

# Just Picked

Newsletter of the  
Upper Midwest Organic  
Tree Fruit Network  
Volume 1, Issue 3, June 2005

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Welcome to the third issue of *Just Picked*, the newsletter of the Upper Midwest Organic Tree Fruit Growers. If you are reading this for the first time and wish to continue to receive future editions or notification of when they are available on the web, please contact me.

I’ve noticed a bias toward apples in our Network so far, which is natural given that it is the most common tree fruit grown in the Upper Midwest. But you may want more content on organically producing and marketing other tree fruits as well. If you have content to contribute or ideas for future editions, they will be more than welcome.

--Deirdre Birmingham

## Calendar

**June 16:** Michigan State University Field Day on Organic Apple Production. See p 6.

**June 21:** Hoch Orchard Field Day of the Upper Midwest Organic Tree Fruit Growers Network. See p 6..

**June 22:** Wisconsin Apple Growers Association IPM field day. Mark Whalon will be going from the field day at Hoch Orchard to speak at this as one of six speakers. For more information contact Anna at 920-478-4277. Advance registration is required.

**July 15:** Countryside Orchard of the Upper Midwest Organic Tree Fruit Growers Network. More info in our last newsletter, issue #2.

**July 20:** Contributions to next issue of Just Picked due.

**September 20:** Contributions to last 2005 issue of Just Picked due.

*The Upper Midwest Organic Tree Fruit Growers Network was started in 2004 for the purpose of sharing information and encouraging research to improve organic tree fruit production and marketing in the Upper Midwest. The Network is supported by the Midwest Organic and Sustainable Education Services (MOSES) and the Risk Management Agency of the USDA in addition to other event sponsors.*



A project of the Midwest Organic and Sustainable Education Service  
Funded by the USDA Risk Management Agency



**Featured Orchard: Prairie Fruits Farm, Champaign, Illinois**

Choosing the south-facing slope or the north-facing slope is not an issue for Leslie Cooperband and Wes Jarrell as they establish Prairie Fruits Farm in rural Champaign, Illinois. When Wes left Madison, Wisconsin, in 2003 to be a department head in the college of agriculture at the University of Illinois at Urbana-Champaign (UIUC) they serendipitously found a seven-acre farmstead where these two self-described “fruit fiends” could indulge their dreams. Those dreams are revealing themselves in a diverse orchard of apples, peaches, pears, plums, and apricots as well as small fruits, all grown organically.



While fruit growing may be new to Leslie, it is not to Wes. He grew up on a small fruit farm in Oregon, west of Portland where he started picking berries at the age of five. While the flatlands of Illinois contrast with the lush environs of western Oregon or Leslie's former fast-paced city life in Boston and New York City, they continue to appreciate the beauty of these former prairie lands. Even Wes' parents, who provide helping hands and words of advice, are taken with the beauty of central Illinois.

Leslie and Wes are focusing on disease-resistant rootstocks and varieties as well as the fruit they personally enjoy. They feel some of the scab-resistant apples have gotten “a bad rap” in terms of flavor. Their strategy is to have different varieties of tree fruits for their customers from early to late season. For apples they have Liberty, Honeycrisp, Macoun, Sweet Sixteen, Turley Winesap, Thome Empire, Mutsu, Sun Fuji, and Marquis Idared on M-7, G-30, M-111 and Bud-118 rootstocks. For peaches they have Reliance, Redhaven, White Lady, Harrow Beauty, Elberta, Bounty, and Belle of Georgia on Bailey rootstock. For pears they have Harrow Delight, Moonglow, Harvest Queen, and Bosc on OH x F40 and OH x F87 rootstocks. For cherries they have Danube, Sam, and Erdi Jubileum on Mahaleb rootstock. And their one variety of apricot, Harlayne on sdlg, is proving to be winter-hardy enough for their Zone 5 location.

