

# OMRI Materials REVIEW

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News and Information for the Organic Community

Fall 2010



## Seed Treatment

### Options for Organic Production

BY ZEA SONNABEND

CCOF POLICY SPECIALIST AND MEMBER OF THE OMRI ADVISORY COUNCIL

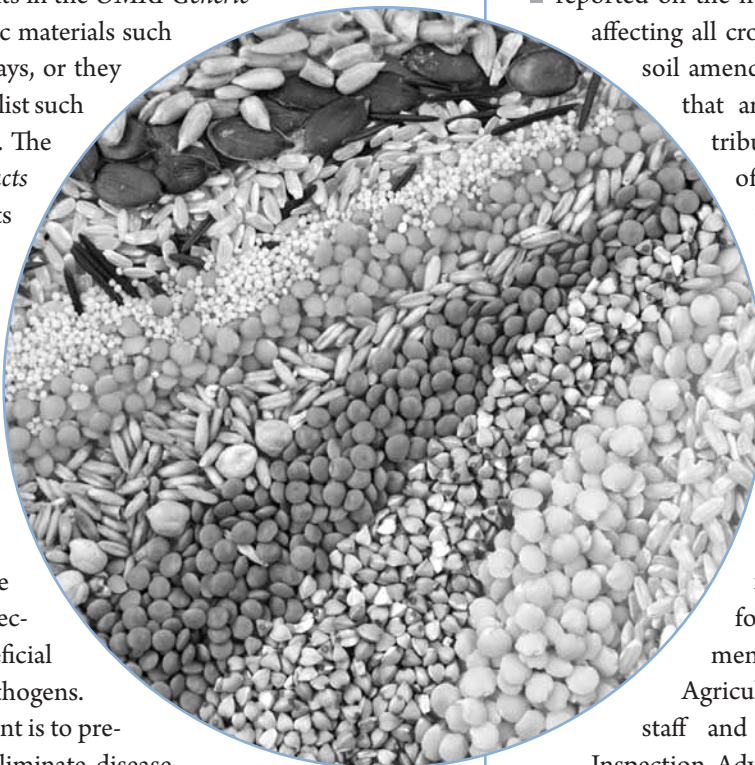
The Seed Treatment category includes materials used for a variety of purposes and from a variety of sources. Allowed seed treatments in the *OMRI Generic Materials List* are either made from nonsynthetic materials such as microorganisms, kelp, yucca, gypsum, and clays, or they are made from synthetic sources on the National list such as hydrogen peroxide, bleach or micronutrients. The Seed Treatment Category of the *OMRI Products List* contains few products, while many products that can be used for seed treatment are listed under other categories. Since it is not easy to determine which products might be used to treat seed, we are discussing some of them here.

#### Why Treat Seed?

There are many benefits to treating seed. The classic reason is to improve germination in cold and wet soils. Where prohibited chemical treatments do this by killing other organisms in the soil, allowed processes coat the seed with a protective layer to keep out pathogens, and supply beneficial microorganisms that can out-compete the pathogens. Another common and related reason for treatment is to prevent the spread of seed-borne diseases. If we eliminate disease organisms before planting, the seed can be safely moved from state-to-state and country-to-country and satisfy all phytosanitary requirements designed to keep disease from spreading.

Biological treatment agents can also help the crop roots become more efficient at absorbing nutrients, due to a symbiotic relationship with the treating microorganism. This can lead to noticeably lower fertilizer bills with a bigger crop

*Seed Treatment continued on page 6*



The need for acceptable seed treatments is growing.

