assist. Without immediate emergency assistance, the ongoing eradication will cease and a new and very serious agricultural pest will be introduced permanently into Texas and neighboring states.

12. Detail an itemized budget indicating how funds from the Compact and all sources indicated in #7 above will be spent.

<u>Item</u>	<u>Cost</u>
Apply sprays to ca. 25 urban properties (Attachment A)	\$30,000
Treat adjacent commercial citrus orchards (Attachment B)	10,000
Continue survey of area in and around quarantine	8,000
Part-time inspector to oversee and assist in the eradication activities	<u>12,000</u>
TOTAL AMOUNT OF REQUEST	\$60,000

13. **If the requested insurance fund money is to be used by a non-party (non-member) State, detail why conditions in the non-party state warrant financial assistance. Also, explain the value of such expenditures to the party (member) State(s).**

N.A.

14. **Application submitted by:**
[Compact Administrator in Requesting State]

Name: I. Miley Gonzalez, Ph.D.

Title: Commissioner

Department: New Mexico Department of Agriculture

Mailing Address: NMDA, MSC, 3BA, PO Box 30005, Las Cruces, NM 88003-0005

Telephone: 505-646-3008

Fax: 505-646-5477

Email: Mgonzalez@nmda.nmsu.edu

Date of Application:

The following person(s) in the **REQUESTING** state(s) can be contacted for further details:

Name: Sherry Sanderson

Title: Bureau Chief

Department: Bureau of Entomology and Nursery Industries

Mailing Address: NMDA, MSC, 3BA, PO Box 30005, Las Cruces, NM 88003-0005

Telephone: 505-646-3207

Fax: 505-646-5977

Email: bcent@nmda.nmsu.edu

(Continue list for each requesting state, if applicable)

The following person(s) in the **RESPONDING** state can be contacted for further details:

Name: Robert L. Crocker

Title: Coordinator for Pest Management and Citrus Projects

Department: Texas Department of Agriculture

Mailing Address: P.O. Box 12847, Austin, TX 78711

Telephone: 512-463-6332

Fax: 512-463-8225

Email: robert.crocker@agr.state.tx.us

Request for Assistance from the Interstate Pest Control Compact

by the

New Mexico Department of Agriculture

The New Mexico Department of Agriculture would like to request financial assistance on behalf of the state of Texas from the Interstate Pest Control Compact for the eradication of Diaprepes root weevil. Currently ten acres in south Texas are infested by this weevil that is known to feed on more than 270 hosts. Chile, cotton, pecans, onions, and corn are some of its known hosts grown in New Mexico that may be impacted by this weevil. If this pest is not controlled and spreads, it could potentially cause 282 million dollars in damage on an annual basis to crops grown in New Mexico. Nationwide it could cause 1-5 billion dollars in damages per year to agricultural crops. In these years of drought and economic hardship, proactive prevention of pest problems that may cause losses to our agricultural crops is appreciated and encouraged. The New Mexico Department of Agriculture stands in support of the state of Texas and its eradication efforts against this weevil.

Attachment A: Diaprepes Root Weevil treatment plan for Homeowners in the Diaprepes quarantined area.

The following treatment should be applied to assist in Diaprepes eradication.

Apply Talstar Lawn & Tree Flowable Insecticide/Miticide at the rate of 1 fluid ounce of product per 1000 square feet of lawn and the soil under trees and shrubs. The application should be made once during the spring using sufficient water to provide maximum coverage.

The application must be made by a licensed pesticide applicator. Always follow label directions when applying pesticides.

Attachment B: *Diaprepes* Root Weevil Action Plan – Citrus Orchard Owners/Managers

Subject: Guidelines for treatment of citrus orchards within *Diaprepes* quarantined areas.

Objective: Provide for eradication of quarantined pest, *Diaprepes* root weevil (*Diaprepes abbreviatus*).

Replaces: Plan of April 10, 2001 (basically unchanged)

Effective Date: March 1, 2004

The following spray schedule must be adhered to in its entirety to help achieve *Diaprepes* eradication.