Being fruit fiends, they are also establishing raspberries, blackberries, gooseberries, currants, strawberries and blueberries. They are bringing some of the Pacific Northwest to central Illinois by introducing raspberry –blackberry crosses of that region, namely marionberries, boysenberries, tayberries, and loganberries. This mix will enable them to offer fresh fruit to their customers from June through November.

More than dreams of fruit are being realized at Prairie Fruits Farm. If you examine their logo you may wonder about the goats. In comes Leslie's dream of having goats and making farmstead goat cheese. She has so admired the fresh goat cheese of Anne Topham of Fantome Farm, an established cheese-maker at the Dane County Farmers' Market in Madison, Wisconsin. With Anne's advice Leslie is full steam ahead to be the only farmstead cheese-maker in Illinois, a rather shocking statistic having just moved from Wisconsin. Their grade-A milking parlor and cheese facility is under construction! Yogurt may also be in their future.

Leslie is milking almost a dozen Nubian goats with a goal of milking 30 to 40 in three years. Nubians are her goat of choice due to their high butter fat and milk solids as well as

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(Continued from page 2) *Featured Orchard*

their friendly temperaments. Their disadvantage, at least to some, is their loudness; but not to Leslie. Her new goat family “is just like her own family and friends on the East Coast -- loud!”

To add to the mix, a young chef started raising broilers in their orchard last year, which helped with weed and insect control. He will add egg-layers this year in *chicken tractors*, in which the animals are penned and moved systematically throughout the orchard, providing the chickens with a constant supply of fresh vegetation and insects.

Wes and Leslie are excited at the prospect of marketing their first fruits and farmstead cheese this summer at the weekly, outdoor, Market on the Square in Urbana. They will also start a combination farm-stand, U-pick operation, and a retail shop as part of their dairy facility. The chef *cum* poultry producer will also market his product at the farm-stand. In addition, he works part-time for Wes and Leslie, which enables Leslie to work part-time for UIUC Extension to help communities build local food systems. While she thoroughly enjoys this work, she expects someday to shift to full-time work with their fruits, goat dairy, and the educational mission of their farming endeavor. For this latter feature, we return to the goats.

Goats are proving to be a huge magnet for people of all ages. Getting people to the farm will better help Leslie and Wes to expand people’s palates for uncommon fruits. An evolving line-up of tastings will be offered as different fruits and varieties ripen. They will also have the opportunity to explain their integrated and organic approach to producing tasty and nutritious fruits.

When asked what resources have been most helpful to them in raising tree fruits organically, Leslie immediately noted the *lack* of information and resource people. Consequently they do a good deal of experimentation themselves. While the UIUC has good IPM people, there is still a perception that you cannot raise fruits organically. But people are doing it and markets are strong for these products so the University can no longer ignore it. They have used The Apple Grower: A Guide for the Organic Orchardist by Michael Phillips, and the websites of Cornell University and Penn State.



With the orchard at an early stage, insect pests and diseases have not yet been an issue. They are planting habitat for beneficial insects in diverse locations within selected tree rows. The plantings include wildflowers and mint, which attracts a huge array of beneficial insects. They prune hygienically for good air movement.

They are big fans of scouting in their orchards and of using Surround to control the Japanese beetles that hit their Honeycrisp in particular. They tried pheromone traps, but these just seemed to bring the beetles to the orchard rather than deter them. As the trees mature they plan to use pheromone traps for codling moth.

They are trying an unusual approach to help prevent build-ups of insect pests and diseases that a perennial monoculture fosters. They are mixing species and planting trees

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## Product Review: Materials Allowed For Use in Organic Tree Fruit Production

Maury Wills, Iowa Department of Agriculture and Land Stewardship

As the Administrator of the Iowa Organic Certification Program and a fellow organic apple grower, I will review in a series of newsletter articles, a variety of products that can be used in organic tree fruit production. Product rates and frequency of application will not be covered since the product label provides that type of information.

