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Small Farm News

Small Farm Program • Cooperative Extension • University of California

'Week of Blueberries' events planned for May

If there's one specialty crop that has California farmers abuzz, it's blueberries. Previously considered an Oregon crop on the West Coast, blueberries have been grown profitably in warmer California climates—and for high-dollar market windows—in an array of southern highbush varieties for nearly 10 years. But farmer interest and consumer demand for the little antioxidant jewels seem to be going strong.

To meet the ongoing interest of farmers and consumers alike, University of California blueberry researchers are hosting "A Week of Blueberries." The collection of blueberry-themed workshops and field days will take place May 19-22 at locations along California's Central Coast, South Coast and Central Valley. The various events are co-sponsored by the UC Small Farm Program, the Hansen Trust, USDA Risk Management Agency, and UC Cooperative Extension.

A common theme in many of the presentations will be planning for increased market competition, according to field day organizer Manuel Jimenez, Small Farm Program advisor in Tulare County.

"Even though demand continues to go up, I think the supply on our side has been going up very, very fast in a short period of time. All that new blueberry acreage is coming into production right about now," he said. "Growers need to realize that added acreage some place else means more competition and possibly fewer places to sell our blueberries."

Blueberry experts from Florida, Oregon and Chile have been invited to share their experiences in expanding blueberry markets and in solving blueberry

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Ben Terry is one of the Sonoma County Meat Buying Club's pork producers. Producers are profiled in the club's newsletter each month.

Meat CSAs: Projects test how small ranchers can direct market

By Brenda Dawson, Communications Coordinator

At the recent UC Niche Meats Marketing Conference in Modesto, one presentation had ranchers in the room eagerly asking questions. The presenter? An operator of a meat CSA. The first question from a specialty meats producer was, "Exactly what is a CSA?"

While the question may seem behind-the-times to many farmers, the idea of a meat CSA is relatively rare. In fact, researchers believe you could probably count the number of California meat CSAs or meat buying clubs on one hand.

In community supported agriculture (CSA), customers pay for multi-month memberships in exchange for their share of a farm's harvest, usually received as boxes full of fresh fruits and vegetables. This direct marketing structure has increased in popularity as more consumers seek ways to connect with locally produced food. But the challenges inherent in meat processing—including complex regulations and accessibility to certified slaughter and packing facilities—add to the complications a small-scale operator could face in starting up a meat CSA.

To explore the concept, UC Cooperative Extension in Sonoma County has started a pilot project called the Sonoma County Meat Buying Club. Stephanie Larson, livestock advisor in Sonoma County, has been working on the project

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In this Issue

Director's Message

Small-scale farmers can be leaders in local food markets


Shermain Hardesty

I am seeing the phrase "locally produced" in many places these days—at the grocery store, in specialty food shops and in restaurants. Since the beginning of the year, three reporters have interviewed me about this popular food trend.

Interest in buying local is driven by both personal and environmental factors. Some consumers buy locally produced food, such as tree-ripened fruit, for its superb flavor and eating quality. Others want to "put a face on the food they eat," and feel that the food they buy directly from the farmer is safer. Many consumers desire to support local producers and/or to reduce carbon emissions by decreasing their food miles.

According to a report recently released by the Hartman Group (a leading food marketing research firm), over three-fourths of consumers are buying products they perceive to be locally produced. There is no single definition of what "local" means; however, 87 percent partly or completely agreed that "locally produced" meant "food products grown within 100 miles of me." Among consumers who buy locally produced foods, the Hartman Group determined that 61 percent are buying frequently at farmers markets and 44 percent at farm stands.

This increased interest in locally produced foods provides an excellent opportunity for small producers. According to the 2002 Census of Agriculture, direct marketing is considerably more important to smaller producers than larger producers in California. Sales direct to consumers comprised 2.2 percent of the total revenues of producers with sales under $250,000, compared to only 0.3 percent of the total revenues of larger producers. (By the way, if you have not yet completed your Census form, please do so because the information is used to support USDA funding of programs for small producers!)

The challenge to capitalizing on this opportunity is developing efficient distribution channels. I recently completed research indicating that farmers markets are very labor intensive relative to the net revenues they generate for producers. Community supported agriculture programs (CSAs) generate significantly greater net revenues to producers.

Can CSA models be modified to appeal to more consumers? At the Small Farm Conference, Dr. Preston Maring described how Kaiser Permanente is developing a program to have weekly produce boxes delivered to Kaiser employees at their workplace. Capay Valley Organic offers varying produce box sizes and delivers directly to homes. As described on the front page of this newsletter, Sonoma County's UC Cooperative Extension has launched a buying club for locally produced meats. The Community Alliance with Family Farmers has established Growers Collaboratives in three areas to distribute locally grown produce to institutions, such as colleges and hospitals.

It is getting easier to buy locally produced foods. But we have a long way to go. Most consumers buy their food at the grocery store because it is convenient. A logical solution would be for our independent grocers to expand their local food offerings—produce, meat and poultry, dairy products, juices and shelf-stable foods.