### Update on AB 856 Implementing California's Input Registration Law

BY JOHN ASHBY

OMRI BOARD OF DIRECTORS

In our Spring 2010 newsletter, we reported on the new AB 856 law affecting all crop fertilizer and soil amendment products that are sold or distributed in the State of California. Over the past three months, OMRI board and staff members have attended a series of subcommittee meetings intended to inform California Department of Food and Agriculture (CDFA) staff and the Fertilizer

Inspection Advisory Board as they develop regulations to execute this law. It has become clear over the course of these meetings that CDFA will have a materials review program with regulatory and registration authority over any Organic Input Material. *AB 856 continued on page 5*



# Off to a Great Start

BY PEGGY MIARS

Thanks to everyone for your kind welcome and warm wishes as I begin my work with OMRI. I am grateful to be able to continue serving the organic community and working with many of the same industry leaders I have worked with over the last several years.



Organic is a life choice my husband Tom and I made 25 years ago when we fervently began reading labels and learning where our food comes from and how it is produced. I credit Tom with leading us to organic foods as a result. He has worked in natural foods retail periodically since then, and I landed at OMRI via Whole Foods Market, Earthbound Farm and California Certified Organic Farmers (CCOF). Tom and I share a passion for organic that pervades our personal and professional lives.

OMRI, CCOF, and the rest of the organic marketplace have experienced tremendous growth over the last several years. Although the rate may have slowed, I firmly believe that steady growth will continue. And, I believe that OMRI holds an important place in the future success of the organic industry. Now that organic has “grown up” in the eyes of consumers and conventional ag, we are under a microscope with everyone ready to pounce on any suspicion of fraud. And rightly so! We don’t want cheaters impacting the important work we’ve undertaken over the last few decades.

Before accepting this position with

OMRI, I was well aware of the newly-implemented law (AB 856) and regulations in California that could affect the way that OMRI works in that state. CCOF and OMRI staffers have been participating in important discussions surrounding this new law to ensure the continued integrity of organic inputs. I’m eager for a new challenge and confident that OMRI will continue to fill a critical and valued niche in the organic industry. One of my first tasks is to start a new dialogue with the National Organic Program (NOP) and accredited certifying agencies (ACAs). Working together, we will secure the continued integrity of organic products.

It has been an amazing and almost seamless transition from CCOF to OMRI. We share the same roots, the same stakeholders, and many of the same values. I am grateful to OMRI’s Interim Executive Director Paul Lipscomb, who has been guiding the organization since January. He has graciously included me in discussions when appropriate while excluding me, when possible, to avoid overloading me. The staff here has quickly gained my trust and support. They are a fantastic group of people whom I admire and enjoy working with. They have successfully caught up on reviews, and customer service has improved dramatically. They deserve our thanks and appreciation.

Thank you to our clients, supporters, and friends. I look forward to working with you in this new capacity! ○

## Welcome Peggy Miars

We are pleased to welcome our new **Executive Director/CEO**. **Peggy Miars** comes to us most recently from California Certified Organic Farmers (CCOF), where she has served for six years as the Executive Director/CEO. She holds a Bachelor of Business Administration degree from Western Michigan University and completed post-graduate classes in nonprofit management at Regis University in Colorado Springs. Peggy previously held marketing and management positions with Earthbound Farm (North America’s largest organic produce brand), Whole Foods Market, Granary Market (a small natural foods store bought out by Whole Foods Market), various nonprofit organizations, and ran her own marketing consulting business. She can be reached at extension 102 or email [peggy@omri.org](mailto:peggy@omri.org).



OMRI is a 501(c)(3) nonprofit organization created to benefit the organic community and the general public. Its mission is to provide professional, independent, and transparent review of materials and processes to determine their suitability for producing, processing, and handling organic food and fiber. OMRI is a member of the Organic Trade Association and of the International Federation of Organic Agricultural Movements.

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# Nanotechnology in the News

## Is Nanotechnology Appropriate For Organic?

BY TINA JENSEN AUGUSTINE

**N**anotechnology is an up and coming science with tremendous potential benefits as well as risks. A vast number of industries are exploring possible nanotechnology applications from food processing and packaging to cosmetics, medicine, electronics, and energy production. Of interest to the organic community are applications which could end up in products labeled as organic. Companies in the food industry are looking at nanostructures to enhance flavor, prolong shelf life, and to improve appearance and texture.

