



# The Inspectors' Report

## IOIA & OMRI Livestock Inputs Webinar

IOIA and the Organic Materials Review Institute (OMRI) have scheduled the first-ever webinar on Livestock inputs for **March 14**. This is the second topic in a series of three intermediate level organic inspector trainings developed by OMRI and IOIA and delivered collaboratively via webinar. The two organizations first began developing the webinars last year, and interest and participation continue to grow. While the first four webinars focused on crop inputs, this new webinar will cover what livestock inspectors should look for during inspections, including feed ingredients and health care materials. Inspectors and certifiers who attend will gain skill in understanding input assessment, and in navigating the resources available on the OMRI website (<http://www.omri.org/>).

OMRI will provide the technical expertise of **Lindsay Fernandez-Salvador**, OMRI Program Director, as lead presenter. **Lisa Pierce**, IOIA trainer, will work with her to ensure that the course is designed to meet the needs of inspectors and certifiers. **Joseph Ward, Ph.D.** in Animal Nutrition and IOIA inspector member, will provide technical advice. The course includes pre-course reading as well as in-class discussion and exercises, with opportunity for Q & A, and a graded post-assessment. Joint IOIA and OMRI Certificates of Completion are awarded to successful participants, and discounts are available for current OMRI subscribers and IOIA members. Enrollment is limited to 20. Additional webinars will be scheduled as needed. IOIA will manage registration through the IOIA webinar site. To register, see the IOIA registration page: <http://ioiaregistration.ganconference.com>

OMRI provides organic certifiers, growers, processors, manufacturers, and suppliers an independent review of products intended for use in certified organic production, handling, and processing. Manufacturers submit product information and an application, and OMRI then reviews each product against the National Organic Standards. Acceptable products are OMRI Listed® in the *OMRI Products List*®, and are allowed to display the OMRI Seal. OMRI also provides guidance to subscribers and certifiers on the acceptability of various material inputs in general under organic standards. [see **Livestock**, p 4]

## Notes from the Chair

By Jennifer Clifford

Greetings members! 2011 was a busy year for IOIA. We made a lot of positive progress through the year and have an impressive agenda for 2012 and beyond.

In December 2011, Michelle Sandy resigned from IOIA's BOD. A big thank you to Michelle for her work and service in the interest of IOIA. We are also grateful for our member input. Many of our committees are very active and we appreciate them and their work. Thank you!

Preparations are underway for advanced training and the AGM in Chilliwack, BC. We have a good lineup of speakers, training sessions and membership discussion topics. In a recent IOIA mailing you should have received BOD candidate bios and proxies. To those who won't be joining us, **please be sure to vote** for BOD members and **send your proxies**. We look forward to hearing your suggestions and ideas now, throughout the week in BC and beyond.

January 31<sup>st</sup> was an important day for the organic industry and all those concerned with GMO trespass. On that date in NYC, the first phase of Organic Seed Growers and Trade Association (OSGATA) et al vs [see **Chair**, p 4]

## AGM Keynote

### Address:

*"Canada Organic - A State of Evolution & Cooperation"*

**Beth McMahon & Gunta Vitins**

**McMahon**, new Executive Director of the Canadian Organic Growers (COG), has been active in the organic sector for several years, recently completing an 8-year term as Executive Director of the Atlantic Canadian Organic Regional Network (ACORN). She holds a Masters of Environmental Studies with a focus on organic agricultural systems.

**Vitins** is President of Canada Organic Trade Assoc. (COTA) & Industry Chair of Agri-Food Canada's Organic Value Chain Roundtable. She has been spearheading innovative agri-food initiatives in the public and private sectors for over 25 years, focusing on the organic industry for the past two decades.

## Accreditation News

A reminder that **March 1** is the deadline to renew your Accreditation.

### Accreditation Renewals:

Philip Hale, Crop, Livestock, Process  
Robert Howe, Processing  
Al Johnson, Crop, Livestock, Processing  
Christopher Kidwell, Process

## 2012 IOIA Membership Directory Now Available!

Price is \$15 for IOIA members, \$25 for non-members. Copies of the Directory are provided by IOIA to all supporting certification agency members as a membership service. Other categories of membership must pre-order and pay for their copies. A few extra copies are available first-come, first-served. See the inserted Mini-Directory in this issue or the on-line IOIA Member Directory for current contact information for members.

## WELCOME RETURNING FORMER MEMBERS (NOT PRINTED IN THE 2012 DIRECTORY):

### INSPECTOR MEMBERS:

Amy Leblanc (Maine, USA)  
Oscar Arturo Somasco (British Columbia, CANADA)  
Elizabeth Whitlow (California, USA)  
Tanya Brouwers (British Columbia, CANADA)

## WELCOME NEW 2012 MEMBERS: INSPECTORS:

Jeremy Conyac (Washington, USA)  
Debbie Leverenz (California, USA)  
Wayne Edgerton (Minnesota, USA)  
Delia Hollbach (Iowa, USA)  
Lisa Laplace (California, USA)  
Gavin Wright (British Columbia, CANADA)

## WELCOME NEW 2012 SUPPORTING INDIVIDUAL MEMBERS:

Joel Rosen (Minnesota, USA)  
Angela Wartes-Kahl (Oregon, USA)  
Rodger Beck (New York, USA)

## Monsanto-Amici Update

Judge Naomi Buchwald heard oral arguments in the case on January 31 and indicated she would issue a ruling by March 31. Info on the suit and transcripts of the proceedings are available at [osgata.org](http://osgata.org).

## 2011 IOIA Scholarships Awarded

IOIA is pleased to announce that Andrew Rutherford Scholarships were awarded to **Evelyn Rosas** and **Molly Dupre**. No Community Initiative Scholarship was awarded this year. Winners receive a tuition waiver, meals and lodging at any IOIA course during the year. The award does not include travel.



**Molly Dupre** has worked in a variety of capacities within the organic farming movement as an educator, farmer, and innovator. In 2002 she co-founded

St Louis' first urban farm with three good friends. The farm, New Roots Urban Farm, is entering its eighth season, growing food to supply CSA members, local food pantries, and a low-income farmer's market. She worked at St Louis' non-profit community gardening organization, Gateway Greening, for four years coordinating the education programs and teaching gardening to area students. She then went on to create a half acre kitchen garden for a local restaurant and worked there for two years growing organic vegetables. Molly spent the 2010 growing season in upstate New York at a grass-based sheep dairy that performs all their field work with draft horses and mules. Currently she works at Shining Rivers Waldorf School coordinating a small CSA, taking care of all the gardens on the school grounds, and teaching. Molly also has a small organic vegetable operation that just finished its first season. She sells veggies and flowers at the Tower Grove Farmer's Market and is looking forward to the day sometime soon when she has a mule team of her own. Her companions include one lovely eight year old daughter and a sweet and quiet hound dog. Her future plans include growing her farm and becoming an organic crop and livestock inspector.

## Evelyn Rosas

"I am excited to partake in the IOIA organic crop and processing training as it will be a great way for me to advocate transition to, and



maintenance of, organic farming systems. I graduated from the University of Chicago having studied linguistic anthropology and lived in a dungeon/library for too many years. After working many jobs that did not have tangible positive effects in the local community, I ended up at a small farm that would solidify my trajectory into agriculture. A few seasons later and now married, my husband and I are still enjoying the steep agricultural learning curve on small farms. This year I am honored to begin farming for the organization Petaluma Bounty, striving to provide fresh fruits and vegetables for families in the community. In the future my husband and I hope to begin a small organic farm together but for now we will concentrate on the absorbing the wisdom of successful growers."

### IOIA Board of Directors

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*The Inspectors' Report* is the newsletter of the International Organic Inspectors Association. IOIA is a 501 (c)(3) educational organization. Our mission is to address issues and concerns relevant to organic inspectors, to provide quality inspector training and to promote integrity and consistency in the organic certification process.

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## IOIA Training Schedule

**Chilliwack, British Columbia, February 28-29 and Annual Meeting March 1** IOIA will sponsor advanced organic inspector training in conjunction with the IOIA Annual Membership Meeting on March 1 at the Best Western Rainbow Country Inn in Chilliwack. A pre-session workshop is offered on Feb. 27 on the Canadian aquaculture standards, plus a BC SPCA-sponsored session on poultry euthanasia. Training will include one full day (Feb 28) of field trip to the Agri-Pacific Research Station Agriculture and Agri-Food Canada and the UBC Dairy Education and Research Centre, both in Aggasiz. The morning session will focus on practical field indicators of soil health for inspectors. The afternoon includes a tour of the dairy research farm with focus on animal welfare projects, field indicators of animal health, feed audit exercise at the Feed Intake Research Facility, and gait score training workshop. Day 2 (Feb 29) will focus on an update of the Canadian Organic Standards, USDA NOP standards update, forensic auditing, and processing inputs with Lindsay Fernandez-Salvador, OMRI Program Director and Rochelle Eisen, Resilient Solutions Consulting. The IOIA events follow the COABC Annual Conference, scheduled Feb 24-26 at the same venue. For more information about that conference, see [www.certifiedorganic.bc.ca](http://www.certifiedorganic.bc.ca).

**Webinar: IOIA/OMRI Livestock Inputs Webinar, March 14** For more details, see page 1, contact the IOIA office, or visit <http://ioiaregistration.ganconference.com>.

**State College, Pennsylvania - Crop, Livestock, Advanced, March 31-April 6** IOIA and Pennsylvania Certified Organic (PCO) will cosponsor Basic Crop Inspection Training and Livestock Inspection Training running concurrently April 2-6. Each basic course includes 4 days of instruction, focuses on the USDA NOP, and includes a field trip to a certified organic operation, plus ½ day for testing. Advanced Organic Inspector Training will precede the training on March 31-April 1. Agenda is under development and will be posted and updated on the IOIA website. Topics include sampling for residue analysis and unannounced inspections. All trainings will be held at the Penn Stater Conference Center Hotel. PCO is a USDA-accredited certification agency that performs approximately 700 inspections annually in Pennsylvania and adjoining states (New York, New Jersey, Delaware, Maryland, West Virginia, and Ohio). For more information about PCO, visit [www.paorganic.org](http://www.paorganic.org).

**Tegucigalpa, Honduras – Basic Farm, April 23-27** IOIA and FIDE Honduras will cosponsor a 4.5 day Basic Organic Farm Inspection training using USDA NOP Standards as a reference. The course will be held in Tegucigalpa, Honduras April 23-27, 2012. Instruction will be conducted in Spanish. Please contact Julio Rendón at Ph: 504-2221-3604 Fax: 504-2221-6316 e-mail: [jrendon@fidehonduras.com](mailto:jrendon@fidehonduras.com) for further information.

**Brandon, Manitoba – Crop and Livestock April 30 – May 12** IOIA and Assiniboine Community College (ACC) will cosponsor Basic Organic Crop Inspection Training followed by Basic Organic Livestock Inspection Training, using the Canadian Organic Standards as a reference. The courses each include 4 days of instruction, including a field trip to a certified organic crop, respectively livestock operation, plus ½ day for testing. For more information about these trainings, please contact Mary Petersen at Ph: 204-725-8700 Ext 6683 Fax: 204-725-8740; e-mail: [PeterseM@Assiniboine.net](mailto:PeterseM@Assiniboine.net). Assiniboine Community College is located at 1430 Victoria Avenue East in Brandon, Manitoba, Canada R7A 2A9.