Getting such food items from producers to the grocers will require developing local processing facilities and distribution systems. How many producers are willing to work on such efforts? Where will the financing come from? Who will step up and provide the entrepreneurial leadership? Will local governments support or impede these projects? There are many production, marketing, financing, policy and management issues that must be addressed. Individuals from many sectors need to come to the table and collaborate to fully develop local food markets.

Shermain D Hardesty

2007 CENSUS OF AGRICULTURE

Make your farm count

USDA NASS has announced it is still accepting Census of Agriculture forms.

Though the UC Small Farm Program is not involved in conducting the census, our program's funding and research count on you being accurately counted. For more information, call (888) 424-7828 or visit www.agcensus.usda.gov.

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The Small Farm Program is a statewide research and outreach program that serves the needs of California's small-scale farmers. For more, visit www.sfc.ucdavis.edu

Week of Blueberries— *From Page 1*

production issues. Jimenez said presentations may also provide some tips on how California growers can better compete with established berry-growing regions.

UC blueberry researchers estimate California has approximately 5,000 acres of commercial blueberry plantings. Most early blueberry acreage was planted on smaller farms, though larger parcels are now currently being converted to blueberries. After two or three years of establishment, blueberry plants can produce fruit commercially for more than 20 years.

The state's different climate regions present varying challenges to regional blueberry growers and marketers, said Ben Faber, UCCE farm advisor and organizer of blueberry workshops May 19 and May 20 in Ventura County.

"The evergreen blueberry grown on the coast, which can produce blueberries between December and March, is limited to about 10 miles from the ocean—where land is at a premium," he said. "I seriously think we could profitably develop 10,000 acres of coastal blueberries [for that market window] if we could find the acreage."

A recent cost study conducted by Mark Gaskell, Ben Faber and other UC researchers estimated the cost to start up 10 acres of conventional blueberries at approximately $6,807 per acre, over three years. Annual production costs were estimated to require prices of $4.40 per pound to break even. More blueberry cost studies can be found at http://coststudies.ucdavis.edu.

The first event of Blueberry Week will be a workshop, 1-5 p.m. May 19 at Faulkner Farm, 14292 Telegraph Road in Santa Paula. The workshop will include classroom presentations on production topics such as new varieties, pruning strategies, frost management, bed management and fertilizing evergreen plants.

The annual Blueberry Field Day at Kearney Agricultural Center in Parlier will be 8 a.m. to 3 p.m. May 21, with focus on both blueberry field trials and classroom presentations on marketing and production. There will also be time for another important blueberry pastime—tasting. With more than 50 blueberry varieties currently being grown, farmers can evaluate for themselves an array of blueberry plants and fruit at Kearney Agricultural Center.

Half-day field days at commercial blueberry plantings will be held 9 a.m. to noon May 20 at Gerry Ranch in Camarillo and May 22 at Chavez Ranch in Nipomo. These events will focus on pruning, fertilization, and irrigation.

More information about blueberry events organized by Small Farm Program advisors can be found in the online calendar at www.sfc.ucdavis.edu. For questions, please call (530) 752-8136.

program news

A Food Safety Workshop for Hispanic Producers was held March 13 at Kearney Agricultural Center, with 46 farmers attending the Spanish-language meeting. SFP advisors **Richard Molinar** organized the meeting, and **Manuel Jimenez** was a speaker. The event was sponsored by the Small Farm Program, UCCE and Sunnyside Packing Company. UC Davis researchers also gave presentations.

Strawberry Production from Organic Nutrient Sources was the topic of a research paper presented by **Mark Gaskell**, SFP advisor in Santa Barbara and San Luis Obispo Counties, at the International Strawberry Symposium March 5 in Huelva, Spain.

California Agriculture at the Urban Edge and a study of six affected communities were the topics of a project presented preliminarily at the Land Use Planning Workgroup Meeting, April 3 at UC Davis. **Ramiro Lobo**, SFP advisor in San Diego County, was one of the co-authors of the study, planned for submission to *California Agriculture*.

The New York Times found a blueberry expert in **Mark Gaskell**, citing his work with early-producing blueberry varieties in a gardening article printed March 27.

Regional Demand for Niche Meats in Northern California was addressed by **Shermain Hardesty**, SFP Director, at the University of California's Niche Meat Marketing Conference on March 27 in Modesto.

Organic Strawberry Production meeting was held April 16 in Guadalupe, organized by **Mark Gaskell**. The meeting included a visit to organic strawberry field trials and topics such as nitrogen management, weed management, and issues with organic nursery plants.

Demand and Marketing for Agitourism were addressed by **Kristin Reynolds**, SFP Program Representative, at the Agritourism Conference held April 16 in Amador County. Her presentation was based on recent research briefs, available at www.sfc.ucdavis.edu/agritourism.

Hmong Growers Meet at Farm Conference was the headline of an article in Asian Week's national section March 7 that featured the outreach work of **Michael Yang**, SFP Program Representative, and wife Phoua Yang of USDA.

Regulatory Impacts on Southeast Asian Farms was the topic of a presentation given by **Richard Molinar** Feb. 4 at the Western Center for Agricultural Health & Safety, UC Davis.