In this first article my review is limited to just a few products in a class known as **bio-insecticides**. The active ingredients in these products have been isolated from natural sources, which are allowed under National Organic Program (NOP) regulations. These products require minimal protective wear such as coveralls, waterproof gloves, socks, and shoes. None of these products require the use of eye or respiratory protection. The Restricted Entry Interval (REI) is also minimal for the use of these products, usually four hours.

Before purchasing and using crop protection products for the organic farm, there are several important things to keep in mind. First, since most of the bio-insecticide products do not work like conventional chemical products, it may take longer before insect or disease pressure is reduced to commercially acceptable levels. Second, it is important to note that there is not necessarily an effective *product solution* available for every pest problem on an organic farm even though some input vendors might like you to think that. Third, all products used on organic fields and crops must comply with NOP regulations. This determination is made by the organic certification organization. When in doubt it is best to contact the certifier before purchasing and using new products.

**Bacillus thuringiensis (B.t.)** is a naturally occurring soil bacterium that causes disease in moth larvae when ingested. It may be used to control a number of pests including leaf rollers, Oriental Fruit Moth, Codling Moth, and Green Fruit Worm. B.t. is the active ingredient in products such as **Dipel** and **Deliver**. Both products are allowed under the NOP. B.t. is considered ideal for pest management because of its toxicity to pests and lack of toxicity to humans or the

natural enemies of many crop pests. B.t. must be eaten by larvae during their feeding stage of development. It is not effective against adult moths and it is not a knock-down killer. However, larvae stop feeding shortly after ingestion and die after a period of hours.

B.t. products are registered for use on many crops including berries, small fruit, cucurbits, and tree fruit crops such as cherry, plum, peach, pear and apple. Look for B.t. dry, flowable products under the brand names listed above. Liquid B.t. products often contain petroleum distillates and are not allowed for use on organic crops. The dry, flowable product is mixed with water and used as a foliar spray.

Another substance that may be valuable for organic tree fruit producers is the **cydia pomonella granulosus virus**. This virus is specific to codling moth. Once consumed by codling moth larvae the virus multiplies. More of the virus is then released into the environment after the larvae dies. The virus is not very UV stable and should be sprayed at dusk.

The product **CYD-X** by Certis USA is formulated with the granulosus virus. It is allowed for use under NOP regulations. CYD-X was introduced approximately eight years ago for a period of one year. It was reintroduced in the western U.S. just two years ago and in the eastern U.S. and in Michigan just last year. It now appears to be widely available. This liquid product is sold in 32-ounce containers that should be kept refrigerated. It is mixed with water and applied as a foliar spray. CYD-X is registered for use on tree fruit crops such as apple, pear, plum and walnut.

**Spinosad** represents another bio-insecticide derived from natural soil organisms. Spinosad is the active ingredient in the product **Entrust** manufactured by Dow AgroSciences. Entrust has been commercially available only since 2003 and is registered for use on a wide range of fruits and vegetables for a variety of pests including codling moth, leafrollers and oriental fruit moth. This product is approved for

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## ***the sLowdown* a Q & A with Michael Phillips**

In celebration of the life and work of Betsy Lydon, who devoted herself to sustaining small scale food producers by encouraging local, seasonal eating and an appreciation for diversified farming, the first annual Betsy Lydon Slow Food Ark USA Award was presented in November 2004 to Michael Phillips, a farmer and author based in the Northern White Mountains of New Hampshire.

Michael, author of *The Apple Grower: A Guide for the Organic Orchardist*, grows apples and medicinal herbs with his wife Nancy and daughter Gracie. A revised edition of *The Apple Grower* is expected to be published by Chelsea Green in fall 2005. Talking with Michael a few months after he accepted the award, we posed the following questions to him.

**Your experiences as both an organic farmer and an herbalist give you a fairly unique perspective on what you've termed "holistic orcharding". Could you explain more fully what you mean by that?**

In many orchards, a slew of chemical spray inputs are applied to maintain a productive harvest. You may compare this to doctors prescribing medicines to alleviate disease. Holistic orcharding is about looking at the ecosystem as a whole in order to grow life-sustaining fruit for folks who want to be somewhat free of disease themselves. There's no escaping the fact that good nutrition is the basis of vibrant health.