Nanotechnology is the science of engineering and controlling matter on an atomic or molecular scale. In nanotechnology, materials are deconstructed down to their molecules or atoms, which are then reassembled into new, previously unknown materials. Classes of nanoparticles include nanorods, nanopowders, nanolayers, nanocrystals and others. Libraries of nanoparticles are continually growing as new nanomaterials and devices are engineered to have novel properties and functions due to their small size. The term nanoparticle has been understood to refer to matter that has at least one dimension on the scale of 1-100 nanometers, but it has also been suggested that particles with dimensions from 0.1 up to 300 nanometers could fall under the same classification.

Most members of the organic community view nanotechnology as contrary to

organic principles and do not want it allowed in the production and handling of organic food and fiber.<sup>1</sup> Organic principles require that we follow the precautionary principal when considering the use of a new material. In the case of nanotechnology there is much unknown about environmental and health risks. An inadequate definition of nanotechnology in organic regulations could inadvertently allow some nanomaterials such as those made from currently permitted synthetics, or exclude some naturally occurring materials and food processing techniques such as milling grain and homogenizing milk.

### What are the concerns?

Particles of materials engineered down to nano-sizes can exhibit chemical properties which are markedly different from the same material in larger-scale form. Just as their chemical properties differ, so might their biological impact according to some experts.<sup>2</sup> Food scientists and toxicologists warn about chronic exposure to nanomaterials. Due to their small size, nanomaterials may be able to enter the body by almost any pathway and cross cell membranes. There has been report of nanoparticles causing DNA damage in exposed laboratory animals,<sup>3</sup> and FDA regulation of nanomaterials does not require health testing in all cases. Engineered nanomaterials of substances that are Generally Recognized As Safe (GRAS) are not subject to the food safety testing that the FDA would require of non-GRAS substances. The effects of releasing engineered nanoparticles into the environment are also largely unknown.

In a March report, the President's Council of Advisors on Science and Technology on the National Nanotechnology Initiative highlighted the need for coordinated assessment of environmental, health, and safety issues surrounding nanotechnology. They also recommended that funds be directed towards product commercial-

ization and technology transfer to help the U.S. stay at the forefront of nanotechnology development.

### Why not ban it outright?

Due to the health and safety concerns mentioned above, Canadian regulators banned nanotechnology in organic food production and handling in a December 2009 amendment to the Canada Organic Standards. In the U.S., the Materials Committee of the NOSB has requested a technical review of nanotechnology to help inform the development of a usable definition that will be applicable to organics. The committee was ready last fall to recommend that the National Organic Program excludes the use of all nanotechnology from organic production, processing, and packaging, except as required by law. However, a minority opinion argued that the definition of nanotechnology should not include nanoparticles created inadvertently as a result of allowed processes. They felt that there should be more flexibility to evaluate nanomaterials on a case-by-case basis and determine a synthetic or nonsynthetic status.

In preparation for the upcoming NOSB meeting this fall, the Materials Committee is now gathering information to better define nanotechnology in the context of organics and refine their recommendation accordingly. The Committee has discussed prohibiting the process categorically like genetic engineering, or considering engineered nanoparticles synthetic and therefore not allowed.

### OMRI's stance on nanotechnology

OMRI considers any products with claims of nanotechnology individually according to current regulations. Until the NOP has enacted regulatory language for the use of nanotechnology in organic production, OMRI will continue to evaluate products on a case-by-case basis. ○

1 Public comment to the National Organic Standards Board (NOSB), May 2009 NOSB meeting.

2 Schneider, A. [2010, March 24]. Amid Nanotech's Dazzling Promise, Health Risks Grow. AOL News.

3 Trouiller et al. [2009, Nov. 3]. Titanium Dioxide Nanoparticles Induce DNA Damage and Genetic Instability In vivo in Mice. *Cancer Res.* 69: 8784-8789. doi: 10.1158/0008-5472.CAN-09-2496.