A Caneberry Field Tour in Watsonville was hosted by **Mark Gaskell** on March 26 as part of the Pomology Extension Coordinating Conference.

Pizza farmer, Santa Clara advisor honored with '08 Pedro Ilic Awards

An innovative farmer-turned-marketer and a Small Farm Program advisor who aids non-English speaking farmers are the recipients of the 2008 Pedro Ilic Awards. The awards, which honor dedication to small-scale farming, were presented by Shermain Hardesty, on behalf of the University of California Small Farm Program at the California Small Farm Conference, Feb. 25 in Visalia.

Honored with the Pedro Ilic Award for "outstanding farmer" is Darren Schmall, a fourth-generation Madera grower who has made a name for himself nationally as the "Pizza Farmer."

Schmall earned his moniker by teaching children about agriculture though a pie-shaped demonstration garden that grows pizza—or at least, its agricultural ingredients. He has parlayed his own farming experience and interest in promoting agriculture into three separate but related business ventures: an agritourism operation, Pizza Farm licensing, and a consulting company. He continues to live and work on his family's 188-acre vineyard.

Darren Schmall, left, and Aziz Baameur, right, were presented the 2008 Pedro Ilic Awards, by Shermain Hardesty, center, at the California Small Farm Conference.

The award for "outstanding educator" was presented to Aziz Baameur, UC Small Farm Program advisor headquartered in Santa Clara County.

"Aziz brings new creative activities to his extension services, such as the first-ever water quality educational program delivered in Chinese for growers in Santa Clara, Santa Cruz and San Benito Counties," wrote Maria de la Fuente, UCCE Santa Clara Director, in her nomination. "His contributions are outstanding in training non-English speaking farmers."

The awards are named for Fresno County small farms advisor Pedro Ilic, whose untimely death in 1994 prompted the UC Small Farm Program to annually honor those who carry out his legacy of personal commitment to small-scale and family farming. Ilic was one of the original advisors of the Small Farm Program, when it was established in 1979.

Conference presents Jimenez with first-ever Tom Haller Award

Manuel Jimenez, Small Farm Program advisor in Tulare County, was honored with the first-ever Tom Haller award at the California Small Farm Conference, Feb. 25 in Visalia.

"My heart has always been in small farms," Jimenez said. "Those kinds of businesses grow good people."

It is his commitment to "growing good people" through agriculture in his local community that helped set Jimenez apart. In his off-hours, he and wife Olga Jimenez spearhead the Bravo Lake Botanical Garden, a community effort believed to be the first agricultural botanical garden in California. The garden began as a youth service project in the small city of Woodlake in 1993, and has evolved into a nonprofit volunteer organization—Woodlake Pride—that not only beautifies the community, but engages the city's youth in an array of agricultural pursuits. Jimenez was raised in Woodlake, where he continues to live today.

Jimenez has worked as a Small Farm Program advisor with UC Cooperative Extension in Tulare County since 1980 and holds a bachelor's degree in plant science from CSU Fresno. He has been active with the California Small Farm Conference since its inception.

This is the first presentation of the award, given by the California Small Farm Conference to recognize exceptional commitment to helping small farms thrive and excel. Tom Haller, the award's namesake, has played important roles in the creation of the Conference, the Community Alliance with Family Farmers and the UC Small Farm Program. He was on hand at the conference banquet to present the award to Jimenez.

Allen Moy, president of the California Small Farm Conference, emphasized that Jimenez was honored for his personal commitment to small scale-farmers, in addition to his professional achievements.

"He goes to work every day and works directly with farmers," Moy said. "But then he goes home at night and works directly with kids in agriculture—and that kind of dedication is what we want to recognize in this award."

Small Farm Program advisor Manuel Jimenez, and wife Olga Jimenez, were honored with the Tom Haller Award.

Woodlake Pride volunteers also attended the banquet. Lizette Martinez, 18, has volunteered at the garden since she was 10.

"They do this for the love of the community. There's always a place to go after school and in the summer," said the high school senior. "I appreciate Manuel and Olga so much for doing this."

Above, Richard Molinar and participants tour Baloian Farms in a hands-on discussion of food safety for small farms. At right, Maneul Jimenez discusses planting with the use of tunnels at the season extension short course.

Small Farm Conference draws 400 farmers, others to Visalia events

More than 400 farmers and their supporters participated in the 21st annual California Small Farm Conference, held Feb. 24-26 in Visalia. The three-day conference offered educational opportunities for new farmers, farmers market managers, and experienced farmers with workshops on marketing strategies, government resources, management and finance, and agricultural hot topics.

As an organizing sponsor of the event, advisors and staff of the UC Small Farm Program played an integral role in speaking and spearheading workshops.

The first day of the conference consisted of day-long short courses. Small Farm Program advisor Manuel Jimenez organized a short course called "Hoop Houses and Other Season Extension Opportunities," which included a presentation by fellow SFP advisor Mark Gaskell. The course included a tour of various tunnels and hoop house styles in use at Kearney Agricultural Center, discussions with a representative from an international equipment supplier, and informational presentations.

The 2009 California Small Farm Conference is planned for March 1-3 in Sacramento.

