



SECRETARIA DE AGRICULTURA,
GANADERIA, DESARROLLO RURAL,
PESCA Y ALIMENTACION

DIRECCION GENERAL DE SANIDAD VEGETAL
UNIDAD MOSCA DEL MEDITERRANEO



OFICINA DE LA DIRECCION DEL PROGRAMA MOSCAMED
2ª. Ave. Sur No. 5, tercer piso
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Tel.: (9) 62 5 13 74 y 62 5 08 02
E-mail: direccion@moscamed.org.mx

REF: BOO.01.04.02/2002/DIRECCION/

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March 08 2002

Richard Mathews
Acting Program Manager
USDA-AMS-TM-NOP

The Mediterranean fruit fly is an invasive exotic pest which annually arrives into Chiapas, Mexico from Guatemala through the bordering coffee-growing zones as recurring outbreaks. Coffee cherries are considered the main host of this pest. Even though this pest feeds on coffee pulp and propagates in the cherries, damages that may be caused in weight of grains or quality loss though alteration of flavor has not yet been measured.

Because of this, the Mediterranean fruit fly is not considered a pest of economical importance for the coffee industry. However, in the context of the territorial or regional agricultural development where the tropical fruit-growing industry as perennial crops is part of the sustainable agricultural diversification, control of Medfly from coffee plantations is imperative. This because the pest disperses from here to the commercial crops of fruits and vegetables, being this a limitation for the regional development.

There are about 240,00 hectares of coffee in Chiapas; 77,000 hectares are in the Soconusco zone, out of these, 8,334 are destined for organic cultivation. The production of organic coffee in Chiapas has achieved its insertion into a specialized market that has permitted 1,872 producers to obtain higher prices in the International Market, with an estimated production of 99,668 quintals, of which 80 % was exported to Europe, United States, Japan and Argentina.

For the above, the extensive programs for control of invasive exotic pests, must consider this situation, since the rules of the *Federacion Internacional de Movimientos de Agricultura ecologica* (IFOAM), the regulations of the European Economical Community and the United States as primary consumers and their certifying agencies forbid the use of agrochemicals in the control of pests and diseases and in fertilization.

Besides, the control of the Mediterranean fruit fly is as program of international cooperation and therefore must employ technology of less risk to the environment because its reach circumscribes to wide areas that are benefited with the status of absence of the pest, in contribution of regional agricultural development.



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The Moscamed Program of Mexico, has solicited Dow Agro Sciences to make arrangements for certifying their product "Success 0.02" as of organic use that can be used in aerial or ground sprays in control of recurrent outbreaks that enter Mexico.

Also the producers of fresh fruits of Mexico have been interested and looking after the development of a new product such as "Success 0.02" for control of the Mexican fruit fly and other fruit flies that seriously affect their harvests. They want to substitute the use of Malathion pesticide for one that is ecological and the Success is considered as an excellent news.

This Program Moscamed-Moscafrut manifests all our support, on the announced arrangements about the bait (corn syrup) to be considered as an inert ingredient and the active ingredient (Spinosad) of natural origin and low dosages contained to obtain the registration for organic use, in accordance with the regulations of EPA and the National Organic Program.

Atentamente
El Director del Programa
Moscamed en Chiapas



Ing. Antonio Villaseñor Cortés

C.c.p. Archivo.

Villa Mille Rose®

MARIA MANETTI FARROW ESTATE LLC
Olive Oil • Balsamico Vinogar • Peach Preserves

April 24, 2002

Via Facsimile: 202 205-7808

Mr. Richard Mathews
 Acting Program Manager
 NATIONAL ORGANIC STANDARDS BOARD
 USDA-AMS-TM-NOP

Dear Mr. Mathews:

As the owner of 350 olive trees (2 acres) in Oakville, Napa Valley, I am writing to express support for organic certification of "Spinosad" for control of the olive fruit fly. This pest has the potential to devastate both the table olive and olive oil industries in California. "Acceptable" levels of olive fly damage for the table olive industry are 2% or less; for the oil industry, 5-10% is the maximum degree of damage that will permit production of a virgin olive oil. Last year, olive fly damage in parts of California exceeded 100%. Under these conditions, organic table olive production is impossible, and organic olive oil production will be severely curtailed.