- (1) Apply Capture 2EC Insecticide/Miticide (bifenthrin) at the rate of 32 ounces of product per acre in the spring. To be effective Capture 2EC must be applied to the soil surface and weeds must be dead or removed prior to application. Capture 2EC serves as a soil barrier for newly hatched larvae that drop to the ground from the citrus foliage.
- (2) Apply a foliar spray of Micromite 25WS Insect Growth Regulator (diflubenzuron), for use on citrus, at the rate of 1.25 pounds of the product + 1 gallon of petroleum oil such as FC435-66 per acre, once each during the spring, summer and fall. Micromite 25WS prevents eggs from hatching and oil deters the attachment of egg masses to leaves.
- (3) Spray Sevin 80S Insecticide (carbaryl) at 10 pounds of product per acre, or Sevin 4 Flowable (carbaryl) at 2.5 gallons of product per acre, or Sevin XLR Insecticide (carbaryl) at 2.5 gallons of product per acre once each during the spring and fall. Add a gallon of Petroleum Oil such as FC435-66 to each of the Sevin sprays. If necessary, one of the Sevin sprays may be replaced with Guthion 50WP (azinphos-methyl) at 4 pounds of product per acre. One gallon of Petroleum Oil may also be added to the Guthion spray. These foliar sprays help control *Diaprepes* adults.

Caution. Petroleum oils can burn foliage if humidity is low and temperatures are high. Always follow label directions when applying pesticides and petroleum oils.

COOPERATIVE AGREEMENT
BETWEEN
THE INTERSTATE PEST CONTROL COMPACT
(Compact)

AND

THE TEXAS DEPARTMENT OF AGRICULTURE
(Responding State)

The principal parties to this Cooperative Agreement are the Interstate Pest Control Compact, hereinafter called the Compact, and the Texas Department of Agriculture, hereinafter called the Responding State.

The purpose of this Cooperative Agreement is to stipulate the general conditions under which the Compact will provide funds to the Responding State to finance other than normal pest control operations, hereinafter called Project, as approved by the Compact Governing Board. Such Project will be provided to the Responding State as an approved "Request for Financial Assistance from the Pest Control Insurance Fund," hereinafter called Request.

The cooperation shall be conducted consistent with the Compact enabling legislation, as adopted by member states, and the Bylaws of the Compact Insurance Fund and with all applicable statutes and regulations of the Responding State.

A. The Compact Agrees:

1. To provide funds in the amount of \$60,000 to the responding State as outlined in the request.
2. To furnish the services of the Compact Executive Director whose duties shall include coordinating activities relative to this Cooperative Agreement.
3. To furnish the services of the Compact Technical Committee for advisory purposes, as mutually agreed, or for Project evaluation and monitoring.

B. The Responding State Agrees:

1. To provide necessary resources to perform Project activities as outlined in the Request in an expeditious and efficient manner.
2. To submit a progress report on Project activities to the Compact Executive Director by August 31, 2004.
3. To submit a final report to include evidence of satisfactory and timely completion of the Project and including a detailed financial statement of funds expended, to the Compact Executive Director by May 31, 2005.
4. To cooperate fully with the Compact technical committee in any evaluation or monitoring of the Project, either during progress or after completion.
5. To maintain pest control and eradication activities of interstate significance at a level that would be reasonable in the absence of the Project.
6. To meet emergency outbreaks or infestations of interstate significance to no less an extent than would have been done in the absence of this Project.

C. It is Mutually Understood and Agreed:

1. That the cooperating parties may mutually agree to minor adjustments in Project details as outlined in the Request, consistent with Project objectives.
2. This agreement shall become effective upon date of final signature and shall continue until May 31, 2005, unless terminated upon 30 day notice by either party or amended by mutual agreement of both parties.


Executive Director, Interstate Pest Control Compact

Date: 4/12/04


Compact Administrator, Responding State
(or Commissioner/Secretary/Director of Agriculture in the
case of a non-party state)

Date: 4/12/04

**INTERSTATE PEST CONTROL COMPACT
FINAL REPORT**

Responding State: TX Date Project Approved: 04/12/2004
Requesting State(s): NM Date Project Completed: 05/31/2005

Project Title: Eradication of Diaprepes abbreviatus in Texas

Brief Summary of the Project (*limit to 2 pages or less*):