Another short course, organized by SFP advisor Richard Molinar, focused on "Small Farm Food Safety," with an open and extensive look at the food safety measures taken at Baloian Farms, which is a signatory of the Leafy Greens Marketing Agreement. UC Davis food safety expert Trevor Suslow also provided detailed information and demonstrations for growers about topics such as water chlorination, pH levels, and turbidity measurements.

The Small Farm Program also participated in workshops on specialty crops (Jimenez and Aziz Baameur), compliance with regulations (Molinar), weed management (Molinar), personal risk management for women farmers (Kristin Reynolds), extending your market season (Jimenez), enterprise selection (Ramiro Lobo), production issues for new farmers (Michael Yang), and record keeping for new farmers (Lobo).

Small Farm Program advisor Aziz Baameur presents a round-up of specialty crops.

For more information about this year's conference, and plans for next year's, visit www.californiafarmconference.com.

Mini watermelon variety trial results in from Fresno County, 2006

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Above, the rind of a miniature watermelon is measured. Relatively thin rinds are usually valued in miniature watermelon varieties.

At left, core samples are taken from each sample miniature watermelon, placed in a plastic bag and cooled before Brix measurements were determined at the laboratory. Brix is a measurement of the soluble solids in a fruit, commonly used as an indication of the fruit's sugar level.

Four types of watermelons are available in supermarkets. Older diploid (seeded) watermelons have been a major part of the market for many years and weigh 18-35 pounds. The large seedless triploid watermelons usually weigh 15-22 pounds and have been a popular item since 1988. The icebox size melons are generally 6-12 pounds each and have been available for at least eight years. The newest melons in the marketplace are seedless "mini" or "personal" watermelons (sometimes called "palm" melons). These newer triploid personal size melons, weighing 3-7 pounds each, first became widely available in markets in 2003 and currently make up only about 8.5 percent of total U.S. production. Besides the smaller size, advertisers also promote a thinner rind, which means more edible flesh. A trade off, however, may be a higher degree of internal bruising if not handled carefully. Varieties such as PureHeart, Petite Perfection, and Bambino were some of the first commercial varieties.

Materials and Methods

A trial was established at the UC Kearney Research and Extension Center in Parlier in 2006 to evaluate nine varieties of mini watermelons. A winter crop of vetch was planted and disked in for organic matter and nitrogen additions. Transplants were set in the ground on May 30, 2006 into black plastic mulched beds spaced 80 inches from center to center with 3-inch buried drip irrigation. Plant spacing was 24 inches between the plants down the row. Soil type is a Hanford fine sandy loam. The pollenizer SP1 was transplanted at the same time using the in-row ratio of 3:1 (3 triploid plants:1 pollenizer). Honeybees were set out just prior to bloom for pollination.

Phytamin 800 (7-0-0) organic fertilizer was applied biweekly at the rate of 2.5 gallons per acre for a total of four applications (10 gallons) beginning June 13, 2006. Pest control included applications of Pyganic pyrethrin insecticide, Trilogy (two applications), and Organocide (sesame oil) for the control of melon aphids. Weeds were controlled with black plastic mulch and hand pulling.

Each plot consisted of 18 triploid plants and 5 pollenizer plants.

A 30-foot section from each plot of the trial was harvested three times in 2006—July 26, August 2, and August 8—and evaluated for total number, total weight, and marketable fruits (57 days after transplanting). In addition, other quality parameters measured were melon diameter, rind thickness, rind color, flesh color, and Brix (soluble solids, or sugar). The quality parameters were measured from five randomly selected melons from each plot, each replication, and each harvest. Each melon was cored from the outside and the core sample taken back to the lab for Brix measurements. Each of the five melons were halved for diameter and thickness measurements (in centimeters). Rind color was described as striped or solid, light or dark backgrounds, and the flesh color was rated on a 4-point scale where 1 = pink/red, 2 = orange-red, 3 = yellow, and 4 = dark red.

Yield

For each of the three harvests there were significant differences in numbers of fruits harvested and yields. For example, Valdoria had significantly higher numbers of fruit and the highest yield in the first harvest, but not by the end of all three harvests. There was no significant difference in total numbers of melons at the end of three harvests. Poquito had the highest yield in the second harvest. The yield in pounds for Poquito at the end of three harvests was significantly higher than Little Deuce Coupe, Precious Petite, RWT 8189, and Bibo, but not

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Mini watermelon — From Page 6

significantly different from Mini Yellow, Valdoria, Vanessa, or Petite Perfection (table 1).

Average melon weight

This calculation was made by dividing the total yield from each plot by the number of melons harvested. Weights were determined for each harvest and for the overall season. The average weight of the melons ranged from 3.0 to 7.2 pounds, all of which fall within the "mini" personal watermelon classification. The smallest melon in this trial was Bibo, averaging 3 pounds per melon over the season. Poquito (7.2) and Mini Yellow (6.2) were clearly the largest melons in the trial and were significantly different from the rest and from each other.