There is particular urgency at this time as, in order for Spinosad to be effective against the olive fly, it must be applied to the trees at the time of pit hardening, which typically occurs in June (this year's growing season is particularly advanced, therefore pit hardening will likely commence even earlier). Without approval before this time, much of the organic olive production in California may be jeopardized.

There is currently no allowed means of controlling this fly organically. Spinosad, derived from a natural soil actinomycete, has been shown to be highly effective against the olive fly. I believe Spinosad is an excellent candidate for certification by the National Organic Program. I urge you to act promptly to approve an appropriate formulation of Spinosad and to enable California's organic olive growers to utilize this material for the 2002 season.

Thank you very much for your attention to this matter of great urgency for California's organic olive industries.

Sincerely,

Maria Manetti Farrow

Maria Manetti Farrow



MAR 14 12:03PM

**United States
Department of
Agriculture**

Animal and Plant
Health Inspection
Service

Plant Protection
and Quarantine

4700 River Rd.
Riverdale, MD
20737

Mr. Richard Mathews
Program Manager
USDA-AMS-TM-National Organic Program
Room 2510, South Building
1400 and Independence Avenue, SW
Washington, DC 20250-0020

MAR - 1 2002

Attn: Spinosad Petition

Dear Mr. Mathews:

The Rangeland Grasshopper and Mormon Cricket Suppression Program of the U.S. Department of Agriculture, Animal and Plant Health Inspection Service (APHIS) supports the designation of spinosad as an organically accepted material. In preliminary trials, spinosad has shown promise in reducing grasshopper populations that are causing economic damage. During 2001, grasshoppers and Mormon crickets caused an estimated \$25 million in crop damage in Utah alone. The APHIS Rangeland Grasshopper Program covers 17 western states, and in years past, several million rangeland acres were treated to reduce damage caused by grasshoppers and prevent movement onto adjacent croplands.

The APHIS Rangeland Grasshopper Program currently relies on carbaryl, diflubenzuron, and malathion to suppress grasshoppers and Mormon crickets. Available data from preliminary tests indicates that Spinosad is a product which can suppress grasshopper populations with less adverse environmental impacts than many of the products currently in use.

Although more extensive testing is needed to demonstrate the effectiveness of spinosad in suppressing grasshoppers, APHIS is continually evaluating new pest management practices for certain grasshopper suppression programs, especially for program operations in the proximity of environmentally sensitive areas. Should there be organic crops in the vicinity of rangeland that requires grasshopper suppression, APHIS finds it likely that those crop owners will prefer that spinosad be approved for organic use.



APHIS - Protecting American Agriculture



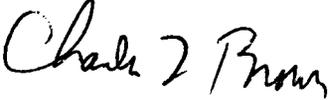
An Equal Opportunity Employer

Mr. Mathews

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Thank you for this opportunity to support the addition of spinosad to the list of allowed substances for use in organic crop production.

Sincerely,

A handwritten signature in black ink that reads "Charles L. Brown". The signature is written in a cursive style with a large initial "C" and "B".

Charles L. Brown
National Grasshopper Program Manager
Invasive Species and Pest Management
Plant Protection and Quarantine
Animal and Plant Health Inspection Service

To: Mr. Richard Mathews
From: Dr. P. Sterling Southern
Subject: Petition for organic certification of spinosad

I am a professor of entomology and an extension specialist at North Carolina State University, with 25 years of experience. I have just learned that Dow AgroSciences has petitioned for organic certification of Spinosad technical material.

Though spinosad appears to me to be a good candidate for certification, I can not speak as an expert regarding its suitability as an organic insecticide. I do wish, however, to call to your attention an important need for such a certification, and one of which you may not be aware.