## Biochar in Organic Farming

**Q: A farmer wants to use biochar in his organic field. What is biochar and how is it made?**

**B**iochar (also called charcoal, biomass-derived black carbon or agrichar) is the common name for *Terra Preta de Indio* (Indian Black Earth). Dating from 500 to 2500 B.P. (Cornell University, 2010), it is a newly re-discovered material used to enhance nutrient and organic matter availability in soils. In addition to its importance in soil management, modern biochar has the potential to mitigate greenhouse gases and provide alternative energy sources.

Soils amended with biochar are generally higher in organic matter, potash and cat-

ion exchange capacity than surrounding soils. These features were especially useful in the Amazonian lands, where fallow periods could be shortened to 6 months, as compared to 8-10 years in soils without biochar. Modern agricultural soil management techniques use biochar for its extreme high affinity of nutrient absorption and for its persistence in the soil structure.

Modern biochar is produced by heating biomass in a low oxygen environment, otherwise known as pyrolysis. Pyrolysis is a form of incineration that chemically decomposes organic materials by using heat in the absence of oxygen. This is usually carried out under pressure and at temperatures above 800° F. During pyrolysis, organic materials such as wood

chips, branches, and other plant wastes are transformed to gases, small quantities of oil, and a solid residue containing carbon and ash. The solid residue is harvested and applied to soils as biochar.

Per the National Organic Program regulations at 205.203(d)(4), “Ash obtained from the burning of a plant or animal material” is an acceptable material for use in organic production. The process by which biochar is produced meets this allowance. However, some variations in the process may include additional chemicals and reactions that render the final biochar as synthetic and thus not allowed in organic production. Organic producers should always check with their certifier prior to using any material on the farm. ○



## Sanitizers and Equipment Cleaners

**Q: Our processing clients want to use a variety of sanitizers and equipment cleaners that have a list of complicated ingredients, most of which are not on the National List for use as a sanitizer. What conditions should I look for in assessing the compliance of these products?**

**S**ection 205.605(b) names only chlorine materials, hydrogen peroxide, peracetic acid, and phosphoric acid as allowed sanitizers in organic processing and handling. However, there are hundreds of products on the market that are targeted towards maintaining food safety and clean equipment. For the most part, almost any material can be used for cleaning equipment and food contact surfaces, just as long as “the handler of an organic han-

dling operation...implements measures necessary to protect organic products from contact with prohibited substances” (205.272(a)). This section of the regulations is commonly referred to as the “intervening event”. An intervening event is a processing step that prevents the contact of prohibited substances with organic food, often taking the form of a hot water rinse, purge, or drip drying. Other commonly used sanitizers are those based in quaternary ammonia (quats). These sanitizers are very powerful and highly desirable in operations that need superior control of microorganisms. However, it is designed specifically to leave sanitizing residues on the surfaces. Many certifiers allow the use of quats in organic production just as long as the intervening event proves sufficient to remove any residues. The processor can

ensure this by utilizing residue sampling strips to determine whether the intervening event of choice removes the residues to the point of a negative result.

Most other sanitizers on the market do not have residue tests to help the processor know whether the intervening event is sufficient. Generally, commercial dish detergents and soaps contain a myriad of additional surfactants, carriers, and diluents that are difficult to understand or even identify. These types of sanitizers were developed specifically for non-industrial settings and so a hot water rinse is usually an acceptable intervening event. Other alcohol-based sanitizers may even be allowed to drip dry due to the volatile nature of alcohol. Producers should check with their certifiers before using any material in their operations. ○



## Following the FD&C Act

**Q: The National Organic Program regulations states at 205.237(b)(6) that “the producer of an organic [livestock] operation must not: use feed, feed additives, and feed supplements in violation of the Federal Food, Drug, and Cosmetic Act (FD&C Act). How can organic livestock operators avoid violating this act in their organic livestock feed practices?**

The Federal Food, Drug and Cosmetic Act (FD&CA) of 1938 was passed after a legally marketed toxic elixir killed 107 people, including many children. Among many provisions, the law authorized the FDA to demand evidence of safety for new drugs, issue standards for food, and conduct factory inspections. According to the FDA, “it regulates \$10 trillion worth of products a year. It ensures the safety of all food except for meat, poultry, and some egg products; ensures the safety and effectiveness of all drugs, biological products..., medical devices, and animal drugs and feeds...” (FDA, 2010).