**Awajishima, Hyogo, Japan, Farm Course, May 16-19** IOIA and JOIA will cosponsor a 4 day Basic Organic Farm Inspection Training using JAS Standards as a reference. The course will be held in Awajishima, Hyogo, Japan, May 16-19, 2012. The training language will be Japanese. Please contact Mutsumi Sakuyoshi at JOIA for more information about the course. E-Mail: [mu-saku@cap.ocn.ne.jp](mailto:mu-saku@cap.ocn.ne.jp) website: [www.joia.jp](http://www.joia.jp)

**Crop and Processing Training in the Northwest in June** is under development.

**Crop and Processing Training, in Farmington, Minnesota, October 15-25** is being developed with the Organic Crop Improvement Association International (OCIA) as co-sponsor. Basic Crop Inspection Training is scheduled Oct. 15-19, followed by Basic Processing Inspection Training October 21-25.

**Canadian Organic Growers and IOIA to offer training in Ontario in October** Canadian Organic Growers has entered into partnership with IOIA to provide training in Canada. The first trainings will include entry-level, basic crop and processing inspection training courses for those interested in becoming inspectors. Each basic course includes comprehensive training on the Canadian Organic Standards and four days of instruction including a field trip to a certified

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[see **Trainings**, page 5]

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## Notes, from page 1

Monsanto took place. The case has 83 plaintiffs and 12 *amici* brief signatories, one of which is IOIA. The Public Patent Foundation which filed the suit states, "The organic plaintiffs were forced to sue preemptively to protect themselves from being accused of patent infringement should they ever become contaminated by Monsanto's genetically modified seed, something Monsanto has done to others in the past". The suit states Monsanto filed 144 suits against farmers for patent or license infringements from 1997 to early 2010. Both PUBPAT and OSGATA's websites have up to date information on the case. By the time you read this there will hopefully be more good news. [see p 2] Stay tuned.

Another issue affecting organic farmers and inspectors in many parts of the country and the world is natural gas drilling. Since the advent of slick water hydrofracking, a controversial method of natural gas extraction, exempted from all major US federal environmental statutes such as the Superfund, Clean Air and Water Acts to name a few, organic farms may be at risk. How this impacts certified operations here in the northeast has been varied. There is financial incentive to lease ones mineral rights enabling gas extraction. We have seen farmers able to paint their barns, upgrade infrastructure and purchase new equipment with their bonuses and royalties. We've seen the loss of productive acreage to roadways, infrastructure placement, pad development and storage facilities.

Some acreage remains industrial and some is reclaimed but depending on the activity may have lost its organic status for three years. Organic farmers additionally lose acreage to buffer zones installed around these sites. Some farmers have gone out of business. Some aquifers have been contaminated with drilling chemicals, heavy metals and methane gas.

Chemical spills and waste pit seepage or overflows and blowouts do occur with contaminating effects. What this means to the inspector is multifaceted. As this is industry on the organic farm we view it as a possible contamination factor from development to reclamation and beyond. There are buffer zones to visit, reclamation seed and fertilizer reviews, questions about drilling mud pit burial, equipment leaks and water quality questions to name a few. Farmers are concerned about their markets and have told me many customers are concerned about products grown in areas where natural gas is being produced. There are other concerns such as collective air pollution issues, waste disposal, water usage or the likelihood of radioactivity in the flow back material in drilling mud and frack fluid. Certifying bodies are working together in deciding how to manage their part of the process, as it is an industry which is expected to be around for a long time. IOIA has delivered several trainings in the upper Midwest designed for pipeline monitors for projects crossing organic farms. This training could be made more widely accessible via webinar.

Did you hear? The BOD has chosen a new IOIA logo! After input from members and lots of BOD discussion, it's final. We hope to announce the winner at the AGM. Look out for new IOIA marketing materials and paraphernalia with the updated logo - coming soon!

We are looking forward to seeing you in Chilliwack.

## Livestock, from page 1

Lindsay Fernandez-Salvador holds a B.S. from Oregon State University in Natural Resource Management and an M.S. from the University of Florida in Geography. She has over 8 years of work experience on both conventional and organic farms in Oregon. Her graduate research thesis examined market conditions that contribute to

small organic farm success. Through this research she became familiar with organic standards and issues facing organic farmers. She also consults for organic producers and performs organic inspections. She has lived and worked in Latin America and is fluent in Spanish.

Dr. Ward earned a BS in Animal Science and MS in Ruminant Nutrition from Purdue University. He earned a Ph.D. in Ruminant Nutrition from Oklahoma State University. As an animal nutritionist, he has consulted in Europe, the Far East and South Africa. He has managed a certified organic soy processing and animal feed manufacturing facility and been active in organic animal production since the early 90's.

The IOIA/OMRI webinars are part of IOIA's new core intermediate or '200 level' courses that all inspectors in a given category need. For example, all livestock inspectors should have additional training in feed audits and livestock materials, and all inspectors of farms should have additional training beyond basic training in audit trail, natural resources, and crop inputs. These new core courses are most valuable to those already working as inspectors and certifiers, going beyond what can be done in a basic 4.5 day course. IOIA is building this new category of courses to develop the necessary skills for performing detailed inspections. Developing the additional 200 level webinars for crops, livestock, and processing is a priority goal for the IOIA training program this year.

Next, IOIA and OMRI plan to also work together developing a webinar program for processing inputs. Webinars focusing on inputs in relation to the Canadian standards are also under development. OMRI will continue to collaborate with IOIA on live in-person training of inspectors, as in the past (2007 and 2008), to ensure that adequate numbers of trained inspectors are available to do on-site inspections of input manufacturing operations.



## Notes from the ED

By Margaret Scoles

**Happy New Year!** Typically, my January ends with a trip to Guelph. This year, I headed instead for sunny San Antonio, TX for the NOP training on Jan. 24 and the ACA-NASOP training Jan 25-26.

A few highlights from the **NOP training** with Miles McEvoy and other staff:

Goals include 100% organic literacy for USDA staff (100,000+ employees). Although the NOSB voted to remove sodium nitrate from 205.602 as allowed with annotation, it is clear that it won't be that easy. A proposed rule is expected during this year, public comment will be received, and then a decision will be made. **This year's preview:** we can expect Final Rule on Residue Testing; Proposed Rule for Pet Food; and Proposed Rule on Livestock Origin. Aquaculture Standards are also coming soon. ARC has a new name, so it is no longer the "ARC auditors" who are doing the accreditation audits of certifiers. Over 60 audits are scheduled this year, about double from previous years. NOP audits of certifiers will focus in 2012 on pasture rule implementation; grower groups; materials review/approval; conflict of interest; sample collection & analysis procedures; and certification compliance procedures. Interesting finding of the NOP audit – incomplete OSPs are passing review and files are passing final review without addressing all non-compliances reported by the inspector.

**ACA-NASOP Meeting** - welcome by Leslie Zuck, ACA President, and Brenda Book, NASOP President. Highlights --**The Organic Seed Search Just Got Easier** -- by Chet Boruff, Association of Official Seed Certifying Agencies, and Kristina Hubbard, Organic Seed Alliance. OMRI has taken down their Organic Seed Database. OSA and AOSCA are working together on a project

### *EPA Releases Water Pollution Data Tool*

The EPA has just released the Discharge Monitoring Report (DMR) Pollutant Loading Tool, an online database system that allows users to track polluters included in the database. Under the Clean Water Act, facilities with National Pollutant Discharge Elimination System (NPDES) permits report discharge data to the EPA. The EPA has pooled and classified some of this information so that users may track the "who, what, and where" of waterway discharge.

The tool calculates pollutant loadings from NPDES permits and Discharge Monitoring Report (DMR) data from EPA's Permit Compliance System and Integrated Compliance Information System for the National Pollutant Discharge Elimination System. Currently, the Tool's database includes information available for the years 2007 through 2010. Pollutant loadings are presented as pounds per year and as toxic-weighted pounds per year to account for variations in toxicity among pollutants. The tool ranks dischargers, industries, and watersheds based on pollutant mass and toxicity, and presents top ten lists to help you determine which discharges are important, which facilities and industries are producing these discharges, and which watersheds are impacted.

The tool also includes wastewater pollutant discharge data from EPA's Toxics Release Inventory (TRI) for the years 2007 through 2010. Users can search TRI data to find the facilities with the largest pollutant discharges to surface waters or sewage treatment plants. Users can also compare the DMR data search results against TRI data search results and vice versa. The tool clearly labels the source of data when displaying search results but does not mix TRI or DMR data when calculating pollutant discharges.

Users of the database can sort data by geographic location, industry, year, and pollutant. Information is displayed in graphs and maps. The DMR tool also ranks pollutant mass and toxicity in "top ten" lists, highlighting the most important pollutants, the facilities or sectors with the worst exceedance records, and the watersheds most affected. The public can then link to enforcement information for those facilities that have violated EPA limits.

The tool is an efficient and accessible means for individuals to track the health their local watersheds. It should be noted, however, that the tool is not particularly useful with respect to Confined Animal Feeding Operations (CAFOs). While CAFOs are point sources, because so many large CAFOs claim not to discharge they are not included in the tool.

(Organic Seed Finder). AOSCA will house a database for organic seed. **Coordinating a Pesticide Residue Sampling Program:** excellent presentation by Nate Lewis, Coordinator of Organic Material Registration, WSDA. He focused mostly on what certifiers need to do with sample results. **Sharing our Perspectives** - we had the opportunity to submit questions followed by small group discussion and then report back with action points for ACA. I facilitated the group with inspection questions. Our group urged ACA to write a letter to NOP asking them to post the NOSB Guidance on Inspector Criteria and Unannounced Inspections. **ACA Annual Meeting:** IOIA got a nice mention for being the only new supporting member that

joined in the past year. We discussed the idea for an Inspections Working Group within ACA.

**Trainings, from page 3** organic operation, plus one-half day for testing. Additionally and for the first time, this partnership will offer concurrent 3-day trainings for audiences other than inspectors. These Crop and Processing trainings are geared for certification agency staff, regulators, industry consultants, and educators. For more information about these trainings as they are developed, including date and location, please see [www.cog.ca](http://www.cog.ca) or [www.ioia.net](http://www.ioia.net). Watch upcoming IOIA newsletters and [www.ioia.net](http://www.ioia.net) for details as these and other trainings develop.

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## IOIA Expands Training Institute Webinars

By Jonda Crosby

Over the next year IOIA will offer an expanded opportunity for inspectors to participate in specific-issue area trainings via webinars. The webinar training option will greatly enhance IOIA membership service, improve accessibility to consistent and inexpensive training, and increase the capacity for inspector-certifier dialogue. Our goal is to develop trainings so that all inspector members can access training materials conveniently without the added expense of travel. The webinar training option facilitates IOIA's focus on continuing education for experienced inspectors. Webinars are being developed to meet the needs of inspectors at all levels of expertise. Webinar offerings will include a range of topics that have been recommended by our inspector members to build their capacity and further understanding of organic inspection topics and procedures. Certifiers also assisted in identifying these topics. The webinars are suitable for a wide range of additional audiences, including initial and final reviewers and other certification agency staff.