Out in the orchard, we need to understand just how much growers actually facilitate fungal disease, for instance, with the use of chemical fertilizers. Such efforts aimed at maximizing fruit production lead to a need to spray even more fungicides. A pathogenic experience results when any organism experiences less than optimal health. The nutrient balance of a living soil promotes the kind of tree health that can thrive alongside the ubiquitous world of fungi. The minerals that an apple tree takes from the soil need to be in proper proportion to each other for all sorts of biochemical cellular activity to take place. The spheres of life found in the humus and orchard understory ultimately define what constitutes exceptional soil management. This in turn is the starting point towards exceptional disease management. So-called "susceptibility to disease" has as much to do with a fertilizing mindset geared towards maximizing fruit production as it does with any genetic propensity in the apple tree to be sick. Yes, there are differences between clonal varieties. Yes, some years are far more conducive to primary infection than others. But when you live poorly - and this is pertinent to the human organism too! - then you can expect a greater need for allopathic intervention.

Holistic orcharding is a far deeper approach to growing fruit than the more familiar approach of medicating each resulting problem might suggest. What's important for people who appreciate "slow food" to be aware of here is that the two approaches I'm describing result in two entirely different nutritional profiles in the apples themselves. And therefore we all have to be aware of the way the fruit was grown from the get go.

**Why is growing apples organically important? Does ecological (low spray) orcharding have a place?**

I am not one to come down on anyone else for being less than perfect, especially seeing as how I've mastered that particular skill myself! It gets difficult when we start giving farms labels as to how crops are being produced. I have an article posted on our web site enti-

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## Harry Hoch Hosts Another Field Day

If you missed the 2004 field day last May, you won't want to miss this one. Harry Hoch, who owns

and manages Hoch Orchards and Gardens with his family, is organizing a full program including several guest speakers. Harry is co-author of the [Integrated Pest Management Manual for Minnesota Apple Orchards](#) and accompanying [Field ID Guide](#). These will be made available at the field day by the Minnesota Department of Agriculture's (MDA), Sustainable Agriculture and Integrated Pest Management Program, which is co-sponsoring the field day.

Mr. Hoch will discuss aspects unique to his orchard of over 6000 dwarf and semi-dwarf apple trees planted in the last seven years. He will explain how he divided his orchard into zones for pest monitoring purposes as well as his pest monitoring and control strategies. Mr. Hoch uses moisture and temperature recorders in his orchard linked to computer software to predict disease stress periods. Mr. Hoch and Jeanne Ciborowski from the MDA will run the actual disease modeling program.

In addition, Professor Mark Whalon of Michigan State University, will show how assessing the diversity and numbers of mite species provides insight on an orchard's ecological balance. Mr. Whalon is part of a research team managing the oldest and largest organic orchard in the Upper Midwest at Michigan State's Clarksville Research Station.

Professor Emily Hoover of the University of Minnesota will discuss her research on ground cover management in orchards. This discussion will be based on her poster presentation at the 3rd National Organic Tree Fruit Meeting held June 6-8 in Washington as well as news of that Meeting. Farm and Orchard Supply of La Crescent, Minnesota, will display their products available for organically managing orchards.

Advance registration of \$15 is required by June 14. Registrants receive educational materials and lunch. Use the form inserted in this field day to register.

Michael Phillips' book [The Apple Grower: A Guide for the Organic Orchardist](#) will be available for purchase from the MOSES Book Store at both field days. Visit Michael's website at [www.herbsAndApples.com](http://www.herbsAndApples.com) ó

### **Announcements:**

#### **Michigan State University Field Day on Organic Apple Production**

All growers who want to learn about principles and practices of organic apple production are invited to attend an organic apple field day, June 16 from 1 to 4 p.m. at Michigan State University's (MSUs) Clarksville Horticulture Experiment Station.