The FD&CA regulates foods for animals as well as humans. The relevant sections of the regulations for animal feed are from Title 21 Food and Drugs, Chapter 1, Subchapter E—Animal Drugs, Feeds, and Related Products. The FDA also widely recognizes the Association of American Feed Control Officials (AAFCO) publications as a reliable source of information regarding animal feeds. AAFCO defines feed(s) as: edible materials which are consumed by animals and contribute energy and/or nutrients to the animal’s diet. The FDA and AAFCO provide closed-positive lists of feed ingredients, additives, and supplements that have been reviewed for use in livestock feed. For example, in ad-

dition to all Generally Recognized as Safe (GRAS) ingredients, the FDA outlines feed additives in section 573. AAFCO provides a similar list, but also names and defines hundreds of feed ingredients ranging from primary agricultural grains to preservatives and anti-caking agents.

Because they cover a wide variety of feed ingredients and additives, it is uncommon to find livestock feed that is allowed for organic production that does not also comply with FDA and AAFCO regulations. However, one example of how one may violate the FD&C Act would be through feeding an animal a feed that has not previously been identified as acceptable by the FDA or AAFCO. Leonardite, a common humate material used in crop production, has been found in some commercial feed products. Leonardite is not listed with the FDA or in AAFCO as an acceptable animal feed ingredient. Therefore, if an organic producer fed such a material to his animal, he would be violating 205.2387(b)(6). Another violation would be to use a material without attention to its FDA or AAFCO restrictions. For example, diatomaceous earth (DE) is a common ingredient used in feeds for its calcium content and anticaking properties. However, FDA regulations state that DE “should only be used as an inert carrier...in an amount not to exceed 2% by weight of the total ration”. Feeding animals pure DE would be in violation of 205.237(b)(6). Overall, there is little probability that commercial animal feeds would violate the FDA or AAFCO regulations, since they are required to comply with these regulations prior to sales. However, organic producers should check with their certifiers prior to using any material on the farm. ○

*AB 856 continued from page 1*

rial (OIM) sold, manufactured or distributed in California.

Part of OMRI’s mission is to support the development and implementation of effective standards for material review. We agree with the intent of California’s AB 856 to increase regulatory oversight, although a number of questions of impor-

**It appears that input suppliers outside of California are mostly unaware that this requirement will become enforceable in four months.**

tance to the organic industry have yet to be addressed. As a service to organic input manufacturers, certifiers and producers, we offer a brief synopsis of OMRI’s points of concern regarding the implementation of AB 856:

AB 856 specifically defines “Organic Input Materials (OIM)” as: “any bulk or packaged commercial fertilizer, agricultural mineral, auxiliary soil and plant substance, specialty fertilizer, or soil amendment excluding pesticides that is to be used in organic crop and food production...”. This definition of materials appears to include anything other than pesticides that is brought onto an organic farm and added to the soil. **Manufacturers of these types of inputs should be informed that all organic input materials, including the generic materials and custom blends up to and including the final brand name products, will apparently require registration and review by CDEA beginning in January 2011.** It is our understanding that this will be the case whether or not the manufacturer markets the product for use in organic production. Products such as mined gypsum, alfalfa pellets, animal manures and bone meal that were previously exempt

*AB 856 continued on page 8*

*Seed Treatment continued from page 1*  
return. The mechanisms by which these biological agents work is truly fascinating but is outside the scope of this article. Please consult the references provided at the end of this article for further details on that subject.