There is currently a small but significant niche market for organically produced flue-cured and burley tobaccos in the United States. In 2001, this market brought North Carolina and Virginia organic flue-cured tobacco farmers ca. 1.3 million dollars in income. There are good indications (increased marketing of organic cigarettes in Europe) that the size of this market will increase in the future.

Two of four major leaf-feeding insect pests of tobacco are budworms (a mix of *Heliothis virescens* and *Helicoverpa zea* - tobacco budworm and corn earworm) and hornworms (*Manduca sexta* and *M. quinquemaculata* - tobacco and tomato hornworm). Both are common pest complexes on North Carolina tobacco, requiring some control in a majority fields in a given year. This is despite the widespread use of cultural practices, such as stalk and root destruction and fertilizer management, known to reduce the potential for such problems and also despite natural biological control by a series of predators and parasitoids. Budworms frequently occur at three or four times the established treatment threshold and can significantly reduce yields. Hornworms can, if the population is high and remedial control is not attempted, completely strip a field - reducing yields by 90+ percent.

Only one commercial variety with resistance to budworms (but not hornworms) is available to farmers, and this variety is not very acceptable due to lower potential yield and lack of disease resistance.

MAR 28 8:54 AM

Currently organic tobacco farmers have available one certified organic insecticide (*Bacillus thuringiensis* ssp. *kurstacki* (Bt)) which is effective for control of hornworms and budworms. However, given the extensive plantings of genetically modified cotton, corn and soybeans expressing the *Bacillus thuringiensis* toxin and the widespread use of Bt as a sprayable insecticide, the risk of resistance development is real. Should resistance to *Bacillus thuringiensis* develop in either budworms or hornworms, no effective alternatives are available to organic producers.

Thus, there is a real need for an alternative to *Bacillus thuringiensis* which can be used for budworm and hornworm control in organic tobacco. Spinosad would be a good alternative if certified. I have tested Tracer (the active ingredient of which is spinosad) in numerous replicated trials on commercial tobacco farms. It has been in these trials a very effective material for

the control of hornworms and the most effective registered sprayable material for budworm control. Grower experience and comments support this conclusion.

In summary

- * Though I am not an expert on this question, Spinosad appears to be a reasonable candidate for organic certification.
- * Organic tobacco is important in North Carolina.
- * Hornworms and budworms are a significant threat in organic tobacco
- * A single material (*Bacillus thuringiensis*) is available to control these pests when they escape from cultural and biological control.
- * There is real cause to anticipate the development of resistance to these pests, especially the budworm. Thus, alternatives are needed.
- * Spinosad is very effective against these pests - based on numerous field trials - and would make a good alternative in a resistance management program or as an alternative material.

With these points in mind. I hope you will give Spinosad careful consideration for organic certification.

My comments are made as an interested individual and not as a representative of my department or institution.

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March 1, 2002

Dear Mr. Matthews,

We at SFNTC would like to express our support for the organic certification of spinosad. We at SFNTC have grown certified organic tobacco since 1989. We currently work 25 certified flue cured organic growers in NC and VA. We also work with growers in burley tobacco in NC, VA, Kentucky and Tenn. our organic growers also raise other certified organic crops in their rotation programs. We also have a residue free growing program with many growers in NC, SC, VA, Tenn., Kentucky, and a few other areas. We currently use spinosad in this growing program. It gives our growers a good alternative to the BT's. Many of our organic growers would also like to be able to use spinosad. We are very concerned that without a product to rotate with BT, that resistance will build up against this highly effective product with all the BT soybeans, corn and cotton in the state. This process is being accelerated.

As a company that works closely with its growers we would very much like to see spinosad registered as an organic product by HOSB and ORMI. Please contact us with any questions.

Fielding Daniel
Albert Butler
Micou Browne

Subject: [Fwd: FW: Organic Petition for Spinosad]
Date: Wed, 27 Feb 2002 08:48:42 -0500
From: Sterling Southern <Sterling_Southern@ncsu.edu>
To: micou_browne@ncsu.edu

Mike here 'tis

"Walton, Larry (L)" wrote

Dr. Southern, I sent this to you this afternoon, however it didn't go through therefore I'm trying again.