Webinars will typically be offered quarterly so more participants will benefit from the trainings during times of the year that work best for them. IOIA will continue to work with leading organic educators and partner with other organizations to provide the highest quality learning experience for participants. The webinar courses typically include pre-course reading and post-assessment as well as in-class discussion and exercises, with ample opportunity for Q & A.

Evaluations from our first year of webinars have been extremely helpful in improving the trainings, supporting the participants and trainers, and for adding new kinds of training to the

schedule in 2012. We will continue to collect evaluations from each training and welcome feedback at any time regarding the courses. A recent participant stated "Thank you all for your time and sharing your knowledge. I truly enjoyed the (webinar) class, I will be able to use what I learned immediately, and look forward to the next opportunity to participate."

To register for a webinar, see <http://ioiaregistration.ganconference.com/>

**Webinar Training Schedule Courses planned for 2012.** *Additional courses are under development.*

### Introductory Courses

**USDA NOP Organic Crop Standards:** This webinar covers the organic crop regulations, including the National List of allowed synthetics and prohibited naturals, in detail with a briefer look at labeling, inspection, and certification requirements. Participants will gain skill in navigating the regulations.

**USDA NOP Organic Livestock Standards:** This webinar covers the organic livestock regulations in detail, covers the National List of allowed synthetics and prohibited natural materials briefly, and looks at labeling requirements for livestock products. Participants will gain skill in navigating the regulations and applying standards to different species. Organic Crop Standards is strongly recommended as a pre-requisite.

**USDA NOP Processing Standards:** This webinar covers the organic handling (processing) regulations, including the National List of allowed synthetics and natural materials and ingredients and labeling with a briefer look at inspection and certification

requirements. Participants will gain skill in navigating the regulations.

### Intermediate Courses

**IOIA/OMRI Crop Inputs:** This webinar will cover what inspectors should look for during farm inspections. Participants will gain skill in understanding input assessment and in navigating the resources available on the OMRI website.

**IOIA/OMRI Livestock Inputs:** This webinar will cover what livestock inspectors should look for during inspections and how OMRI reviews livestock materials, including feed ingredients and health care materials. Participants will gain skill in understanding input assessment and in navigating the resources available on the OMRI website.

**Verifying Compliance to the USDA NOP Pasture Rule:** This webinar is geared for working organic inspectors and reviewers to assess compliance with the USDA National Program Final Pasture Rule. The new rule, implemented June 17, 2010, was the largest amendment to the organic regulations in history. It amended living conditions; management of pasture, soil, and water; and requirements for Dry Matter Intake from pasture. Ruminant livestock producers were required to be fully compliant by June 17, 2011. The course includes practice on calculating DMI and real-life application.

**Processing Audit Trail/Balance:** This webinar will cover recordkeeping requirements for processors and is a must for all processing inspectors. Participants will gain skill in recognizing common problems encountered in inspection, also in completing and reporting intermediate level traceability tests and mass balance audits.

[See **Webinars**, page 22]

## Canada and US move toward full equivalency

Canada and the United States in late January 2012 took another step toward full equivalency of their organic standards with Canada's recognition of U.S. organic pasture regulations as equivalent to its standards for organic ruminant stocking rates. As a result, a "critical variance" no longer applies to ruminant animals or ruminant products traded under the U.S./Canada Organic Equivalency Arrangement. This change reflects efforts by both countries to harmonize standards and move toward full equivalence. **Products from non-ruminant animals, such as poultry and swine, must still verify that they meet the Canadian stocking rates for those species.**

In the U.S., ruminants must receive 30 percent of their feed during the grazing season from organic pasture and must be out on pasture at least 120 days per year. In addition to these pasture requirements, operations must provide adequate space and living conditions which accommodate the natural behavior of livestock. This includes year-round access to the outdoors.

On June 17, 2009, the USDA and Canada Food Inspection Agency entered into an Equivalence Arrangement. This means that as long as the critical variances and other terms of the arrangement are met, organic operations certified to the USDA organic or Canada Organic Regime standards may be labeled, represented, and sold as organic in both countries.

The updated critical variances in the trade arrangement now include: Canada Requirements. To be sold, labeled, or represented as organic in Canada, USDA organic products must

## Guelph Training Recap

**Kelly Monaghan** and **Garry Lean**, IOIA trainers, addressed the second Guelph advanced training with updates to the COR Standard and Permitted Substances Lists on January 26. **Ken Commins**, of International Organic Accreditation Services (IOAS) gave an excellent presentation on 'Identifying Organic Fraud'. His travel expenses were supported by generous donations from CSI and Ecocert Canada, IOIA supporting certification agency members. **Dan Scheele**, inspector member from Ontario, spoke on the specific issues of inspecting hogs to the COR. A certifier panel of **Jennifer Scott** (CSI); **Simon Jacques** (Ecocert Canada); and **Dave Lockman** (Pro-Cert) provided valuable opportunity for inspector-certifier dialogue and Q&A. **Bill Barkley**, IOIA Canadian Committee Chair, moderated the one-day event and did much of the advance planning and logistical support. He ended the day by facilitating a discussion of inspector issues. A hefty pre-course assignment and pre-course reading assignment was prepared by Lean and Monaghan. Speakers, trainers, and certifiers swelled the group of 13 participants to more than 20 total for the day. A similar first training occurred one year earlier, also at the 2011 Guelph Conference. IOIA hopes to increase the number of similar continuing education opportunities for inspectors that occur in conjunction with major organic events. Other IOIA members who volunteered to help staff the booth included **Tom Cassan** and **Maureen Bostock**, as well as trainers already mentioned.



meet the following additional requirements:

- Agricultural products produced with the use of sodium nitrate shall not be sold or marketed as organic in Canada.
- Agricultural products produced by hydroponic or aeroponic production methods shall not be sold or marketed as organic in Canada
- Agricultural products derived from animals (with the exception of ruminants) must be produced according to livestock stocking rates as set out in CAN /CGSB32.310-2006 (amended October 2008).

United States Requirements. To be sold, labeled, or represented as

organic in the United States, Canadian organic agricultural products derived from animals must be produced without antibiotic treatment.

## Quebec adopts Canadian Standards

On Jan. 1, Quebec adopted the federal organic standards. This means the Quebec Organic Reference Standards have now been shelved, and products certified according to these standards will be accepted in Quebec only until the end of 2012. Quebec's decision to enforce mandatory compliance with the federal standards for organic agriculture within the province is an important step towards wider harmonization of provincial organic standards with the federal standards.



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## December Basic Crop Training in Northern California

By Lisa Laplace

An unseasonably warm week welcomed the 2011 IOIA Crop Inspector training to Napa Valley California. The classroom portion of training was located at the LEEDS certified Doubletree Inn in American Canyon and the mock inspections at nearby CCOF certified vineyards. Attendees included ACA representatives, certified farmers, experienced inspectors, and enthusiastic inspectors-to-be. Garry Lean, Jonda Crosby, Margaret Scoles, and Margaret Dickson facilitated sessions that were challenging and informative. The highlight of the training was the onsite inspections. This was a wonderful opportunity to see the operator's responses to the specific issues facing these local vineyards. One of the challenges for the vineyard my group visited was managing excess nutrients in their extremely fertile soils. This intricate balance of nutrients produced quality grapes that were reflected in the wines we were graciously provided during our private tasting.



Inspectors following an audit trail for Frog's Leap Vineyard  
Demian Bartholomew, Jim Fraser, Elizabeth Church, Michelle  
Lawson, Terrie Gilardoni, Dale Krystosek.  
Photo by Elizabeth Church

I work as a staff inspector for MOCA (Marin Organic Certified Agriculture) and participated in this training to deepen my understanding of the NOP and crop inspection procedures. Our instructors were knowledgeable, current, and fun. The intensive homework and quizzes pushed me to a new level of understanding helping me to focus on my weak areas. These classroom sessions impressed objectivity, accuracy, and ethics. The benefits of this training go well beyond its academics. It has not only enriched my knowledge of organic crop inspection but my life as well. The network of new acquaintances has already proven to be invaluable. I am planning on attending more IOIA Trainings in the future. As so clearly stated by attendee Rose Smith, "This course has been excellent! Even coming from an ACA it has been a HUGE help with understanding the NOP better...this class has put so many parts together for me in my mind!"

## Another Basic Training Perspective

By Demian Bartholomew

Completing the Basic Crop Inspection Training with IOIA in Napa this past December was an incredibly informative experience. An amazing group of folks from various backgrounds joined together with the mutual hope of becoming qualified to inspect organic farm operations. Instructors Gary Lean and Jonda Crosby greatly inspired me to pursue working in the field of Organic Crop Inspection, offering a vast wealth of knowledge sourced from extensive experience as inspectors and farmers. The amazing diversity of backgrounds in the group included a few working crop inspectors, as well as farmers, a pest management consultant, and three employees of the certifying agency CCOF (California Certified Organic Farmers). After soaking up three full days of information concerning the role of the organic crop Inspector, NOP standards, and writing an Inspection Report, the group split into three to conduct mock inspections at separate vineyards.



Photo by Elizabeth Church



My group was fortunate to visit Frog's Leap Winery, one of the first organic vineyards in Napa, where they proudly embrace ecologically sound practices such as dry-farming, cover cropping and frequent petiole samples to evaluate soil fertility. The field trip brought to light several challenges the Napa grape industry faces. Over-fertilization and irrigation, along with lack of cover cropping have caused a trend of severe soil degradation and shortened life span of vineyards. A focus on soil health, maintained by a dry-farm system such as the one used at Frog's Leap, not only improves the quality and yields of grapes, but also decreases the use of off-farm inputs and offers a myriad of benefits to the wildlife in adjoining ecosystems and watersheds. In addition, careful monitoring of soil fertility, pest management, and a well-organized recordkeeping system prove paramount in contributing to organic farmer's successes in passing farm inspections and maintaining their Organic Certification.



Though challenging and time-consuming, writing the Inspection Report was invaluable in getting a taste of what it might be like working as an Organic Crop Inspector. The final exam on the last day felt like a breeze after studying the material in such depth all week with equally excited future inspectors under the guidance of such positive instructors. I left the training feeling very excited about the possibility of pursuing Organic Crop Inspection as a career. Immediately after, I lined up a shadow inspection for February in Santa Cruz, California (my home), and have also been looking into shadowing crop inspections in Central America and Switzerland (my motherland). Many thanks to IOIA!

## Grower Benefits from Basic Crop Training

By Elizabeth Church

Having worked in organic agriculture for several years, I was interested in organic policy, organic standards and what makes the paper trail such a challenge for organic growers. My perspective coming into the IOIA crop course was that of the grower and wanting to connect the relationship between certifier and grower. My expectations for the IOIA course were high and they were fulfilled at every step. The first 3 days were intensive and my evenings were filled with reviewing the material and getting a good night's sleep. The knowledge of the instructors was always expansive and accurate, yet they appreciated input from the students and made us all feel welcome and appreciated. A highlight of the course was the camaraderie of the students – we bonded with each other after each session, sharing experiences, making contacts, and giving advice.

Overall I feel so thankful to IOIA for putting on these trainings, for moving the integrity of the organic inspector forward and upward.