### Options for Seed Treatment

The choice of seed treatment depends on the specific crop being treated, the reason the treatment is desired, the soil and environmental conditions for planting, and the availability of the prospective treatment in a useable form. No one choice is good for every species and every situation, so investigation into the characteristics of each option is worthwhile. Here are some of the most well-known options:

**T-22** (*Trichoderma harzianum*) is a fungus that actively grows on plant roots as they develop, providing protection against plant root pathogens such as *Pythium*, *Rhizoctonia*, *Fusarium*, *Cylindrocladium* and *Thielaviopsis*. The effectiveness of T-22 on select crops and diseases has been debated in the scientific literature. Some crop species have shown good results while other species may have one variety respond well while another does not. Data from the literature and the product description from the manufacturer BioWorks both focus on use of this material as a soil drench, but do not refer to its effectiveness as a seed treatment. To be used as a seed treatment it must be combined with other materials that will help it stick to the seed. While OMRI considers microorganisms like T-22 as an allowed material, there are no OMRI approved coating products yet that contain T-22. It is understood that once

\* These products are not OMRI Listed, and OMRI has not reviewed the ingredients in any of these products. DO NOT use these products without talking to your certifier first.

Many products that can be used for seed treatment are listed in other categories.

T-22 is applied to seed the shelf life will be reduced considerably, so treatment should occur shortly before planting. There also exists a perception among growers that the T-22 application can reduce seed germination.

**Bacillus subtilis** is a ubiquitous naturally occurring saprophytic bacterium that is commonly recovered from soil, water, air, and decomposing plant

material. Strains of *B. subtilis* can be used as biological control agents under various conditions, with a couple of strains showing positive results on seeds. The *B. subtilis* strain GB03 (Kodiak® from Bayer Crop Science) was discovered in Australia in the 1930's and is applied either as a seed treatment or directly to soil. *Bacillus subtilis* strain MBI 600 is used to suppress disease organisms such as *Botrytis*, *Alternaria*, *Rhizoctonia*, and *Fusarium* and is also used to promote more effective nodulation by nitrogen-fixing bacteria, improving yields. It is used as a seed and in-furrow treatment on crops such as cotton, seed and pod vegetables, and others. It has been shown to work against *Sclerotinia fruticola* fungus as well as *Fusarium*, *Verticillium* and *Rhizoctonia* spp. There are several modes of action. Colonies of *B. subtilis* take up space on the roots, leaving less area or source for occupation by disease pathogens. The bacillus consumes root exudates and deprives disease pathogens of a major food source, thereby inhibiting their ability to thrive and reproduce. The *B. subtilis* bacteria produce a class of lipopeptide antibiotics including iturins, which help *B. subtilis* bacteria out-compete other microorganisms by either killing them or reducing their growth rate. Iturins can also have direct fungicidal activity on pathogens. OMRI has many *Bacillus subtilis* products listed in the category Microorganisms, including some from the Serenade and Rhapsody product lines from Agraquest Inc, as well as Activate 1005 from Natural Resources

Group. However, none of these contain the GB03 strain. Although they are not OMRI Listed, the products Kodiak Concentrate Biological Fungicide\* by Bayer CropScience and Companion Biological Fungicide\* by Growth Products Ltd are specifically *B. subtilis* GB03. While the products listed so far are all liquids, they could easily be formulated with organically approved coating agents such as gums and clays into a seed treatment that is approved for organic use.