Regards Larry

> -----Original Message-----
> **From:** Walton, Larry (L)
> **Sent:** Tuesday, February 26, 2002 6:1 PM
> **To:** Sterling Southern (E-mail)
> **Subject:** Organic Petition for Spinosad

> Dr. Southern, It was a pleasure having lunch and talking with you today.
> As I informed you, I am attempting to learn my new territory and my
> contacts. I appreciate your interest in the petition to have Spinosad
> organically certified. This will be a tremendous benefits for your organi-
> tobacco growers! As I informed you, please find two file attached that
> list the features of Spinosad that may help you in your support list. As
> we discussed, You certainly have my permission to forward this e-mail to
> other interested personnel.

Dow AgroSciences has submitted a petition for the organic certification of the active ingredient Spinosad to the USDA office of National Organic Standards Board (NOSB) last summer. The NOSB will consider this petition during their meeting on May 7, 2002 in Austin, Texas. The Dow AgroSciences petition is now posted on NOSB web site <http://www.ams.usda.gov/nop/> for comments.

You can express your support for the organic certification of Spinosad by taking one of the following actions.

1. Send a letter to the attention of Mr Richard Mathews at the following address.

Acting Program Manager
USDA-AMS-TM-NOP
Room 2510-South Building
1400 and Independence Avenue, SW
Washington, DC 20250-0020
Telephone: (202) 720-3252
Fax: (202) 205-7808

You should either fax a copy of your letter to him or send it through a courier service since their regular mail is very slow due to security checks. On the subject line of your letter indicate "Spinosad petition"

2. Send an E-mail to Mr. Mathews at the following address

NOPWebmaster@usda.gov. On the subject line of your E-mail indicate "Spinosad petition".

3. Go to their web site and place your comments on their site under the "Spinosad petition".

4. You may choose to personally participate at the NOSB meeting on May 7-8 in Austin Texas and personally express your support during the meeting

Origin:

- Spinosad is a naturally derived product produced through the fermentation of the bacteria *Saccharopolyspora spinosa*.
- The *S. spinosa* bacterium is a naturally occurring organism and is not genetically engineered.
- Spinosad is produced through a fermentation process
- Technical spinosad for organic formulations contains only the spinosad factors (90%) and residual organic growth media (10%)
- **Formulations:** EPA registered products containing spinosad include
 - Success
 - SpinTor
 - Tracer
 - Conserve
 - Justice fire ant bait
 - GF-120 fruit fly bait
 - When technical spinosad is granted organic status, these formulations will be explored for acceptability and either modified or new formulations will be developed specifically for organic growers
- **Mode of action:**
 - Spinosad has a unique mode-of-action that is different than any known insect control agent.
 - There is no cross-resistance with other insecticides
 - Ideal for rotation in an IPM program. It can be rotated with Bts in many cropping systems in order to delay or prevent insect resistance to Bts and other natural products.
- **Efficacy:**
 - Spinosad is the first biological product to provide efficacy that is equivalent to the best synthetic insecticides on key pests. Spinosad has demonstrated insect control activity against a large number of pests including members of the insect orders
 - Lepidoptera (worms or caterpillars), e.g. Beet armyworm, corn earworm, diamond-back moth, cabbage looper, codling moth, leafrollers, and leaf miners.
 - Thysanoptera: Thrips (first biological with excellent efficacy), e.g. citrus thrips, western flower thrips.
 - Coleoptera: e.g. Colorado potato beetles
 - Diptera: e.g. leafminers and fruit flies, including olive fruitfly, walnut huskfly, cherry fruitfly, Mexican fruitfly and Mediterranean fruitfly.
- **Toxicity and environmental persistence**
 - Non-persistent: field soil half-life (T_{1/2}) range from 0.3 and 0.5 days.
 - Degradation by photolysis and microbial breakdown in all environmental compartments:
 - Treated plant surfaces (half-lives of 2 to 16 days)
 - Water (half-life < 1 day) and on bare field soil (< 1 day).