## California Process Training

By Stanley Edwards

Ice cream, wine or beer? Students did not have it rough at the IOIA Basic Processor training in Napa California. First we were in a LEED Certified Hilton Brands hotel, then the on site restaurant was serving delicious seasonal food, the bar was well stocked, the hot tub was nestled among the natural landscaping and duck pond. The well-lit, spacious classroom had just about the biggest screen I've ever had the opportunity to view a USDA logo on! Other than that, it was a usual training with a mix of certifier staff, independent inspectors and curious, hard working and ambitious individuals on a quest for knowledge.





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## California Advanced Training

by Pam Sullivan

Two IOIA Advanced Training sessions were held at the Doubletree Hotel & Spa in American Canyon, CA. from December 6 – 7, 2011. The first day focused on Pesticides and Residue Sampling Training, a pertinent and timely topic in light of the NOP's proposed requirement that certifying agencies institute pesticide residue testing of organically produced agricultural products on at least 5% of the operations they certify. Wil Sumner and Brandon Nauman of Scientific Certification Systems (SCS), based in Emeryville, CA., conducted the full-day training. SCS is a global leader in third-party certification, and offers auditing, testing and standards development for environmental, sustainability and product quality claims. Participants for the day received a separate certificate for IOIA/SCS Residue Sampling Training.



**Wil Sumner and Brandon Nauman of Scientific Certification Systems**

The morning was devoted to a power point presentation which began with an introduction to the various classifications of pesticides and their formulations. The dynamics of pesticide residues were discussed, especially in light of drift contamination, which is the main cause of contamination of organic crops. Factors that determine what makes an adequate buffer zone were outlined, as well as the physics involved in spray techniques, droplet size, formulations, and translocation. Sampling patterns were explained; these are central to ensuring that representative collection occurs based on specific production practices. The US Regulatory framework was also covered with an emphasis on regulations specific to the NOP and the list of prohibited pesticides to be targeted for NOP residue testing.



A discussion of agricultural field sampling techniques formed the heart of the training, and provided specific, practical information, essential for any inspector who will be responsible for on-site sample collection. Field sampling methods and patterns were detailed in an excellent power point presentation. Wil demonstrated the equipment, sampling methods, and labeling protocols involved in warehouse sample collection from boxes of bulk produce. He also emphasized the regulatory aspects of sampling, including a discussion of FDA protocols for documentation and maintaining chain of custody.

Advanced Training Group at Benziger Family Winery on December 8. Jennifer Schomp, third from right, front row, presented Non-GMO Project Product Verification Program Training for FoodChain Global Advisors, technical administrator for the Non-GMO Project with eight participants.

After lunch, the group traveled to ZD Winery in Napa for a hands-on, in-field demonstration of



proper collection techniques. Wil showed the proper equipment and techniques for taking soil samples, and how to select petiole and leaf samples, as well as grape clusters and olives. The various methods of field sampling patterns were reviewed, as well as the handling logistics involved once samples have been collected.

After the field demonstration, the group adjourned to the ZD tasting room, where Brandon finished the day with a short presentation on IPM. There was time for a glass of wine and numerous questions. The consensus among the participants was that this had been a valuable introduction to a very complex subject. We all gained practical knowledge that will be helpful in our role as inspectors to determine the what, where, whys and hows of sampling.



Elizabeth Whitlow, CCOF, learns about biodynamic wine production at Benziger Family Winery.

The following day, Pam Sullivan presented a training on Advanced Winery Inspections. Pam has inspected more than 50 wineries for CCOF, who co-sponsored the session. The morning began with an overview of winemaking, differentiating between red and white wines. Slides were shown to illustrate typical winery equipment, and basic winemaking vocabulary was reviewed. A winery inspection is not so very different from other processing inspections, so the organic control points (OCPs) specific or unique to wineries formed the main focus of the presentation. OCPs for receiving, crush, ingredients, storage, transport, topping, labeling, dealcoholization, and bottling were each reviewed in detail. The role of sulfur dioxide was discussed as well as the differences between the NOP, Canadian and European standards insofar as sulfur dioxide use and labeling is concerned. The participants were provided with sample audit trail documents, and these were decoded as a group exercise. The importance of inspecting to the OSP, with special attention to winemakers' record keeping, was emphasized and the shortcomings of the various sample audit documents were analyzed.

After lunch, the group drove to the Benziger Family Winery in Glen Ellen, CA., a very beautiful certified organic and biodynamic vineyard and winery operation. Our tour began in the impeccably maintained vineyards which sprawl over acres of rolling hills. After a brief discussion of biodynamic farming methods, and a stop at the composting operation, we arrived at the crush pad for a tour of the winery and cellars. Here we received a very informative and entertaining explanation of winemaking from receiving through bottling. Participants had the opportunity to ask questions and then sample an array of Benziger wines in their attractive tasting room.

***Learning Opportunity for the future: Watch for Organic Wine Inspection Webinar by Pam Sullivan.***

### ***How-To's of Inspection Business Session Well-Attended***

**Stephen V. Bird**, IOIA Inspector Member and past BOD member, has authored a book called ***Successful Organic Inspector: The 3 Secrets to Create the Career and Lifestyle You Want.*** He provided a free session for IOIA on December 6 during the IOIA trainings in California on the topic of the business of being an inspector as a promotion for his book. The session was well-attended by both novice and experienced inspectors. He also plans to do training on the topic. ***Next issue -- a book review and interview with the author.***

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# Taking the Mystery Out of Boiler Additives

By Tony Fleming and Joe Montecalvo, PhD

*1-hydroxyethylidene-1,1-diphosphonic acid. Diethylaminoethanol. Marathon 84. 2-acrylamido-2-methyl-propane-sulfonic acid copolymer.*

Process inspectors are trained to look for boiler additives that carryover onto products via steam, such as “volatile amines”. But what exactly does that mean? Making sense of the boiler additives used at a processing facility—or even obtaining the actual chemical names—can be a frustrating experience for the chemistry-challenged. Of the boiler additives listed above, for example, two are acceptable for organic processing, not because they lack toxicity, but because their chemical properties prevent them from being transmitted via steam and contacting food—note that the sentence says “acceptable” and not “allowed” (as in 205.605). Another one is prohibited from having any direct contact during organic processing. Still another is allowed in a very limited instance. One of them is listed in a way that makes it impossible to tell its status without prior knowledge. And all of them can be removed from the steam with the use of an activated carbon filter, right?

Beyond the challenges of determining what additives may be present and how they behave in the boiler system, the inspector also has to be on top of the processes being inspected, in order to recognize the myriad ways boiler

steam can contact equipment, packaging, and, especially, ingredients and products, at which point it is known as *culinary steam*. In this article, we attempt to take the mystery out of boilers and boiler additives by outlining the major classes of boiler additives in common use at food processing facilities, what they are used for, and how to recognize them. We also present a simple decision tree that should help to streamline the boiler aspect of a processing inspection. But first, we begin with a brief review of how boilers work and why they often require chemical treatment.

## Boiler Systems

The role of a boiler system is to produce hot water and/or steam and transmit them to various points in the plant where they are used in processing and cleaning. Issues affecting both the performance of the boiler system and the quality of the steam or water produced can arise at any point in the system. Most issues are ultimately related to the chemical properties of the feedwater: alkalinity, pH, dissolved oxygen, and dissolved minerals such as calcium, magnesium, and iron are the feedwater components most problematic for boiler systems. In addition, heating the water changes the stability of dissolved minerals, alters the pH, and increases the reactivity of dissolved oxygen, all of which negatively affect the system. Finally, the phase change from steam to condensate that occurs in steam lines, condensate traps, and at the point of use promotes

acidification and oxidation, with attendant corrosion and mineral deposits.

All of these chemical processes can cause costly problems if left unchecked, such as greatly reduced boiler efficiency, higher energy use, scale and rust buildup on steam lines and processing equipment (with greater potential for contamination of products), and severe corrosion leading to premature equipment failure. These issues are typically dealt with by conditioning the feedwater via several kinds of mechanical and chemical methods (e.g., de-aeration, filtering, clarifying, ion exchange), and by employing a variety of chemical additives inside the boiler system itself to address specific problems. An important consideration for inspectors is that feedwater conditioning should be a key part of the boiler program at facilities with water-quality challenges, because it can significantly reduce, or even completely eliminate, the need for employing problematic kinds of boiler additives.

## Classes of Boiler Additives and What They Do

Boiler additives fall into several distinct chemical classes, each of which is typically suited to deal with a particular type of problem in boiler systems. Thinking about boiler additives in terms of the issues they are intended to address also makes sense from an organic certification perspective, much like a process

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### Water Quality and Boiler Additives at Processing Inspections: Two Sides of the Same Coin

Exactly which of these undesirable chemical processes are present in a particular boiler system, and the methods used to mitigate them, depend to a large extent on the quality of the feedwater. This relationship suggests the importance of considering the water quality component of a processing inspection in conjunction with the boiler system. If the water supply is derived from groundwater, for example (i.e., a municipal or private well), the boiler system challenges are likely to revolve around controlling alkalinity and hardness, whereas surface water supplies tend to have low alkalinity and hardness, but higher acidity and levels of dissolved oxygen. A review of water quality data at the inspection can be very helpful in understanding the facility's boiler program, and perhaps identify inconsistencies between the two. Typical sources of comprehensive water-quality data include consumer confidence reports (for public water supplies) and outside testing programs (for private wells), often performed by the boiler service company specifically for that purpose. A broader discussion of water quality issues is beyond the scope of this article, but can be found in the TAP area of the members-only section of the IOIA website.



inspector looks at the hierarchy of pest management practices in a facility. As it turns out, only two widely-used classes of additives exhibit behavior that is of direct concern for culinary steam systems in organic handling facilities. The most important chemical characteristic for purposes of organic integrity is not the toxicity per se, but whether or not the compound enters the vapor phase and is transmitted with the steam. This is determined by a property known as the distribution ratio, which is a temperature-dependent expression of how much of the compound resides in the vapor phase (steam) versus the liquid phase (hot water). Compounds with a distribution ratio greater than zero are said to be volatile. A wide range exists, however, with some boiler chemicals having ratios as high as 10 (highly volatile), while others have ratios approaching zero (low volatility). Below, we highlight the commonly-used classes of boiler additives in terms of the three most common issue(s) they are intended to address.

**Dissolved Oxygen:** One of the most troublesome components in boiler systems is dissolved oxygen (DO). When boiler water is heated, DO becomes increasingly reactive and can cause severe corrosion of metal parts throughout the system if not controlled. It is very difficult to completely prevent DO from entering the boiler system: some invariably gets past the de-aerator (if present), while minute leaks at steam fittings and exposure to air in the condensate system allow additional oxygen to enter the system, where it is often returned to the boiler along with the condensate.

Boiler additives are designed to address this issue in two different ways. The first is by chemically eliminating the oxygen through the use of inorganic compounds known as **oxygen scavengers** (sometimes called reducing agents), which readily accept

oxygen into their chemical structure by transforming into soluble salts. Sodium sulfite (or sulfide, or sulfonate) is the most widely used oxygen scavenger because it is cheap, effective, and of comparatively low toxicity (though not without hazard). As a rule, oxygen scavengers do not enter the vapor phase, and therefore pose no risk of being transmitted to products via the steam.