**Other Microorganisms and Products:** The Natural Industries Inc product Actinovate SP contains *Streptomyces lydicus*. It is OMRI Listed in the Microbial Products Category. The soil borne fungi that are suppressed and controlled by this product include *Fusarium*, *Rhizoctonia*, *Pythium*, *Phytophthora*, *Phytophthora*, *Phytophthora*, *Sclerotinia*. The non-OMRI Listed product Yield Shield\* by Bayer CropScience contains *Bacillus pumilius* GB34 and may potentially be used as a seed treatment. However, since the inerts have not been reviewed, growers should check with the certifier first. The OMRI Listed fungicide product Mycostop Biofungicide by Verdera Oy contains *Streptomyces griseoviridis*. The Agricoat product Natural II is an OMRI listed seed treatment and organically certified coating process that has a proprietary formula of biological materials and coating ingredients. *Trichoderma lignorum* is another microbial species that may show promise for seed treatment. While this strain is available in other countries, it is not included in any formulated products in the US.

**Physical treatments.** Hot water is the oldest and simplest disease control method. It is not appropriate for all crop species (not for "fruity" crops) and it must be used shortly before planting because it decreases seed longevity significantly. Temperature level and duration of treatment have to be very specific in order for the treatment to be effective, and for the treatment to not kill the seed. Hot water treatment is not visible to the eye, and therefore anyone can claim that they treat-

ed a crop with hot water without doing it. An aerated steam treatment called Thermosteam™ is now available in Europe from the Swedish company Seedgard. It uses conditioned hot humid air which renders pathogens harmless without affecting seed germination. Another European technology called “E-dressing” subjects the seed to low energy electrons that have a disinfecting effect, without using any chemicals and without decreasing viability or storage life. It does require special equipment that is not yet available in the US.

**Other treatment materials** include garlic extracts, neem tree oil, other essential oils such as clove or thyme oil, and nonsynthetic acids such as acetic acid or lactic acid. The most promising research is from trials of formulated thyme oil, which has shown effectiveness against *Xanthomonas campestris*, *Clavibacter michi-*

*ganensis* and *Alternaria brassiciola* in vitro. However, essential oils can adversely affect germination if the concentration is not low enough.

### Conclusion and Recommendation

It is important to note that it is often a long way between the basic research that shows that something works as a seed treatment, and the commercialization of a product that is formulated and effective in the field. This process is even more complicated for products that must be acceptable for organic production and registered by the government for a specific crop and purpose. The organic market is growing quickly, and the need for acceptable seed treatments is growing along with it. All innovative companies thinking about organics should consider more product development for seed treatments. ○

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note: This article used product labels for reference. These can be obtained through the websites of the companies mentioned.

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## Jamie Liebman

Jamie Liebman died June 12, 2010 of brain cancer. He was 51. After receiving his Ph.D. plant pathology from the University of California at Berkeley, Jamie dedicated his skills and competency as a scientist to reduce the use of toxic chemicals, protect the environment from destructive agricultural practices, and improve the health and safety of farm workers. As a volunteer on the California Certified Organic Farmers’ Materials Review Committee, he was instrumental in bringing rigorous scientific review of the materials used in organic production. His contributions of knowledge, commitment to the principles of organic agriculture and active vision helped form the basis for OMRI. After working for the Pesticide Action Network of North America, Jamie went to work at the US Environmental Protection Agency’s Region 9 offices in San Francisco, where he ended his career. Contributions in his honor may be made to Community Alliance with Family Farmers, Children’s Hospital Research Center Oakland (California) and Pesticide Action Network of North America. ○

## More Review Staff

We have added another **Product Review Coordinator** position to our growing staff, and we are pleased to announce that **Andria Schulze** has accepted the position. Andria has been working as a Review Program Assistant since October 2009, providing excellent customer service and valuable Review Program support. She will continue to help OMRI to grow and increase product review capacity in this new role. Andria can still be reached at extension 112, [andrias@omri.org](mailto:andrias@omri.org). Thank you, Andria!