Field day participants will visit a five-acre certified organic apple orchard that was established five years ago at the station. The orchard consists of three apple cultivars, each with different susceptibility to disease. The field day will feature presentations focused on building soil quality, fertility and biological diversity, orchard floor and tree management and disease and insect management.

The field day is free, but participants must register by June 15 to assure adequate transportation and materials. To register, visit <http://www.hrt.msu.edu/organic/FieldDay.htm> or call Sandy Allen at 517-355-5191, ext.339.

The organic apple orchard project is funded by Project GREEN (Generating Research and Extension to meet Economic and Environmental Needs), the state's plant agriculture initiative at Michigan State University, and a USDA Sustainable Agriculture grant through the Michigan Agricultural Experiment Station. ó

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tled "An Intelligent Paradigm" that explains this fully. Suffice to say, each grower backed by his or her community is doing the best they can to survive economically and feed their neighbors.

That said, I want to put in a word for those farmers and orchardists who are minimizing chemical inputs to an absolutely bare bones level. Our culture needs such pioneers who think outside the box if we're to truly reach what's been called a "sustainable agriculture". I talked earlier of the health relevance of nutrient-dense food resulting from a systems approach to agriculture. You cannot separate the nurturing attributes of real food from the health of the soil. Organic agriculture is first and foremost about promoting the health of the soil. Put the two together and you start producing the kinds of apples that kids want to eat. The little ones have always been my guide to which way of growing makes the most sense in the long term. Allow me to offer you a taste of an organically-grown, locally-grown apple and you'll know exactly what I mean.

**Tell me more about how "locally grown" actually translates into more flavorful and nutritious food.**

Let me add to what I've already said here by focusing on what I call regional apples. These are the heirloom varieties of yore as well as modern varieties that grow to perfection only in particular locales. Latitude plays a role here as does soil type. Spartan is a jewel of an apple in northern New England, and a far better keeper than its McIntosh parent. The original Gravenstein as grown in western Sonoma County in California wows everyone with its thin-skinned crispness. Yet this "cooking apple" loses

its fresh appreciation across other middle growing zones until you encounter the red strains of this heirloom in such places as the Annapolis Valley of Nova Scotia. The Albemarle Pippin as grown in the Virginia Piedmont region - but not elsewhere - is truly one of the world's finest apples.

Nutrient-dense apples result when the grower first and foremost gives credence to the living soil. Diversity is the key to reducing pesticide residues on fruits. When people take time to discover local orchards and support such efforts with their food dollars, everything falls into place.

**What do you feel are the most important insights you've gained into organic apple production?**

Apple growers need to learn management techniques that take into account the orchard as a whole. You can go out and mow six or more times, for instance, because that's what Americans do with grass. Or you can understand how apple roots interact with mycorrhizal fungi beneath a haphazard mulching plan that encourages flowering meadow species in the aislesways, providing nectar for adult parasitic wasps that lay their eggs in codling moth eggs. There's a full day's course in that statement, of course, but the point is we affect everything in the orchard when we do something as seemingly benign as mow the grass.

The biodynamic concept of the farm as its own organism intrigues me immensely. Most orchardists have a tremendously large list of inputs used to fertilize the trees, foliar spray the trees, protect the fruit from diseases, protect the fruit from insects, and so forth. Each one of those inputs comes accompanied with a bill. Don't get me wrong: certain products are essential given the current state of our limited

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Michael Phillips

## Why Aren't Disease Resistant Apples in the Supermarket?

Ian Merwin, Associate Professor of Horticulture, Cornell University

This is a response to recent dialogue about disease resistant apples. This was the topic of a multiyear, multistate (NY, MA, VT, PA, NJ) research and extension project funded by the USDA-SARE program during the 1990s, and several disease-resistant cultivars (DRCs) have been included in the NE-183 apple variety tests since that time. Despite this attention, there has been very little interest in or adoption of DRCs in the mainstream apple industry. The possible exception may be Switzerland, where government subsidies for organic production practices, and a comprehensive marketing effort have led to some broad success with DRCs for organic markets (check published reports by Franco Weibel). I think there are two main reasons for this lack of impact and adoption.