The other type of additive used to manage DO involves a completely different approach, namely creating a film on the surfaces of steam lines and other equipment. Such **filming amines** are formulated with emulsifiers and dispersants to form a protective barrier that inhibits corrosion from both oxygen and carbonic acid (our next topic). By design, they are highly volatile in order to carry over in the steam and effectively coat steam lines, and they are most often found in older facilities, which tend to have less modern boiler systems with more corrosion-prone components. Currently, octadecylamine is the only FDA-approved filming amine; it is limited to 3 ppm in steam, and prohibited in dairy plants. In organic handling situations, it is allowed only in steam used for packaging

sterilization.

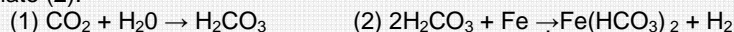
**Carbonic Acid:** The other major cause of corrosion in boiler feedwater is carbon dioxide (CO<sub>2</sub>), which readily dissolves in water to form carbonic acid. This reaction accelerates at higher temperatures, such as those found in a boiler system, resulting in enhanced rates of corrosion. The primary source of CO<sub>2</sub> in feedwater is carbonate minerals, such as calcium carbonate (limestone) and calcium-magnesium carbonate (dolomite), both of which occur abundantly in many aquifers and are major components of hardness. These minerals are readily soluble in groundwater and produce both carbonate and bicarbonate, which are the key components of alkalinity and the main chemical precursors to CO<sub>2</sub> and carbonic acid. While mechanical de-aeration does remove most dissolved CO<sub>2</sub>, it has no effect on carbonate or bicarbonate; conditioning the feedwater via ion exchange (e.g., softening or reverse osmosis) is effective at reducing alkalinity, however.

Boiler additives employed to combat carbonic acid attack have two primary modes of operation. As their name implies, [see **Boiler**, p 14]

### Chemistry 101: Boiler System Corrosion and Treatment

Dissolved oxygen causes steel to corrode into iron oxides and hydroxides (rust) according to the following 3 equations: (1)  $Fe + 2H_2O \rightarrow Fe(OH)_2 + H_2$   
 (2)  $Fe(OH)_2 \rightarrow Fe^{++} + 2OH^- \rightarrow Fe_2O_3 + 3H_2O$  (3)  $4Fe + 6H_2O + 3O_2 \rightarrow Fe(OH)$

Another mechanism of corrosion results when carbon dioxide dissolves in water to form carbonic acid (1). Carbonic acid then reacts with steel to form ferrous bicarbonate (2):



Boiler additives used to treat corrosion work by interrupting these chemical processes. For example, oxygen scavengers, such as sodium sulfite, accept oxygen into their structure, thereby forming non-scaling sodium sulfate:  $2Na_2SO_3 + O_2 \rightarrow 2Na_2SO_4$

Neutralizing and filming amines both neutralize acid (H<sup>+</sup>) created by the solution of carbon dioxide in the condensate:  $R-NH_2 + H_2CO_3 \rightarrow R-NH_3^+ + HCO_3^-$   
 The former are a systemic treatment that creates a condensate pH of 8.5 to 9.0, whereas the latter form a protective barrier that coats susceptible surfaces.

For a more comprehensive chemical treatment of this topic (highly recommended), see **Mechanisms of Boiler and Steam Condensate Corrosion**, posted on the IOIA website.

## Boiler, from page 13

**neutralizing amines** are high-pH chemicals that react with carbonic acid to neutralize acidity and maintain a strongly alkaline pH in the boiler system. Morpholine, cyclohexylamine, diethylamino ethanol, and hydrazine are all in this class, and all are readily transmitted in the vapor phase. Together with the aforementioned octadecylamine, they comprise the so-called “volatile amines” inspectors should be on the lookout for. The second mode of action against acid attack uses a filming agent to coat susceptible surfaces with a protective barrier. The **filming amine** octadecylamine, and acrylamides are the primary additives of this type. The latter belong to the class of additives broadly referred to as **polymers** (resins), which are not volatile except for trisodium nitrilotriacetate, a rarely used amine substitute.

**Mineral Deposits:** Mineral deposits wreak havoc by reducing boiler efficiency, raising energy costs, and coating the surfaces or plugging orifices of processing equipment (with attendant functional and sanitation challenges). Referred to generically as “scale” or “rust”, these deposits include several kinds of minerals with different sources and chemical properties. Calcium-magnesium carbonates typically form in systems fed by groundwater, which often comes from limestone- and dolomite-bearing formations. Iron oxides (rust) can occur both as a result of corrosion, which liberates iron from steel surfaces, and naturally: some groundwater sources are high in dissolved (reduced) iron, which becomes insoluble in the presence of oxygen inside the boiler and precipitates as oxides or hydroxides. Silicates are less common but sometimes occur in acidic feedwater, and subsequently become unstable and precipitate as scale in the alkaline environment inside a boiler system.

Feedwater conditioning methods available to reduce the mineral content include ion exchange, and clarifying with quick lime (for calcium and magnesium) or soda ash (for silicates). A variety of additives are also used, most of which react with the dissolved phase of the mineral to either keep it in solution or to cause it to precipitate out in a soft and easily removable form.

**Phosphates**, for example (mono-, di-, and tri-sodium phosphate; sodium polyphosphate) react with calcium and magnesium to form soft rock phosphate, while **chelating agents** (ethylenediamine tetra-acetic acid, or EDTA, is a common example) enhance the solubility of minerals and prevent them from precipitating on surfaces. **Polymers** work similarly to chelating agents and are among the best methods for controlling both iron and silicate deposits. None of these three classes of additives are volatile, except for the polymer, trisodium nitrilotriacetate.

### Tips for Effective Boiler Additive Inspections

The first question that must be answered is whether or not there is direct contact between boiler steam and any product or food-contact surface, including during sanitation. The answer to this question should be clear from the Organic Handling Plan, but it must be verified at the inspection, both by operator interview and by direct observation of the process flow. We have encountered situations where the OHP is wrong! Pay particular attention to any schematic facility diagrams and flow charts. Be clear about whether steam-based processes use indirect heating (e.g., plate pasteurizer, double-wall kettle, tube-in-shell) or direct heating (e.g., sparging, capping-lidding operations, blanching, peeling, and extrusion). Beyond these common processes, direct steam may be used in a number of less obvious places: scalding (chicken processing), tempering (grain processing), steam

### A Simple Decision Tree for Inspecting Boiler Systems:

- 1) Is a boiler system present at the facility? *If the answer to any of the first three questions is “NO”, there are no compliance issues related to boiler additives. If it is “YES”, continue on.*
- 2) Does steam have direct contact with ingredients, products, packaging, or food-contact surfaces at any point during processing or sanitation?
- 3) What boiler additives are used, and are any of them volatile?
- 4) Does the operation utilize an “integrated boiler management” program in which alternatives to volatile boiler additives (e.g., feedwater conditioning, excellent system maintenance, and non-volatile additives) are or have been tried first? *If yes, continue to #5. If no, or the boiler program is not documented, a minor noncompliance may exist. Continue to #5.*
- 5) Is the steam used in organic processing limited to packaging sterilization? *If yes, go to question #6. If no, jump to question #7.*
- 6) Are cyclohexylamine, diethylaminoethanol, and/or octadecylamine the only volatile additives in use, and is the concentration measured in the steam within FDA limits? *If yes, the operation complies with the NOP. If no, go to the next question.*
- 7) Are measures in place to prevent contact of prohibited boiler additives with organic food, and are they documented to be 100% effective? *If the answer to either of these is no, a major noncompliance exists.*

barriers in pasteurizers, and sterilization of transfer carts and other ancillary vessels are examples.

Second, if direct contact does occur, then you must identify the chemical names of all boiler additives used, not just the trade names. This can't be emphasized enough! This information should also be clear from the OHP, but we have seen many cases where the OHP lists only the trade name

## Regulation of Volatile Boiler Additives: FDA vs NOP

The seven volatile boiler additives currently regulated by the FDA for use in food processing plants are cyclohexylamine, octadecyclamine, diethylamino ethanol, hydrazine, morpholine, ammonium hydroxide, and trisodium nitrilotriacetate. In practice, ammonium hydroxide is seldom if ever used in food plants because it can create odor issues. In all cases, the maximum concentration allowed in culinary steam is regulated. The first five are "volatile amines", the last two are not. This is why keying on the phrases "amine", "amino", or just plain "-ine" is helpful, but not infallible, for identifying additives that transmit through the steam. The first three are allowed at 205.605 for package sterilization only (as limited by FDA); otherwise, none are allowed to have any contact with organic food. To learn how and which boiler additives are regulated by the FDA, visit 21 CFR 173.310.

(e.g., "Marathon 84"), and if you don't obtain the chemical name, you would have no way of recognizing this additive as morpholine (prohibited). Moreover, the boiler additives used at a given facility can and do change over time, and those changes may not be communicated between the boiler service staff (usually an outside company) and the individual who updates the OHP. Thus, don't rely solely on the OHP: always visually observe the boiler room and compare both the trade and chemical names of the additives listed on the containers to the OHP and any MSDS provided with it. Note that MSDS for boiler additives must be maintained on site.

Third, there is a strong case to be made that an organic handler should be using an "integrated boiler management" program to reduce or eliminate the need for volatile additives. Look for evidence that the facility has a viable boiler system maintenance program that includes regular feedwater and condensate

testing and inspection of system components. How often are water-quality tests performed on the plant's water supply, and are the results consistent with the boiler treatments used? Is there evidence that alternatives to volatile additives are or have been attempted, such as appropriate feedwater conditioning methods and non-volatile additives? Oxygen scavengers such as sodium sulfite, and acrylamides such as 2-acrylamido-2-methyl-propane-sulfonic acid copolymer are often excellent alternatives to volatile additives.

Some operations that use volatile boiler additives in culinary steam may shut off the additive feed at some predetermined time before organic handling begins in an effort to prevent contact with organic products. This raises a host of difficult questions. How is the appropriate shut-off interval determined, and are the results repeatable (as in any good science experiment)? Boiler systems are complex systems with many variables that affect the "half life" of additives. For example, was the condensate test done on a Monday, after the boiler was off or running on low power for the weekend? Was more than one test performed? Perhaps most importantly, what is the sensitivity of the test method that was used? Testing of condensate for volatile additives is a fairly simple operation using colorimetric kits from familiar suppliers (e.g., Hach, Ecolab), but just like quat test kits, the sensitivity varies from kit to kit (or it may be geared to FDA maximum limits) and may not definitively indicate "zero" residue is present in the condensate. If this is the situation, you must ask a lot of questions and request documentation. In some cases it may not be possible to conclusively verify that shutting off the additives is a scientifically sound approach to compliance. Such problematic operations may be better off using a

portable steam generator during organic handling, an elegant and comparatively inexpensive solution that requires no additives.

Finally, keep in mind that, despite some claims to the contrary, none of the steam traps and filters in use today in processing plants are capable of removing volatile boiler additives. This includes activated carbon filters, culinary filters, condensate traps, and any other kind of filter!