# CALENDAR

**October 2 -3 Hoes Down Harvest Festival, Capay Valley, CA.** Educational farm tours, children's area, hands-on workshops, farm products and an abundance of organic food, live music and good times. All proceeds benefit nonprofit organizations that support sustainable agriculture and rural living. [www.hoesdown.org](http://www.hoesdown.org)

**October 13 The Organic Summit, Boston, MA.** This forum will be a singular opportunity for representatives from a variety of organic industry stakeholder groups to participate in complex discussion and learning. Author Ellen Ruppel Shell will present this year's keynote, "Growing Organic in a Discount Culture". [www.theorganicsummit.com](http://www.theorganicsummit.com) \*

**October 13-16 All Things Organic™ Conference and Trade Show/ Natural Products Expo East/ BioFach America Organic Products Expo, Boston, MA.** This promises to be an impressive gathering of industry experts and contributors, with three tradeshows collocating in one giant venue. The Organic Trade Association is sponsoring a special line up of workshops highlighting organic issues. [www.organicexpo.com](http://www.organicexpo.com) \*

**October 25-28 National Organic Standards Board (NOSB) Meeting, Madison, WI.** This meeting's agenda will include recommendations for nanotechnology, apiculture and corn steep liquor. Discussion documents include animal stocking rates; animal handling, transit, and slaughter; and nutrient vitamins and minerals. [www.ams.usda.gov](http://www.ams.usda.gov) \*

**December 3-4 Sustainable Agriculture Pest Management Conference, San Luis Obispo, CA.** CCOF partners with Cal Poly's College of Agriculture Food and Environmental Science (CAFES) annually for this event. The conference provides active industry professionals, pest control advisors, consultants and organic growers with information on innovative strategies for controlling pests using sustainable agriculture practices. [www.ccof.org/pcaconference.php](http://www.ccof.org/pcaconference.php) \*

**December 3-5 Sustainable Agriculture Conference, Winston-Salem, NC.** This year's theme is "Local & Organic Arrives: Our Opportunity is Now". The event will include an outstanding educational program, a five-hour cheesemaking workshop, Friday tours, and something for everyone. [www.carolinafarmstewards.org/sac10](http://www.carolinafarmstewards.org/sac10)

**December 9-11 ACRES, USA Conference, Indianapolis, IN.** This popular yearly event for professionals involved in commercial-scale sustainable and organic agriculture features dozens of speakers who cover a wide range of subjects. [www.acresusa.com/events/10conf/about](http://www.acresusa.com/events/10conf/about) \*

**January 26-29 EcoFarm Conference 2011, Pacific Grove, CA.** This yearly event is the largest sustainable agriculture gathering in the West. It will include dozens of prominent speakers with a focus on marketing strategies, research and other important food system issues. [www.eco-farm.org/programs/efc](http://www.eco-farm.org/programs/efc) \*

\* OMRI staff will attend, present, or exhibit at this event.

Compiled from a variety of sources. OMRI welcomes your calendar suggestions. Email to [info@omri.org](mailto:info@omri.org).

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from state registration will apparently also become subject to this requirement.

January 1, 2011 is the current target date for implementation of AB 856. Many agree that requiring the registration of everything that is added to the soil of an organic farm is an extremely ambitious undertaking and cannot be accomplished within that time frame. We understand there may be a phased-in implementation period, although that has not yet been confirmed. Unfortunately, it appears that input suppliers outside California are mostly unaware that this requirement will become enforceable in four months. Approval of ANY of these inputs will require an on-site inspection of every manufactur-

ing facility, whether the site is in the State of California or elsewhere, as part of the

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registration process. How the out of state inspections will be paid for and who will conduct them are unresolved as of today.

OMRI understands that the intent of AB 856 is not to inhibit the growth of the organic industry. However, in light of the above concerns, we believe that this could be the consequence of rushed implementation. The organic name is something that we have all worked hard to establish, and the entire industry depends on our ability to safeguard that label. We encourage our readers to consult with their trade organizations to find out how this law might affect their business. The regulations will be available for public comment in the near future and this will provide an excellent forum to express concerns, comments and questions regarding this law. For more information, go to <http://www.cdffa.ca.gov/is/flders/fertilizer.html>. ○