A. Reason for Requesting Funds:

In 2004, Texas was confronted with a budget shortfall coupled with an urgent need to maintain a program to contain and eradicate the Diaprepes root weevil (*Diaprepes abbreviatus*) that had established itself in a small area in the McAllen, Texas. It was crucial that continuity in the eradication program be maintained because the insect's potential rate of increase is immense (5,000 eggs/female/3-4 months), larvae are extremely difficult to control due to their several-foot depth in the soil, and the insect exploits at least 270 hosts (many of them heavily-transported around the country). The larvae feed on roots, often girdling and killing the taproot. This feeding impedes water and nutrient uptake, provides entry for root rot fungi (*Phytophthora*), and results in host mortality. A single larva can kill young host and even older, established hosts will decline from the effects of multiple larvae. Adults cause some damage by notching leaves. The Diaprepes root weevil (or Diaprepes) had entered Texas from Florida where it is causing tens of millions of dollars in damage yearly. In Florida Diaprepes has established itself so far in Broward, Dade, DeSoto, Collier, Glades, Hendry, Highlands, Hillsborough, Indian River, Lake, Lee, Manatee, Marion, Martin, Orange, Osceola, Palm Beach, Pasco, Polk, Seminole, St. Lucie, Sumter, and Volusia Counties. In those Florida counties, the weevil inflicts an estimated \$70 Million in damage annually. Currently Florida is the only US state other than Texas that is infested by this Caribbean-area pest, although southern tier states as far away as California are at risk. In Texas, Diaprepes threatens \$1.532 Billion in agricultural crops including citrus (ca. 33,000 acres, \$25 Million), cotton (6 Million acres, \$570 Million), vegetables (120,000 acres, \$377 Million), potatoes (18,000 acres, \$54 Million), sweet potatoes (4,200 acres, \$8 Million), woody containerized ornamentals (NA acres, \$390 Million), woody field-grown ornamentals (NA acres, \$61 Million) and sugarcane (45,500 acres, \$57 Million). The potential geographical range of Diaprepes in U.S includes the Gulf Coast States and California, conservatively. Its northern range limit is untested, as is its drought tolerance. It might proceed up the Atlantic coast, perhaps to warmer parts of South or North Carolina. By preventing the spread of Diaprepes, this grant helped to protect an estimated \$43.8 Billion in crops in various states including California, New Mexico, Arizona, Georgia, Alabama, Mississippi, Louisiana, Tennessee, South Carolina, and North Carolina. In terms of principle crops, that would include cotton (\$7 Billion), vegetables and melons (\$15 Billion), nursery (\$8.9 Billion), fruits and nuts (\$11.9 Billion), sugarcane (\$1 Billion).

B. Action Taken:

In response to a request by the New Mexico Department of Agriculture (NMDA), the Interstate Pest Control Compact (IPPC) granted \$60,000 to the Texas Department of Agriculture (TDA) for eradication of Diaprepes. These funds, which were matched by an in-kind \$15,000

contribution by TDA, paid for applications of aduclicides and larvicides to two quarantined groves and 21 homeowner properties, weekly monitoring of adult Diaprepes, and a half-time technician to enforce the quarantine and interface with pesticide applicators, trappers, and property owners.

C. Results:

All funded activities were completed on schedule. Chemical treatments reduced populations of larvae and adults in quarantined orchards and home landscapes. Monitoring of adults allowed optimization of treatment timing and disclosed a single escape from the quarantine area (See attached map: dotted yellow line is citrus grove where infestation first was detected; red and orange circles both are positive traps and blue circles are negative traps; yellow line delimits quarantine; orange circle is 300 m flight radius around site of single escaped weevil). Patrolling of the quarantine area interdicted attempts to remove quarantined plant materials. In summary, eradication momentum was maintained. TDA has now secured interim state funding, has expanded the area being treated, has sought and obtained valuable suggestions from experts in other parts of the country, is mapping the locations of trap catches (with assistance from USDA), is having educational meetings with concerned citizens and is implementing an enhanced action plan to speed progress toward eradication.

Financial Statement:

Compact Funds Authorized

\$60,000

<u>Expenditures:</u>	<u>Compact Funds</u>	<u>State Funds</u>	<u>Other Funds (Specify)</u>
Personal Services:			
Technician	\$22,941.50		
In-kind contribution, with partial salaries of the program coordinator, regional director, and chief inspector involved in overseeing the program		\$15,000.00	
Equipment:	\$0.00		
Supplies:	\$0.00		
Travel & Subsistence:	\$0.00		
Other Expenses:			
Compliance Contract with Texas A&M University-Kingsville for trapping of adult Diaprepes in and around quarantine area.	\$8,000		
Compliance Contract with Esparza Pest Control for treatment of residential properties in quarantine area.	\$24,994.90		
Compliance Contract with Texas Citrus Mutual for treatment of commercial citrus orchards.	\$2,078.56		
Total:	\$58,014.86	\$15,000.00	
Additional Comments:			
Submitted By:	Robert Crocker, Ph.D.	Date: June 29, 2005	
Title:	Coordinator for Pest Management, Citrus and Biotechnology Programs		
Agency & Address:	Texas Department of Agriculture P.O. Box 12847 Austin, TX 78711		