**Problem One:** It is difficult to market these varieties. At the local retail level (niche markets, farmers' markets, CSAs) it can be done with persistence in some markets. We have developed a loyal following for New York at the Cornell University orchard salesroom, and from my small (three acres) home orchard (Black Diamond Farm at [www.incredapple.com](http://www.incredapple.com)) based upon its intense and unique varietal incidental benefit to the

grower, and a useful attribute for marketing to an environmentally concerned local clientele.

We have also developed a small but reliable local market for other DRCs including Liberty, Priscilla, Jonafree, William's Pride, and Sansa. None of these has the long-term keeping legs of GoldRush, but they are very good apples in their fresh-market windows. After four years of frustrations trying to grow and sell only DRCs in my home orchard (which was originally designed to be suitable for trying organic methods), we decided to expand our plantings to include many of the russets and antique apples, and selected newer varieties such as Ginger Gold, Gala, Jonagold, and Honeycrisp. This was strictly a market-driven decision, and it has worked. The mixture of antiques, new varieties with excellent eating quality, and DRCs has enabled us to sell everything we grow through a combination of CSA, the local farmers' market, a local cooperative store (Greenstar), and our local Wegman's supermarket (so yes, there are some DRCs on supermarket shelves), which is com-

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*(Continued from page 7) Michael Phillips*

understanding. The refined kaolin clay spray has definitely given us a friendlier approach to abate pest damage, for instance. Here the idea is to coat all surfaces of the foliage and developing fruitlets with a white coating of clay that irritates the insects to the point of wanting to go elsewhere. Nevertheless, I'm tuned into the drawbacks of any product approach as well, particularly when overused. No one answer passes the silver bullet test - we very much need to use a series of coordinated steps to succeed at organic orcharding. And that ties right into biodynamics where the ideal orchard is part of a farm where animals provide manure for fertilization, certain herbal concoctions can be used to induce systemic resistance to disease, and one's own cider vinegar keeps the grower going. ó

*Over the course of Betsy Lydon's distinguished career as an advisor to foundations and donors in the field of sustainable agriculture, she held leadership positions with several organizations, including National Resource Defense Council, Mothers and Others for a Livable Planet, Sustainable Agriculture & Food Systems Funders, Environmental Grantmakers Association, CORE Values Northeast, BuyGreen Virginia, and the Organic Farming Research Foundation. As the first consumer advocate on the FDA National Organic Standards Board, she helped draft the Food Production Act of 1990, which defined national labeling requirements for foods.*

*Tragically, Betsy died in 2004 of breast cancer, but her accomplishments inspired her friends and colleagues to continue her work. The Betsy Lydon-Slow Food Ark USA Award will be presented annually and includes a small cash award. Contributions are welcome. For more information, contact Slow Food USA at 718-260-8000.*

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## Upper Midwest Organic Tree Fruit Network

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mitted to including locally grown produce in its produce offerings. An essential aspect of marketing these apples has been repeated spot pickings at optimal eating quality, and lots of tastings to persuade consumers to try the DRCs.

**Problem Two:** Unless you grow only DRCs and have a high market tolerance for cosmetic blemishes, the opportunities to reduce fungicide usage with DRCs are quite limited. In orchards with mixed blocks of disease-susceptible and disease-resistant varieties, your fungicide program is driven by the most susceptible varieties. Unless you can carefully design and plant your orchards so that each DRC block requires about one tank of spray mix, and has sufficient physical separation from the other blocks, you often end up spraying fungicides on your DRC blocks anyway. Since almost all of the DRCs (Liberty may be the only exception to this generalization) are susceptible to one or more of the other quince rust, fireblight, sooty blotch and flyspeck, and powdery mildew, they will actually require a few well timed fungicide and/or antibiotic sprays in most regions. In the northeastern US apple orchards, you will have to apply about six to ten sprays for insect control each growing season, so growing DRCs does not really save you that many trips through the orchard with the sprayer.