## Annual Report, from p 19

Eric Feutz, Treasurer, is the senior member of the BOD and ably chairs the Finance Committee. During 2011, he convened the Finance Committee to plan the audit and draft the 2012 budget. The BOD met in person at the AGM, 11 times via conference calls, and at the 3-day retreat. BOD minute highlights are published in each newsletter. Full minutes are available on the "Inspectors Only" section of the website.

### Staff:

Margaret Scoles continues as Executive Director. IOIA benefits from a staff of highly skilled and dedicated individuals. In addition to adding the Training Services Director full-time, IOIA transitioned from a part-time to full-time Office Manager.

- ▶ Danalynne Miller, Office Manager (thank you to Renee Higgins, who left in 2011 as the position was expanded)
- ▶ Jonda Crosby, Training Services Director
- ▶ Sacha Draine, International Training Manager (.6 FTE)
- ▶ Kathy Bowers, U.S. Training Services (.6 FTE)
- ▶ Lynell Denson, Administrative Assistant (.4 FTE)
- ▶ Diane Cooner is contract Newsletter Editor, Website Manager, and moderator of the IOIA Forums.

**Your help as volunteers and committee members is necessary and greatly appreciated!**

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## Food Justice Certified: Domestic Fair Trade Label from the Agricultural Justice Project

By Elizabeth Henderson

Fair prices to farmers that cover their costs of production, the protection of children from hazardous farm work, and living wages plus respectful treatment for all food system workers are the core guarantees of the new **Food Justice Certified** label. After a dozen years in development, the **Agricultural Justice Project** is launching this program across North America.

The Farmer Direct Coop, a marketing cooperative of 70 grain farms in Saskatchewan, is the first group of farmers to earn the Food Justice label. Hoch Orchards, Featherstone Farm, the Bluff Country Coop, Gathering Together Farm, and Spring Hill Farm (two of the Organically Grown Company's Ladybug brand farms), and the Midwest Organic Services Association in the Upper Mid-West have also met the high bar for AJP certification.

In announcing the official launch of this domestic fair trade program, Michael Sligh, of the Agricultural Justice Project Management Committee, declared, "Just as the certified organic label took years and input from thousands of individuals to become the gold standard for how to grow and produce our food, the creation of **Food Justice Certified** has involved a broad base of committed individuals and groups from all sectors of the food system. The process has been transparent and rigorous and aims to set a high bar for integrity and fair relations among the people who grow, process and sell our food. A truly digestible food product is one in which farmers, farm workers and those who sell the fruits of this labor all work collaboratively."

The Food Justice label is available both to farms and other food businesses from seed to table. It can be used as an additional claim along with certified organic or as a stand-alone label for advanced integrated pest management farms. In New York State over the next year, farms will be piloting a pledge version for small-scale direct market farms with limited hired labor.

Currently, Quality Certification Services ([qcsinfo.org](http://qcsinfo.org)), Midwest Organic Services Association ([mosa.org](http://mosa.org)) and Oregon Tilth ([otco.org](http://otco.org)) offer AJP Certification. This label is distinguished by a verification process that includes the participation of farm worker organizations. CATA/Farmworker Support Committee ([catafarmworkers.org](http://catafarmworkers.org)), Centro Campesino ([centrocampesino.net](http://centrocampesino.net)), the Farm workers Association of Florida ([floridafarmworkers.org](http://floridafarmworkers.org)), Community to Community ([foodjustice.org](http://foodjustice.org)), Pioneros et Campesinos Unidos del Noroeste ([pcun.org](http://pcun.org)) and the Agriculture Workers Alliance in Canada ([awa-ata.ca](http://awa-ata.ca)) have been through trainings to provide the worker inspection component of this certification. In cooperation with IOIA, AJP will be offering training to inspectors who wish to qualify to verify this new certification.

**There will be an AJP training in Santa Cruz, California, March 27-29, 2012. If you would like to register to attend and for information and questions about the standards, trainings and technical assistance, please contact Sally Lee at the Rural Advancement Foundation International. Email: [agjusticeproject@gmail.com](mailto:agjusticeproject@gmail.com), 919-623-9516.**

The **Food Justice Certified** label rewards honest and open relationships throughout the food chain. Its third party verified seal certifies that the highest standards of equity and

fairness have been met on farms, in food manufacturing and in stores. The standards cover:

- Farmers and all food system workers' rights to freedom of association
- Fair wages and benefits for workers
- Fair and equitable contracts for farmers and buyers
- Fair pricing for farmers
- Clear conflict resolution policies for farmers, workers and buyers
- The rights of indigenous peoples
- Workplace health and safety and decent farmworker housing
- High quality training for farm interns and apprentices
- The rights and protection of children on farms
- High quality training for farm interns and apprentices
- The rights and protection of children on farms

To read the full standards, go to [www.agriculturaljusticeproject.org](http://www.agriculturaljusticeproject.org).

The founders of the Agricultural Justice Project who also serve on the AJP Management Committee include Elizabeth Henderson from Peacework Farm and the Northeast Organic Farming Association, Marty Mesh from Florida Organic Growers and Quality Certification Services, Michael Sligh from the Rural Advancement Foundation International-USA, and Richard Mandelbaum from CATA/Farmworker Support Committee. The AJP Advisory Council guides the Management Committee; it includes farmers and farmer advocates, farmworkers and farmworker advocates, food co-op managers, organic certifiers, and other food system business representatives.

Internationally, fairness is regarded as an integral part of organic agriculture. The IFOAM Principle of Fairness states: "Fairness is characterized by equity, respect, justice and stewardship [See **Justice**, page 22]



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# IOIA BOD Meeting & Retreat Minutes

New Lebanon, NY - November 18-19-20, 2011

A regular meeting of the BOD was held in person. **Attendance:** Jennie Clifford, Silke Fuchshofen, Ib Hagsten, H  l  ne Bouvier, Eric Feutz, Debra Bunn, Margaret Scoles – Executive Director: Absent: Michelle Sandy. Acting Chair & Timekeeper: Jennie Clifford, Acting Vice-Chair: Silke Fuchshofen, Note taking: Margaret Scoles, H  l  ne Bouvier minutes, Eric Feutz financials.

Meeting convened on November 18 at 7:38 AM. Ib Hagsten moved to recess for BOD retreat work. Recess November 18, 2011 10:45 AM, reconvened November 20, 2011 7:13 AM.

Discussion over “Championing projects” produced the following **Action Points:** Jennie Clifford and H  l  ne Bouvier will draft an ED Performance Evaluation and submit to BOD for approval before December meeting. Ib Hagsten and H  l  ne Bouvier will revise Orientation package and policy on meet and greet of new BOD. Debra Bunn and H  l  ne Bouvier will create BOD job descriptions with responsibilities before March 2012 AGM.

**Audit Policy: Action Point:** Eric Feutz will advocate to Finance Committee for a recommendation on Audit Policy, detailing timeline and scope of audit, review of accounting procedures and annual financial review before March 2012 AGM.

**Membership Committee:** Update received on Membership Committee’s work with regard to strengthening membership base, implementation of member recruitment campaign and promotion of membership benefits. Nominations Committee is currently working on nominations and number of candidates.

**Bylaws Proposals: Action Point:** Silke Fuchshofen will contact bylaws Committee for recommendation to revise by-laws per discussion of Staggered BOD terms - 1 and/or 3 year terms. Currently 5 BOD elected every other year and 2 BOD elected every other year, starting in 2011 when BOD was expanded from 7 to 5.

**Grant Writer:** Discussed grant writers/seekers and payment structures.

**Finance Committee** to meet in December. Preliminary budget will be looked at. Action Point: Eric Feutz will engage Finance Committee for direction re annual finance for line items, such as wage increases and bonuses.

**Treasurer Report:** BOD reviewed January through September 2011 Revenue & Expense Budget vs. Actual, Balance Sheet as of September 30, 2011 and Treasurer’s report dated November 20, 2011. Ib Hagsten motioned to approve Treasurer’s report with one correction, H  l  ne Bouvier seconded. All in favour. Motion carried.

## IOIA BOD Conference Call - December 13, 2011

The meeting convened at 9:23 a.m. EST immediately following an 8:30 a.m. EST executive meeting concerning the Executive Director’s compensation and the Executive Director and staff’s bonuses. **Attendance:** Jennie Clifford, Acting Chair; Silke Fuchshofen, Timekeeper and simultaneous recorder of action points in Google Docs; Ib Hagsten, Minutes, assisted by Patricia Hagsten as Note taker; Eric Feutz, Financials; Debra Bunn and Margaret Scoles, Executive Director. Absent: Michelle Sandy and H  l  ne Bouvier.

**Budget:** Eric Feutz presented a preliminary 2012 budget showing a \$4,600 surplus; however, following the Executive Meeting decisions plus discussion of the line items, adjustments will be made using year-end actual figures and a revised budget will be presented at the January BOD meeting. Line item added for grants/special projects was discussed, stays as presented. Eric Feutz, in conjunction with the Finance Committee, is to develop an audit procedure proposal that will meet the intent of IOIA Policy Manual yet be within the budget.

**BOD to hold the mini day-long BOD retreat** the day prior to Advanced Training on Monday, February 27. BOD will arrive on Sunday, February 26th and not to leave until late in the day on Friday, March 2nd.

**Scholarship:** Deb Bunn moved and Ib Hagsten seconded a motion to approve the Scholarship Committee’s recommendation to give two Rutherford Awards for 2012. Motion unanimously approved. [see **Minutes**, page 22]

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# IOIA Annual Report 2011 – Executive Summary

Prepared by Jennifer Clifford, IOIA Board Vice-Chair/Acting Chair, and Margaret Scoles, IOIA Executive Director

*Note: The complete Annual Report is posted on the IOIA website ([www.ioia.net](http://www.ioia.net)) and copies will be available at the Annual Meeting on March 1.*