Brix (Soluble Solids, Sugar)

From each harvest and each replication, five melons were randomly selected and a core sample removed and placed in a plastic bag and cooled. They were taken to our laboratory where the Brix was determined for each sample. An average for the five samples was then taken for each variety at each harvest, for the four replications and averaged. There were highly significant differences in sugar content between varieties (see table 1). RWT 8189, Bibo, and Little Deuce Coupe were significantly higher in sugars than all of the rest, with Brix measurements of 12, 11.9, and 11.7 respectively, but did not differ significantly from each other. The lowest Brix reading was from Valdoria at 9.9.

Table 1. Season total yield and quality data.

VARIETY	Yield (tons/ acre)	Number (melons/ acre)	Weight (avg. lbs/ melon)	Diameter (cm)	Rind Thickness (cm)	Sugars (Brix)
Petite Perfection	24.0	11216.6	4.2	15.1	0.55	10.9
Precious Petite	20.1	11978.9	3.3	14.2	0.60	10.0
Little Deuce Coupe	20.5	9964.3	4.1	15.2	0.60	11.7
Bibo	14.6	9746.5	3.0	13.4	0.45	11.9
RWT 8189	16.1	9365.3	3.4	13.9	0.48	12.0
Poquito	31.8	8711.9	7.2	19.3	1.80	10.1
Mini Yellow	25.3	8330.8	6.2	15.9	1.15	10.5
Vanessa	24.2	9038.6	5.3	16.6	1.30	9.9
Valdoria	24.7	9855.4	5.1	17.3	1.23	9.9

Rind diameter

We did find very significant differences in rind thickness of the varieties. The thinnest rinds were found in Bibo, RWT 8189, and Petite Perfection, which were significantly different from the rest; however, Petite Perfection did not differ from Precious Petite (0.60) or Little Deuce Coupe (0.60). The thickest rind and significantly different from all of the rest was Poquito (1.8 cm).

Summary

Though there was no significant difference between the total number of melons produced by each variety, there was a significant difference in the yield (lbs/acre) with Poquito giving the highest yield and Bibo the lowest. Bibo, Precious Petite, and RWT 8189 were among the smallest of the group. RWT 8189, Bibo, and Little Deuce Coupe (and Petite Perfection) were the sweetest and had some of the thinnest rinds.

New cost studies examine production costs

The University of California, Davis, and UC Cooperative Extension have released 14 new cost-of-production studies for growing high-density olives, table grapes, winegrapes, fresh market tomatoes, onions, berries, apples and dates.

Each study is based upon a hypothetical farm operation using practices common to a region. Assumptions used to identify current costs and operations for the individual crops, material inputs, cash and no-cash overhead are described.

An analysis table shows profits over a range of prices and yields. Other tables show the monthly cash costs by cultural operations, the costs and returns per acre showing material inputs, hourly equipment costs, and the whole farm annual equipment, investment and business overhead costs.

Topics of new cost studies include establishing a super high-density olive orchard in the San Joaquin and Sacramento valleys; establishing and producing table grapes in the San Joaquin Valley (separate reports for Thompson Seedlesss, Flame Seedless, Redglobe and Crimson Seedless); establishing a vineyard and producing wine grapes on the North Coast (separate reports for red varieties-Cabernet Sauvignon and white varieties-Sauvignon Blanc); producing onions in the Intermountain region; producing fresh market tomatoes in the San Joaquin Valley; establishing and producing apples in the Intermountain region; establishing a date palm orchard and producing dates in the Coachella Valley; and establishing and producing blueberries on the Central Coast (separate reports for conventional and organic blueberries).

The cost studies are available online at http://coststudies.ucdavis.edu, at county UCCE offices, by mail from the University of California, Department of Agricultural and Resource Economics, One Shields Ave., Davis, CA 95616; or may be requested by calling (530) 752-1517.

- Richard DeMoura

Examining urban agriculture in Alameda County and elsewhere

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At right, this parcel of former farmland in Alameda County has been surrounded by urban development.

According to a recent American Farmland Trust study, 538,273 acres of land were urbanized between 1990 and 2004, two-thirds of which was agricultural land.[1] As urban areas grow, many farmers and ranchers whose operations were once far from the city may find themselves producing on the "fringe," or the edge of newly urbanized areas. Meanwhile, urban farmers and gardeners focus on producing food or fiber within cities and towns, typically on a relatively small-scale (e.g., 1/8 – 2 acres). Bringing these two broad categories together, urban and peri-urban agriculture has been defined as:

> an industry that produces, processes and markets food and fuel, largely in response to the daily demand of consumers within a town, city, or metropolis, on land and water dispersed throughout the urban and peri-urban area, applying intensive production methods, using and reusing natural resources and urban wastes, to yield a diversity of crops and livestock.[2]

Within this framework, both groups of producers—in inner cities and along urban edges—must contend not only with the inherent challenges of agriculture (such as weather and pests), but also with social factors related to their proximity to commercial and residential neighbors. In order to identify overlapping sets of challenges by urban and peri-urban producers, Kristin Reynolds has been conducting a study in Alameda County. Interviews have been conducted with representatives from more than 50 gardens, farms and ranches in the county, and findings of the study will be made available through the Small Farm Program at a later date.