- In the absence of sunlight (aerobic dark soil), spinosad still undergoes microbial decay with T1/2 of 2 weeks.
- Does not leach in soil. This has been confirmed by laboratory soil column studies and field dissipation studies.
- Numerous studies demonstrate spinosad has low toxicity to most non-target organisms, including mammals, birds, earthworms, fish and most aquatic species
- Extensive risk assessments and safety standards are already in place, such as an established ADI standard for human exposure.
- Spinosad has been fully evaluated for use on multiple crops with large margins of safety that would be important to the organic grower.

Spinosad has met the U.S. Environmental Protection Agency criteria for a Reduced Risk Product. These include:

- Reduced environmental load
- Reduced risk to agricultural workers
- Reduced risk to beneficial insects
- Reduced environmental non-target organism levels of concern
- No groundwater concerns
- Excellent efficacy
- Green Chemistry Presidential Award for manufacturing
- Increased options for integrated pest management (IPM)
- **Green chemistry**
 - First insect control product ever granted in the US specifically for pollution prevention in the control of insect pests infesting almonds (CA SLN, 1997).
 - Federally registered 1997 under EPA's Reduced Risk expedited review program.
 - First insect control product registered under FQPA with a tolerance.
 - Spinosad and its fermentation-based manufacturing process were awarded the Presidential Green Chemistry Award, 1999. Recognizes products and process incorporating the concepts of Green chemistry into manufacturing design and crop protection.
- **Economic benefits to organic grower**
 - Many insect pests that are not controlled by existing organically certified products can be controlled by spinosad.
 - Organic farmers will be able to compete more effectively with conventional produces.
 - More food products can be produced organically.

Others:

- There are numerous public literature resources available for spinosad. Accordingly, there is a large amount of product knowledge behind spinosad that could now become useful to the organic grower.
- Spinosad is an EPA registered active ingredient and with approved food Tolerances on nearly all crop plants. Spinosad has over 265 food tolerances established.
- Spinosad is registered in over 40 countries

- Listing of spinosad as an approved active ingredient will facilitate the future and subsequent assessments of end-use formulations containing spinosad by appropriate state organizations.

Only end-use formulations that contain previously certified organic components or EPA list-4 inert components would be submitted to state certification organizations.

Mr. Richard Mathews
Acting Program Manager
National Organic Standards Board
USDA-AMS-TM-NOP
Fax #: 202/205-7808

Dear Mr. Mathews;

I am writing to express support for organic certification of "Spinosad" for control of the olive fruit fly. This pest has the potential to devastate both the table olive and olive oil industries in California. "Acceptable" levels of olive fly damage for the table olive industry are 2% or less; for the oil industry, 5-10% is the maximum degree of damage that will permit production of a virgin olive oil. Last year, olive fly damage in parts of California exceeded 100%. Under these conditions, organic table olive production is impossible, and organic olive oil production will be severely curtailed.

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There is currently no allowed means of controlling this fly organically. Spinosad, derived from a natural soil actinomycete, has been shown to be highly effective against the olive fly. I believe Spinosad is an excellent candidate for certification by the National Organic Program. I urge you to act promptly to approve an appropriate formulation of Spinosad and to enable California's organic olive growers to utilize this material for the 2002 season.

Thank you very much for your attention to this matter of great urgency for California's organic olive industries.

Sincerely,

Margaret Ann Chase
MAG'S OLIVE ORCHARD
21255 Hwy. 41E

Mr. Richard Mathews
Acting Program Manager
National Organic Standards Board
USDA-AMS-TM-NOP
Fax #: 202/205-7808

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Thank you very much for your attention to this matter of great urgency for California's organic olive industries.

Sincerely,

Francesco Chiericati
FC

FRANCESCO CHIERICATI
CHIERICATI FARMS
10000 NICHOLSON AVE