The primary advantages of DRCs under practical conditions may be that you can extend spray intervals, use lower rates and “softer” fungicides, and that you have a mixed planting of resistant and susceptible varieties which should help to postpone the development of resistant strains of the apple scab fungus.

For almost all commercial wholesale apple growers, these limited benefits of growing DRCs have simply not been enough to compensate for the serious challenges in marketing these varieties. Economic studies by Carlyn Harper and her grad students at the University of Massachusetts in our USDA-SARE projects showed that growing DRCs could save about \$180 per year in fungicide costs under ideal conditions. Sensitivity analyses revealed that a negative market price differential of just 1% or 2% less for these new varieties (a very conservative estimate in most markets) would negate those fungicide savings for the grower. Of course there may be very substantial environmental benefits to the agroecosystem when fungicide use can be eliminated or greatly reduced, but since the US food system does not recognize or reward farmers for such indirect benefits or positive externalities of reducing agrochemical usage, there is no direct incentive to encourage growers to adopt these varieties.

A final note: Long term, the logical market for disease-resistant apples should involve organic producers. They are already growing for environmentally and/or health conscious consumers who are willing to pay a higher price for organic produce, and it should be relatively easier for them to develop markets for new disease resistant varieties. At present most organic orchardists are growing the usual disease-susceptible varieties and relying upon sulfur and copper compounds (both of which have significant negative environmental and tree health impacts) to control scab and other diseases in their organic orchards. Several organic certification systems in Europe are planning to ban copper compounds in organic production, and this could encourage organic fruit growers to adopt alternatives such as DRCs in order to market their fruit in Europe. So the status quo for DRCs may change in the near future. ó

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*Spring 2004 Printed with permission from the author and the editor of Pomona, the member-written quarterly journal of NAFEX, the North American Fruit Explorers. NAFEX is a network of individuals throughout the U.S. and Canada devoted to the discovery, cultivation and appreciation of superior varieties of fruits and nuts. For more information, go to [www.nafex.org](http://www.nafex.org)*

## Upper Midwest Organic Tree Fruit Network

*(Continued from page 3) Featured Orchard*

according to ripening dates. For example, they have apples near peaches, and cherries and pears in another area. They do not know if this strategy will work or if others have tried this before, so the jury is still out.

I was particularly interested to hear their soil fertility plan given Leslie's past position at the University of Wisconsin-Madison as a compost specialist. Their orchard ground was previously in row crops with the 2002 corn stubble to deal with. The soil structure was lost and it crusted badly. Their first step was to have their soil analyzed for the usual soil fertility parameters as well as micronutrients. For the soil analysis they divided their land into five regions or plots from which they pulled separate samples. They found a good deal of heterogeneity throughout the five acres. That helped them plan to better match soil features better with plant needs. So a region low in pH, for example, was where the blueberries went since they need an acidic soil.

In summer 2003, they planted buckwheat (as suggested in Michael Phillip's book). It flowered twice that year before they incorporated it into the soil in the fall. They were going to apply compost in the fall but did not get it on until early spring 2004. They used two different sources of compost. The first was from the local fair grounds and was primarily livestock bedding with some manure. They spread one to two inches of it and disked it in to soil before planting. However, to find good quality compost that met organic certification requirements provided our compost specialist "with a huge reality check." Leslie searched high and low and finally purchased compost from Fresh Air Farms in Ohio. The pricing was competitive with sources in Illinois despite the shipping. This compost was added to every tree hole at planting. The buckwheat self-seeded between the rows in 2004. They have disked that in and already are seeing improvements in soil structure. They are now establishing a permanent cover comprising a diverse mix of warm and cool season grasses and legumes. They will mow this and let it self-mulch. The habitat plantings for beneficial insects will not be mowed.

They do not have an irrigation system, but are seriously considering one now as they endure a major dry spell. However, last year the rains were plentiful and well-timed.