To complement field data collected over the past months, Reynolds has also attended a number of events related to urban and urban edge agriculture, including a recent conference, "Pollinating Our Future" held in Milwaukee, WI. The goal of the conference was to "provide stimulating ideas, present successful experiences of urban agriculture initiatives, [and] address important and controversial issues facing cities today." Workshop tracks were focused on four themes: Food Justice; Garden as Community; Policy and Planning; and Enterprise Development.

Sprouts and micro greens grow in this Growing Power greenhouse in urban Milwaukee.

The first day of the conference included intensive workshops on Small Plot Intensive (SPIN) farming, composting/vermiculture, and food policy councils, as well as tours of several urban agriculture sites in Milwaukee. One tour of Growing Power, a non-profit urban agriculture organization based in Chicago and Milwaukee, guided participants through the organization's urban farm facility, including greenhouses where sprouted greens were produced for local consumption, and an innovative aquaponics system used to produce fish for local markets. Also on-site were dairy goats, chickens, honey bees, and turkeys.

The second day of the conference included a variety of workshops. Participants in "Immigrant Farmers in the City" workshop learned about how an agricultural training center had assisted immigrant farmers in overcoming obstacles to successful farming in the Milwaukee area. A workshop titled "The Urban Livestock Movement: Bringing Animals Back In" led by Dr. Jennifer Blecha of San Francisco State University, gave an overview of historical and contemporary livestock production in U.S. cities, based on Blecha's recent dissertation research. Other workshops were more interactive, such as a session on barriers and obstacles to widespread adoption of urban agriculture, and a discussion that solicited participant input on a newly formed network, the North American Urban and Peri-Urban Agriculture Alliance, which will include a clearinghouse for informa-

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1 Thomson, E. "Paving Paradise: A New Perspective on California Farmland Conservation." American Farmland Trust, Nov. 2007. www.farmland.org.
2 Smit, J., Ratta, A., and Nasr, J. 1996. Urban Agriculture: Food, Jobs and Sustainable Cities. New York: UNDP.

Molinar helps South Africans grow lemongrass

By Jeannette Warnert, ANR Public Information Representative

Richard Molinar, UC small farm advisor for Fresno County, traveled to South Africa last fall to teach small farmers how to grow lemongrass.

The red-colored herbal tea rooibos is currently an important crop in the country. However, due to an oversupply of rooibos, U. S. Agency for International Development provided funding to Florida A & M University to teach farmers about producing alternative plants that can be combined with rooibos to make specialty teas.

Florida A & M University recruited Molinar because of his experience researching organic lemongrass production at the Kearney Research and Extension Center.

On short notice, Molinar made the 26-hour plane trip to Cape Town and then traveled for three hours by truck on a treacherous road to Wupperthal. He spent the next 10 days in the rural village and in remote communities accessible only by foot. In all, Molinar gave six presentations and helped plant nine lemongrass plots on local farms. In Wupperthal, he planted a quarter-acre demonstration plot of lemongrass.

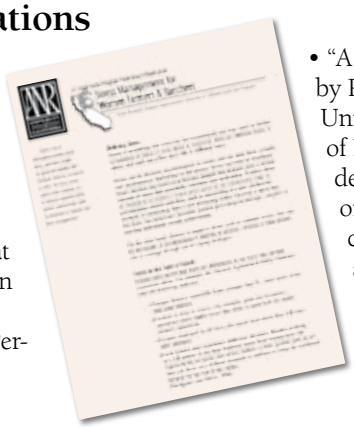
Since returning home, he is maintaining contact with the villagers via e-mail (there are two computers in the area) and has shipped several lemongrass varieties for the farmers to try.

Richard Molinar, right, advises these farmers in Wupperthal on growing lemongrass for specialty teas.

New Small Farm Program publications

Two new preliminary publications are available from the Small Farm Program. Limited copies of each are available free of charge, by contacting the Small Farm Center, (530) 752-8136 or sfcenter@ucdavis.edu.

• "Stress Management for Women Farmers and Ranchers" by Kristin Reynolds is a 6-page article that focuses on common stressors experienced by women on family farms. The publication was distributed at the California Small Farm Conference workshop, "Personal Risk Management for Women Farmers."



• "A Market-Driven Enterprise Screening Guide," by Ramiro Lobo, Larry Lev (Oregon State University) and Stuart Nakamoto (University of Hawaii), is a 16-page self-evaluation tool for determing the potential of planting a new crop or beginning a new enterprise. The guide includes a worksheet with 43 questions, which address the topics of marketing, knowledge, production, resources, risk, and priorities. The publication also includes a completed worksheet by a fictitious family farmer that readers may use as a guide.

Urban agriculture — *From Page 8*

tion those topics. Other workshop topics included competing in the marketplace, community economic development, and a Growing Food and Justice for All Initiative.

One additional feature of the event was a tasting of local agricultural products. Dinners held each evening of the conference featured not only artisanal Wisconsin cheese, but locally-produced meats, wines and even fresh vegetables—many of them grown in greenhouses for winter production in or around the urban areas of Milwaukee. A keynote address was given by Michael Ableman, founder of The Center for Urban Agriculture at Fairview Gardens in Goleta, CA.