## Key Activities and Alliances:

- ▶ Celebrated the 20<sup>th</sup> anniversary of IOIA in Tampa, Florida. Fred Kirschenmann, the speaker at IOIA's first annual meeting, returned as keynote speaker. Sweetwater Farm, founded by Rick Martinez, early IOIA BOD member, hosted the biggest party in IOIA history, including a highly successful benefit auction.
- ▶ Significantly increased inspector membership. IOIA's 240 inspector members represent a 6.7% increase during 2011 and the highest number in history.
- ▶ Added the position of Training Services Director to expand the IOIA Training Institute, bringing Jonda Crosby on as full-time senior staff. She brings a lifetime of experience in sustainable agriculture and agricultural education.
- ▶ Added the position of Technical Editor, Tony Fleming, to write or edit technical articles useful to inspectors for each issue of the IOIA newsletter.
- ▶ Successfully won a bid for and completed a contract with the USDA to propose criteria, training content, training approaches, and licensing approaches for organic inspectors and reviewers. This ambitious project was accomplished by a hard-working team, shared management, and Monique Scholz, lead writer and IOIA member from Quebec.
- ▶ Supported the lawsuit of Organic Seed Growers and Trade Association (OSGATA) et al vs. Monsanto. IOIA is one of 12 amici brief signatories. BOD and the ED participated in calls over several months as the suit developed.
- ▶ Commented to the US National Organic Standards Board on issues of unannounced inspections, inspector criteria, and residue testing.
- ▶ Nearly doubled webinar offerings. IOIA delivered Organic Aquaculture training via webinar to a classroom in Hong Kong. Other webinars included NOP Pasture Rule, two customized NOP standards trainings for certifiers, and an audit balance webinar. Pre-course webinars are standard curriculum content for all courses in the US.
- ▶ Entered into partnership with the Organic Materials Review Institute to provide the first of three webinars (Crop Input Materials) in a series, and planned the second (Livestock Input Materials), scheduled for delivery in March and throughout 2012 every quarter as requested. Processing Materials are to be developed next. These are the first of the ("200 level") trainings, identified as topics not covered comprehensively in the basic courses but still essential for all inspectors. Inputs webinars for the Canadian Organic Standards Permitted Substance List are under discussion.
- ▶ Continued an ongoing alliance with FoodChain Global Advisors to provide non-GMO product verification training.
- ▶ Hosted quarterly Certifier-Inspector Dialogue conference calls. The ongoing dialogue is invaluable in shaping the IOIA training program and addressing inspector issues and member concerns.
- ▶ Sponsored a booth at the World Organic Fair with JOIA and KOIA and a workshop at the Organic World Congress, and participated in the IFOAM General Assembly. The ED traveled to Korea for these events. Sacha Draine, IOIA International Training Manager, and the ED traveled together to attend BioFach in Germany. Board Chair, Michelle Sandy, attended BioFach China.
- ▶ Continued to participate on the Canadian General Standards Board's Organic Technical Committee. Kelly Monaghan, IOIA's representative, is OTC Chair.
- ▶ Provided in-house training over two days on the NOP Standards at the USDA office in Washington, DC.
- ▶ Continued sponsorship of the Guelph Organic Conference in Canada and provided advanced training in conjunction with the 2011 conference, largely through the efforts of Canadian Committee Chair, Bill Barkley, and Membership Committee Chair, Kelly Monaghan. This training sparked the concept to foster single-day organic training events for inspectors in conjunction with other major organic events.
- ▶ Participated in Natural Products Expo East and Expo West in the U.S.
- ▶ Continued support of OTA, IFOAM, OMRI, COG, Green America, and MT Nonprofit Association through memberships and subscriptions.
- ▶ Joined the Accredited Certifiers Association as a supporting member.
- ▶ Continued quarterly newsletter, annual Membership Directory, IOIA Forums (English, Spanish language, Canadian members), member discounts.
- ▶ Sponsored social networking for inspectors (i.e. the Guelph Wine & Cheese).

## Trainings:

IOIA training continues to increase in value and global recognition. IOIA again saw another increase in both the numbers of events and participants over the previous year. The webinar format continues to increase access to IOIA training with webinars provided for audiences as far away as Australia and Hong Kong. IOIA sponsored training events in Manitoba, Ontario, Utah, Idaho, Florida, Vermont, New Jersey, Minnesota, California, Jamaica, Australia, Korea, Ecuador, Hong

Kong, Japan, Nicaragua, Peru, and Costa Rica, usually with the support of regional co-sponsors. International livestock and processing trainings and more participation in advanced training were significant areas of activity. Plans are underway to quadruple the number of webinar offerings during 2012. With both the USA and Canada on the brink of adopting national regulations for organic aquaculture, IOIA is gearing up to meet the need for more aquaculture training.

<b>IOIA Trainings in 2011</b>		
<b>Type of Course</b>	<b>Number of Events</b>	<b>Number of participants</b>
Basic Crop	12	227
Livestock	3	49
Basic Processing	6	77
Advanced	5	92
NOP Standards Workshops	2	35
Aquaculture	1	30
Pasture Webinars	1	22
IOIA – OMRI Webinars	3	55
Other Webinars	2	13
Other	<u>1</u>	<u>27</u>
<b>Total</b>	<b>36</b>	<b>627</b>

**Finances:**

IOIA maintains a solid financial position and once again, did not need to dip into cash reserves. The USDA contract was a welcome unbudgeted and unexpected source of income. A modest increase in inspector dues, coupled by an increase in inspector membership also helped increase income.

IOIA reports to the membership on a cash basis. At the end of 2011, IOIA had accounts receivable of \$64,000, most of which was received in January 2012. These receivables created a temporary shortfall in the Cash basis financial report at year-end.

A full audit of the IOIA finances for 2010 was due to occur in 2011, as per BOD policy. The audit is still in progress; results will be reported in the 2012 newsletter.

**Committees** -- Full Committee Reports will be available at the Annual Meeting. A hearty thank you to outgoing Kelly Monaghan, who chaired the Membership Committee for the past 4 years.

**Board of Directors in 2011:**

With the 2011 AGM, the BOD was expanded for the first time from five to seven full members. In the past, IOIA had maintained boards of five or seven, always with two alternates. A bylaws ballot in 2010 eliminated the position of alternates. The 2011 AGM election created a BOD with four new BOD members out of seven. This majority of new members was a major factor in deciding to meet in-person for a 3-day retreat in upstate New York in November. This was the first in-person BOD retreat outside the AGM since 2007.

Retiring Board members: Bob Durst (4 years and Chair for the past 3 years) deserves a huge thanks for his work. Also, thanks are due to David Konrad (4 years), Julio Perez and Bob Howe (both 2 years as Alternates), and Michelle Sandy (nearly 2 years). Thank you Michelle, who served as BOD Chair for most of the past year. She resigned from the BOD in December.

Soon-to-retire Board member: Jennie Clifford (2 years)

New Board members in 2011: Debra Bunn, Silke Fuchshofen, Ib Hagsten, H  l  ne Bouvier.

**Balance Sheet (Cash Basis)  
As of December 31, 2011  
Current and Previous Year**

	<b>Dec 31, 11</b>	<b>Dec 31, 10</b>
<b>ASSETS</b>		
<b>Current Assets</b>		
<b>Checking/Savings</b>		
<b>Total Checking/Savings</b>	160,238.72	191,204.42
<b>Total Accounts Receivable</b>	-419.63	-100.45
<b>Total Other Current Assets</b>	9,191.42	4,703.30
<b>Total Current Assets</b>	169,010.51	195,807.27
<b>Fixed Assets</b>		
<b>Total Building</b>	35,000.00	35,000.00
<b>Total Fixed Assets</b>	35,000.00	35,000.00
<b>Other Assets</b>		
<b>Accumulated Depreciation</b>	-1,540.92	-1,540.92
<b>Total Other Assets</b>	-1,540.92	-1,540.92
<b>TOTAL ASSETS</b>	<b>202,469.59</b>	<b>229,266.35</b>
 <b>LIABILITIES &amp; EQUITY</b>		
<b>Liabilities</b>		
<b>Current Liabilities</b>		
<b>Health Reimbursement Arrgmt</b>	-100.00	0.00
<b>Total Current Liabilities</b>	100.00	0.00
<b>Total Liabilities</b>	100.00	0.00
<b>Equity</b>		
<b>Contributed Property-FM Value</b>	29,031.80	29,031.80
<b>Restricted (Scholarship Travel Fund)</b>	656.00	1,156.00
<b>Retained Funds</b>	199,078.55	192,610.59
<b>Net Income</b>	-26,196.76	6,467.96
<b>Total Equity</b>	202,569.59	229,266.35
<b>TOTAL LIABILITIES &amp; EQUITY</b>	<b>\$202,669.59</b>	<b>\$229,266.35</b>

Statement is subject to review and approval by IOIA Board of Directors. Final copies will be available to members at the IOIA AGM and on the website.



**USDA Announces GE Regulatory Actions**

USDA's Animal and Plant Health Inspection Service (APHIS) has announced [four regulatory notices](#) and supporting scientific evaluations related to the agency's oversight of genetically engineered plants. Three notices were published in the *Federal Register* on Dec. 27, and a fourth was published on Dec. 16. APHIS has determined non-regulated status for corn genetically engineered to better withstand drought conditions, and a glyphosate-tolerant soybean that produces higher levels of oleic acid. In addition, APHIS has prepared plant pest risk assessments and draft environmental assessments to address requests from developers seeking non-regulated status for a soybean genetically engineered to produce an omega-3 fatty acid and corn genetically engineered to be resistant to the herbicide 2,4-D (a major component in Agent Orange) and aryloxyphenoxypropionate acetyl coenzyme A carboxylase inhibitors. APHIS has [posted links](#) to the related documents.

**GE Crops in the Real World - Bt Corn and Honey Bees**

One of the most frequently mentioned benefits of genetically engineered crops is a reduction in chemical pesticide use on corn and cotton. These chemicals typically kill not only pest insects but also beneficial insects that help control pests or pollinate crops. They may also harm other friendly organisms like birds.

But in reality, corn engineered to kill certain insect pests-AKA Bt corn-has mainly resulted in the replacement of one group of chemical insecticides with another. Previously, corn may have been sprayed, or soil treated with chemical insecticides to control several insect pests, especially corn rootworm. Bt has largely eliminated (at least for the time being) the demand for insecticides to control

rootworm or European corn borer.

But those who tout the benefits of GE fail to mention that today virtually all corn seed is treated instead with chemical insecticides called neonicotinoids to ward off several corn insects not well controlled by Bt toxins. And while almost all corn is now treated with insecticide via the seed, substantial amounts of corn went untreated by insecticides prior to Bt. For example, corn alternated (rotated) with soybeans from year to year usually needed little or no insecticide treatment, and only five to 10 percent of corn was sprayed for corn borers.

A new publication by several academic entomologists on the impact of neonicotinoid insecticides on honey bees shows that such seed treatment may be having serious repercussions. Previous research has linked neonicotinoids to bee deaths as a possible contributor to colony collapse disorder, which is wreaking havoc on bees across the US.

The new research is important in showing that when neonicotinoid insecticides are used as seed treatments, they can migrate through the soil or through the air in dust to other plants near (or in) corn fields, like dandelions, which honey bees prefer as a pollen source. It was already known that this type of insecticide can travel through the plant as it grows, and this study also shows corn pollen contaminated with this insecticide and substantial corn pollen use by honey bees.

Importantly, the amount of the insecticide found in and around corn fields is near the range known to kill honey bees, and dead bees collected near treated fields contained insecticide residues. It is also known that sub-lethal doses of these insecticides can disorient bees, and may make them more susceptible to pathogens and parasites.

There are a few pieces of the puzzle that still remain to be put into place, but it is looking likely that neonicotinoid seed treatments are harming U.S. honey bees.

Other research indicates that corn seed treatment is harming other types of beneficial insects. An extensive study in the U.S. Northeast on many types of beneficial beetles that are found in corn fields showed that neonicotinoid seed treatments likely harmed several of these species, although other species may fill in. This study was limited to beetles, did not include other beneficial insects, spiders and mites, and did not examine the implications for crop damage. Other research has shown that reductions in beneficial organisms can result in decreased crop yields.

In general, current data suggests that the new, ubiquitous seed treatments that have accompanied Bt corn are just as harmful as the insecticides they are replacing.

And it illustrates that the impacts of GE technology must be considered more broadly than just direct harm from an engineered gene or protein. As the authors of one of the studies wrote: "Field experimentation must consider the effects of these broader systems for realistic evaluation of currently deployed transgenic crops."