An electrical fence of three dimensions and about five feet high (from Premier) around the entire farm is keeping the deer at bay. So far they have been diligent to keep it mowed under the fence so the grass does not touch a lower strand and short it out.

Leslie and Wes are quite optimistic about their farm-based businesses. They feel there is a real hunger for high quality, diverse fruit raised locally and organically. Wes and Leslie hope to show you all this. Stay tuned for a Network field day at Prairie Fruits Farm in 2006! ó

*(Continued from page 4) Product Review*  
use under NOP regulations.

While researchers have indicated that Entrust is most effective against leafrollers, it may significantly reduce codling moth populations especially if used in conjunction with CYD-X. Entrust is a wettable powder product that should be mixed with water and applied as a foliar spray. Entrust and CYD-X may be especially helpful for producers who have smaller organic tree fruit blocks where pheromone mating disruption products may not be effective.

Please submit your questions or comments regarding organic tree fruit products that you would like addressed in future articles to the network coordinator or via email to [maury.wills@idals.state.ia.us](mailto:maury.wills@idals.state.ia.us).  
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2005 Field Days  
Upper Midwest Organic Tree Fruit Growers Network  
**REGISTRATION FORM**

Please mark how many individuals from your farm plan to attend each of the following field days:

# attending

	June 21 Hoch Orchard, La Crescent, MN
	July 15 Countryside Orchard, Lansing IA
	<b><u>Total count</u></b>

Your name(s): 1.	
2.	
3.	
Farm Name:	
Street Address:	
City/Town:	Zip:
Phone:	Email:

**Each workshop costs \$15.00 per person to cover refreshments and materials.**

**Total count x \$15.00 = amount due \$ \_\_\_\_\_**

Please make a check out to MOSES and include with this form.

**Mail this form and payment at least one week before the field day to:**

Deirdre Birmingham, Organic Tree Fruit Grower Network, 7258 Kelly Rd, Mineral Point, WI 53565

*Field days will be from 10 AM to 3 PM, rain or shine.*

*Registration will be confirmed by email with directions to the field days.*

**June 21: Hoch Orchard, La Crescent MN.** Hosts: Harry Hoch and family

Guests: Mark Whalon, Ph.D., Michigan State University, "Orchard Ecological Assessment" and Emily Hoover, Ph.D., University of Minnesota on "Orchard Floor Management."

Additional Sponsor: Minnesota Department of Agriculture, IPM Program

**July 15 Countryside Orchard, Lansing IA.** Hosts: Jamie Bjornsen, owner; Bob Johnson, orchard consultant.

All interested in more ecological approaches to tree fruit production are welcome.  
No host claims to have all the answers. They are simply sharing what they are learning.

*Any questions, contact Deirdre at [deirdeb@mindspring.com](mailto:deirdeb@mindspring.com) or 608-967-2362.*

*For more information on the Upper Midwest Organic Tree Fruit Growers,  
visit our webpage at <http://www.mosesorganic.org/treefruit/intro.htm>*



## Useful Resources

**Previous issues of this “Just Picked” Newsletter are available on the Network webpage** [www.mosesorganic.org/treefruit/intro.htm](http://www.mosesorganic.org/treefruit/intro.htm). You may also receive past issues by contacting the Network Coordinator.

The **Network’s web page** is a valuable resource. One section is titled “Resources.” Under the Resources section is a comprehensive listing of many items that you can find from ATTRA, other web-based resources, or via mail order.

**Don’t Forget: you can join or un-join the Network’s list-serv at anytime.  
For information, please email the list-serv moderator at  
[deirdreb@mindspring.com](mailto:deirdreb@mindspring.com)**

*This is a project of the Midwest Organic and Sustainable Education Service (MOSES)  
for more information about MOSES, visit our website at [www.mosesorganic.org](http://www.mosesorganic.org) or contact us  
at 715-772-3153, [info@mosesorganic.org](mailto:info@mosesorganic.org) or PO Box 339, Spring Valley, WI 54767  
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