The Pollinating Our Future conference brought together a broad spectrum of participants, including farmers producing on the edge of and within cities, university researchers, Cooperative Extension representatives from around the country, and members of organizations serving urban and peri-urban farmers. With the emerging fields of urban agriculture, and the increasing necessity of urban edge farmers and ranchers to contend with urban pressures, opportunities for networking, farmer-to-farmer problem-solving and innovation can be an important part of maintaining a viable system of agriculture on an urbanizing landscape.

For more information about the conference visit www.growurban.org.

Select pithaya varieties with red, fuschia, pink and white flesh from ongoing variety trials.

Pitahaya field test yields preliminary results

By Ramiro Lobo & Gary Bender

Pitahaya or Dragon Fruit (*Hylocereus spp.*) is a vining cactus native to tropical America and commercially grown in several countries. Pitahaya is already established and grown as a backyard plant in San Diego and other counties in California for its edible fruit. The fruit is especially popular among people from Southeast Asia and Latin America for fresh consumption or for decoration and special events. In addition, pitahaya is also becoming a trendy item in high-end restaurant menus, and demand is increasing among mainstream consumers because it is assumed to have high antioxidant activity.

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Pitahaya or dragon fruit has great potential for commercial production in Southern California because the demographics of the region, combined with small-scale production and the growth habits of the plant, make it an attractive alternative for local farmers. In addition, there is considerable interest among specialty produce marketers because fresh pitahaya fruit cannot be imported into the United States and local supply is almost non-existent.

This research project aims to develop production, economic and marketing information that may lead to the commercial production of pitahaya or dragon fruit by small-scale farmers in San Diego and other counties in Southern California.

VARIETY	Avg. Fruit Wt. (gms)	Avg. Brix Score	Days to Harvest	Color Skin/Flesh
Cebra	468	17.05	46	Red/Red
Rosa	384	17.01	45	Red/Red
Orejona	438	17.3	45	Red/Red
Lisa	465	17.02	44	Red/Red
Sin Espinas	393	16.5	43	Pink/Red
San Ignacio	552	15.6	48	Red/Red
Mexicana	495	14.04	40	Pink/White
Valdivia Roja	250	17.9	40	Red/Red
Bien Hoa Red	360	18.9	41	Greenish Red/Fuschia
Bien Hoa White	388	11.85	37	Pink/White
Delight	371	18.08	41	Red/Pinkish White
American Beauty	380	18.51	43	Greenish Red/Fuschia
Haley's Comet	482	16.7	38	Red/Fuschia
Physical Graffity	374	17.93	40	Red/Pink
Seoul Kitchen	518	12.36	41	Red/White

Plant materials from 18 commercially grown varieties or clones of pitahaya–all identified as self-fruitful–were used to establish a field trial to evaluate the performance of these varieties under growing conditions in Southern California. The first production year for most varieties was 2007. All varieties adapted relatively well to growing conditions in Southern California. However, there were marked differences among the varieties with regards to susceptibility to frost damage and sunburn, and in overall yield and fruit quality. Although results are not final, the project has provided much needed information for the establishment and growth of a pitahaya industry in California. The table and photos above summarize key preliminary results for 2007.

Meat clubs — From Page 1

along with Jacqueline Rotlisberger, coordinator of the club.

"Sonoma County has three CSAs for vegetables, so why can't we do meat?" Larson explained.

An initial survey conducted last summer yielded 300 responses from interested customers. Of those, the club began with 67 members. Currently in its third month of operation, the club has grown to 139 members. Members receive either 7, 15, or 25 lbs. of frozen meat each month in 1-3 lb. packages, depending on their level of membership. Memberships cost $55-$175 per month, over a minimum of three months.

"We are trying to make it more user-friendly, something that you would actually buy in a supermarket," Rotlisberger explained.

From an operator's standpoint, one of the prime advantages of a meat buying club is also one of its greatest challenges: The entire carcass of each animal is used, but fairly dividing up who gets a tenderloin and who gets a chuck roast can be tricky. The Sonoma club's sorting process has evolved over time from a loose art of shuffling meat packages to something closer to a science—easier now that their meat inventory has grown, delivery timelines have standardized, and records have been established of each customer's prior packages.

Each month the club divides up meat from about three head of cattle, three pigs, two goats, 25-30 ducks and five lambs, all of which are born and raised within 25 miles of Santa Rosa. Because there are few multi-species producers, the club sources its meat from multiple local ranchers. Along with their meat, members also receive a newsletter that highlights the various producers and provides recipe ideas from local chefs.

"We're giving them the whole animal, but they're used to buying just certain pieces," Larson explained. "We're finding people have forgotten how to cook—so [we give them] the recipe to go with it."

Larson pointed out that a critical part of the Sonoma Meat Buying Club is its proximity to USDA processing and wrap plants. The club operates in a close partnership with Sonoma Direct, a USDA cut-and-wrap facility. In addition to cutting and wrapping, the company also transports the carcasses from the slaughter facilities, stores the club's frozen meat inventory, and delivers the packaged meat to customer drop-offs. For this pilot project, Sonoma Direct is also the prime financier—paying the producers by hot carcass weight and receiving payment from club members.