University of Illinois entomologist Mike Gray, an expert on corn rootworm, summarized the state of U.S. corn production in a recent research article: "The current lack of integration of management tactics for insect pests of maize in the U.S. Corn Belt, due primarily to the escalating use of transgenic Bt hybrids, may eventually result in resistance evolution and/or other unforeseen consequences."

*Full article by Doug Gurian-Sherman  
[Union of Concerned Scientists, January 10 2012](#)*

## Webinars, from page 6

### Multi Ingredient Processing

**Inspection:** This webinar will be taught by professional food scientists. It goes beyond the basic processing course and addresses the complexities of dry, liquid, cooked, refrigerated and frozen products. It will help the inspector prepare for commonly encountered problems and challenges, including food safety considerations.

### Advanced and Specialty Courses

**Organic Wine Inspection:** This webinar will include an overview of wine production, focusing on organic control points for inspection.

**Organic Aquaculture Inspection:** This webinar will include an overview of aquaculture production systems, focusing on the organic control points for inspection.

## Justice, from page 16

of the shared world, both among people and in their relations to other living beings. The principle emphasizes that those involved in organic agriculture should conduct human relationships in a manner that ensures fairness at all levels and to all parties – farmers, workers, processors, distributors, traders and consumers. Organic agriculture should provide everyone involved with a good quality of life, and contribute to food sovereignty and reduction of poverty.” AJP has translated this principle into the concrete terms of conditions on US farms and food businesses.

Farmers who have gone through the AJP process find that it gives them the push they need to make big improvements in personnel policies. In Philomath, Oregon, Gathering Together Farm owners Sally Brewer and John Eveland work with their crew of more than 100 employees to supply produce to their wholesale and retail customers, 300 community supported agriculture (CSA) members and an on-site restaurant. “Our

employees are the heart and soul of GTF,” says Eveland on why they applied for Food Justice Certification. “We are very proud of our team and want to be a great employer. Being Food Justice Certified allows us to communicate this commitment to the world.”

## Minutes, from page 17

**Audit:** Records need to be audited, per BOD Policy Manual. Treasurer and Finance Committee directed to have a decision as to what is needed to review policy and the IOIA books by February 14th BOD meeting.

## IOIA BOD Conference Call - January 9, 2012

**Attendance:** Jennie Clifford, Silke Fuchshofen, Ib Hagsten, H el ene Bouvier, Eric Feutz, Debra Bunn, Margaret Scoles – Executive Director. Acting Chair/Vice-Chair & Timekeeper: Jennie Clifford, Note taking: Margaret Scoles, H el ene Bouvier minutes, Eric Feutz financials.

**Accept Resignation from Michelle Sandy, BOD Chair, and confirm decision made Dec 29 Executive Session on BOD operations:** Eric Feutz moved to accept Michelle Sandy’s resignation. Seconded by Ib Hagsten. All in favour. Motion carried. The BOD is very appreciative of Michelle Sandy’s contributions and time dedicated to IOIA.

**ED staff bonuses (Dec 13 Executive Session), discussion staff bonus with tax:** Eric Feutz moved to approve staff bonuses with taxes covered by IOIA. Seconded by Ib Hagsten. All in favour. Motion carried.

**2012 Budget Approval:** Discussion: Tabled to February 7 meeting.

**Mischa Popoff Membership application:** Review of Membership Committee recommendation. Ib Hagsten moved to support Membership Committee recommendation. Seconded by Debra Bunn. All in favour.

**IOIA Logo:** Discussion over logo and voting results. Ib Hagsten moved to adopt #163 as IOIA’s new logo. Seconded by H el ene Bouvier. All in favour. Motion carried. Eric Feutz moved to have Al Johnson Chair the By-Laws Committee. Seconded by Ib Hagsten. All in favour. Motion carried. We gratefully appreciate all the hard work and dedication that Garry Lean brought to the Chair of the By-Laws Committee.

## IOIA BOD Conference Call - January 10

A meeting was held for discussion on the topic of inspector and reviewer accreditation/ registration/ licensing.

## Yoko Mizuno Publishes Fourth Book on Organic Agriculture in Japan

IOIA inspector Yoko Mizuno has published a fourth book on organic food and agriculture; The book’s title literally translates “*The food the organic inspector Yoko Mizuno wants to eat with her family*”. Her second and third books were geared toward grade school children. In addition, Mizuno has co-authored 2 professional books on organic agriculture. She recently received an offer to have this book translated into Chinese to be published for the readers in Taiwan, Hong Kong, Singapore, and Malaysia. We wish Yoko continued success in her endeavors!



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## SECTOR NEWS

### NOSB Report Now on NOP Site

The December 2011 edition of the NOP newsletter is now available on the NOP website, [www.ams.usda.gov](http://www.ams.usda.gov). This issue includes a summary of the Fall 2011 NOSB meeting in Savannah; International trade policies: European Union; Overview of Japan assessment; Korean market update; National List update; and NOP web content updates as well as other pertinent topics.

### New NOSB Members Announced

New NOSB members whose five-year terms began Jan. 24, 2012, are Harold V. Austin IV (Handler), Carmela Beck (Producer), Tracy Favre (Environmental), Jean Richardson (Consumer/ Public Interest), and Andrea (Zea) Sonnabend (Scientist). NOSB's new officers are Barry Flamm (Chair), Mac Stone (Vice Chair), and Wendy Fulwider (Secretary). Leaving the NOSB after completing their five-year terms are: Tracy Miedema (NOSB Chair), Steve DeMuri (Handling Committee Chair), Katrina Heinze (Materials Committee Chair) and Tina Ellor (prior Crops Committee Chair).

### NOP publishes Sunset table

The National Organic Program (NOP) has published [NOP 5611, National List Sunset Dates](#), a table of the sunset or expiration dates for all substances included on the National List of Allowed and Prohibited Substances (National List). Under the Organic Foods Production Act of 1990, the National Organic Standards Board must review all substances on the National List every five years and recommend renewing, removing, or changing each listing—a process commonly referred to as “sunset review.” Intended to provide an easy way to identify the sunset or expiration date for all substances included on the National List, NOP

5611 has been incorporated in the [NOP Program Handbook](#).

### OMRI Launches Retail Campaign

OMRI is launching a retail information campaign, with the goal of raising awareness of the OMRI seal and OMRI Listed® products within the retail sector. The OMRI Retail Subscription offers access to materials and education about products for organics. For more info go to: [www.omri.org/retail](http://www.omri.org/retail)

### Comments Sought on Proposed Rule on Synthetic Methionine

On February 6, USDA published a proposed rule that would continue the allowance of synthetic methionine in organic poultry production but at reduced levels from the current allowable levels.

The current allowance for synthetic methionine expires on October 1, 2012 and allows 4 pounds per ton of feed for laying chickens; 5 pounds per ton of feed for broiler chickens; and 6 pounds per ton of feed for turkeys and other poultry. The proposed rule would permit organic poultry producers to use synthetic methionine after October 1, 2012 at the following maximum levels: laying and broiler chickens – 2 pounds per ton of feed; turkeys and all other poultry – 3 pounds per ton of feed.

Full deliberations of the NOSB in recommending the continued use of synthetic methionine in reduced allowable quantities for organic poultry production, are available at [www.regulations.gov](http://www.regulations.gov) (search for keyword or ID AMS-NOP-11-0063; NOP-11-11PR). Additionally, comments can be submitted through [www.regulations.gov](http://www.regulations.gov) until April 6, 2012.

### Draft guidance on bulk organic products

The NOP is requesting [public comments on draft guidance](#) for accredited certifying agents and

certified operations. NOP regulations currently state that handlers of packaged organic products do not need to be certified if the products remain in the same container. The draft guidance clarifies the certification requirements for handlers of unpackaged organic bulk commodities, and specifies that handlers of unpackaged bulk organic products, such as grain, hay, milk and livestock, must be certified **OR** be covered under another operation's organic certification. Under the latter circumstance, the handler must be specifically included by direct reference in the Organic System Plan (OSP) of the certified seller or buyer of the organic products, subject to approval and inspection by the certifying agent of the certified operation. **Comments are due by April 3.**

### New NOP Training Modules

NOP recently posted several new [Training Modules](#) to its website. Examples of new training modules include a label review and exercise, adverse action notices review and exercise, review of procedures for submitting questions to NOP, and NOP's GMO policy. Additionally, NOP has added [several new documents](#) related to accreditation and certification procedures to the NOP Program Handbook.

### About the NOP Handbook

The NOP adds, edits, and removes documents from the Handbook as needed to reflect emerging issues and policy decisions. Moving forward, all changes will be listed in the Summary of Changes document by date and reflected in the Table of Contents. *NOP Organic Insider* subscribers will also be notified via email. These messages will also be archived on the NOP website. Follow this link to [Subscribe](#) to the *Organic Insider*.

### Current Handbook Edition

Revised January 27, 2012

[Introduction \(PDF\)](#)

[Summary of Changes \(PDF\)](#)

Individual Documents: [Table of Contents \(PDF\)](#)



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**Keep IOIA Strong - Lend Your Strength And Get Involved!**

## 2012 Calendar

**Feb 23 – 25** The MOSES Organic Farming Conference, La Crosse, Wisconsin. [Registration and lodging information.](#)

**Feb 28 – 29** IOIA Advanced training Chilliwack, British Columbia, Canada

**March 1** IOIA Annual General Meeting, Chilliwack, BC

**March 2-10** Ag and Natural Resources Week, East Lansing, Michigan. The event hosts more than 75 programs and annual association meetings. Events include the [Michigan Organic Reporting Session](#), a small flock poultry workshop, renewable energy seminars, and the Great Lakes Forage and Grazing Conference.  
[www.anrweek.canr.msu.edu/](http://www.anrweek.canr.msu.edu/)

**March 3** [NOFA-NH Winter Conference](#), Dover High School, Dover, New Hampshire.

**March 4-6** California Small Farm Conference, Santa Clarita. The three-day educational conference includes day-long short courses and on-farm tours, focused workshops, engaging keynote addresses, and numerous networking opportunities. This year's theme is "Cultivating the Next Generation."  
[www.californiafarmconference.com](http://www.californiafarmconference.com)

**March 7-8** HAACP for the Organic Professional, Natural Products Expo West, Anaheim, CA

**March 14** Webinar: IOIA/OMRI Livestock Inputs Webinar

**March 31 – April 6** IOIA Crop, Livestock, Advanced trainings, State College, Pennsylvania

**April 1 – 2** Natural & Organic Products Europe, Grand Hall, Olympia, London.  
[www.naturalproducts.co.uk](http://www.naturalproducts.co.uk)

**April 23-27** IOIA Basic Farm inspection training, Spanish language Tegucigalpa, Honduras

**April 25 & 26** Washington DC. OTA Policy Conference and Hill Visit Days. [www.ota.com](http://www.ota.com)

**April 30 – May 12** IOIA Crop and Livestock training, Brandon, Manitoba.

**May 16 – 19** IOIA Basic Farm training. Awajishima, Hyogo, Japan.

**May 21 – 24** NOSB Spring 2012 meeting, Hotel Albuquerque at Old Town, Albuquerque, New Mexico.

**June 18 – 21** [2nd International Organic Fruit Research Symposium: Organic Fruit 2012](#), Leavenworth, Washington.

*For a complete listing of upcoming IOIA trainings,  
please see page 3 of this issue*