As for administrative duties, Rotlisberger estimates that she spends about one week's work per month on membership details like the newsletter and recipe cards, and another two weeks' worth of time sourcing meat, servicing customers, packaging and coordinating delivery.

One of the financial goals of the pilot project is for the club to be able to pay its own administrative overhead. Larson estimates that once such a club is well established, administrative tasks could be completed by a part-time employee.

The Sonoma Meat Buying Club is not UC Cooperative Extension's only foray into a meat CSA. In 2006 PlacerGrown, a collaborative CSA in Placer County, offered meat in addition to its standard harvest boxes and was considered one of the first meat CSAs in California. Though the PlacerGrown CSA is not being operated this year, Roger Ingram, UCCE Placer County farm advisor, is working on another way to market meat directly.

He has met twice with a small group of interested livestock producers to discuss options for a meat buyers club this year.

Instead of the CSA-style membership of the Sonoma club, Ingram favors a model based on the "metropolitan buying clubs" operated by Joel Salatin, the owner of Polyface Farms in Virginia and a subject of the book *Omnivore's Dilemma*. Salatin's farm produces beef, pork and poultry so he is the only supplier to his buying clubs. Instead of multiple-month memberships, club customers submit orders each month, based on available inventory, and delivery sites are determined by a minimum total order (e.g. $1,000).

Many of the challenges Ingram is currently debating are the details of having multiple producers supply a collaborative buying club. Questions remain regarding pricing, accounting, adding new producers, identifying products, determining quality standards and setting up an appropriate legal entity for financing.

"Right now I have more questions than I have answers," Ingram said.

Producers who are interested in joining or starting a meat buyers club are encouraged to contact Stephanie Larson at (707) 565-2621 or slarson@ucdavis.edu, or Roger Ingram at (530) 889-7385 or rsingram@ucdavis.edu.

For more about the Sonoma County Meat Buying Club, visit www.ucanr.org/socombc. To read more about niche meat marketing, visit http://ceplacer.ucdavis.edu/livestock.

Tips from the Sonoma Meat Buying Club's experience so far:

- "At some point you're going to have a USDA cut-and-wrap inspector looking over your shoulder," Larson said. "I would sit down with him ahead of time, definitely." Meat CSAs are still unfamiliar to many inspectors.
- "Make sure you have an agreement with your producers that they can sign, a set of standards that they're going to meet for the meat buying club," Rotlisberger said. This will make marketing and label-approval easier. Another tip: If you want your own label, seek approval from USDA as early as possible.
- Computers make club administrative tasks easier. The cuts each customer receives are tracked in a database, and most membership communication is done by e-mail or through their website, www.ucanr.org/socombc.

Sonoma County Meat Buying Club packages have been sized at 1-3 lbs. to approximate cuts sold in stores.

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upcoming events

May 19-22: Week of Blueberries
Workshops and field days on blueberry production and marketing at various locations throughout the state. See article on p. 1.

May 30: Maximize Your Farmers Market Experience
A workshop for farmers market vendors will be held 1-4 p.m. May 30 in Tuolumne County. The workshop will provide training on improving booth appearance, customer service and customer education; techniques to extend your growing season; factoring the cost of production into prices; food safety tips for samples; certification requirements; and developing on-farm sales. Shermain Hardesty, director of the Small Farm Program, will also be speaking. The meeting will be held at 18440 Striker Court in Sonora. Registration is $5, due by May 27. For more information, contact Scott Oneto at (209) 533-5695 or sroneto@ucdavis.edu.

May 30: Food Safety Seminar
A free workshop and seminar on food safety will be held May 30 at the UC Cooperative Extension office in Fresno, 1720 South Maple Ave. This event is co-sponsored by the UC Small Farm Program. For more information about this event, contact Richard Molinar, (559) 456-7555 or rhmolinar@ucdavis.edu.

June 18 - 19: Symposium on Agricultural Research and Extension
The Symposium on Agricultural Research and Extension will be held from noon June 18 to noon June 19 at the Marriot Courtyard Sacramento Cal Expo, 1782 Tribute Road, in Sacramento. The event is sponsored by UC Agriculture & Natural Resources and by the California Commodity Committee. The symposium is planned to assist participants in developing a long-term strategy for promoting and funding commodity research and extension work. Presenters will include professionals from USDA, Cal Poly, University of California, California Department of Food & Agriculture, and commodity boards. Registration is available at http://forestry.berkeley.edu/ccc. For more information, contact Sherry Cooper at (530) 224-4902 or slcooper@nature.berkeley.edu.

July 10: Mini Watermelon Field Day
A tour of miniature watermelon field trials and informational presentations will be held July 10 at UC Kearney Agricultural Center, 9240 South Riverbend Ave. in Parlier. The event will be free to attend, and is co-sponsored by the UC Small Farm Program. For more information, contact Richard Molinar, (559) 456-7555 or rhmolinar@ucdavis.edu.