

News & Notesof the UCSC Farm & Garden

Issue 174, Spring 2023

Spring Plant Sale—Downstream From the Atmospheric Rivers

If you are a home gardener who starts your own annual plants from seed at home, you know it has been a rough, slow start with all this cold, wet weather. This year it has been hard to sow summer crop seeds without all the indoor trappings for light, heat, and greenhouse space. We could not be more delighted to announce that the Center for Agroecology's Spring Plant Sale is BACK this year and better than ever. We've got your seedling needs covered. This year's plant sale is rich with interesting, delicious vegetables, herbs, and flowers.

Here's a little preview of just some of the more unusual, tasty or locally successful varieties we'll have on offer the weekend of April 29-30.

Solanaceous or nightshade family plants are subtropical and tropical perennials we treat as annuals in our temperate climate. That means they take a long time to grow from seed and get to transplant size. As a general rule with tomatoes, peppers, and eggplant, the smaller the fruit, the faster the harvest season, which is important if you live in a cool coastal region where you may be harvesting cherry tomatoes in August but not see your first heirloom slicing tomato until October.

Here are a few of varieties on offer that will perform well in your Monterey Bay Area garden:

Cherry Tomatoes (9 types) always do well in foggy parts of the Monterey Bay or even with a late start. They are also a good option for small space gardens since their light, prolific fruits and vining nature allow for productive vertical gardening; they also do well in containers. Consider growing locally-bred varieties like the 'Chadwick Cherry,' developed here on the UCSC campus. Alan Chadwick liked it because it was a cherry tomato that tasted like a slicing tomato, not a lump of sugar, as has become the trend in cherry tomatoes. So he grew it and he saved seed from the best of the best, and thus "evolved" his own place-based strain that features a vigorous climbing vine. Another home-town selection is the heirloom 'Camp Joy' tomato bred and propagated in Boulder Creek. If you love a very sweet flavor, try 'Super Sweet 100.' If you prefer some color distinction on your plate, the yellow and pink stripes of 'Pink Bumblebee' or the purple with black shoulders 'Black Cherry' tomato are nice.

Those who live inland, in the coastal mountains, perhaps have a very warm microclimate, or just harbor a sense of adventure can try the larger **slicing and heirloom varieties (14 types)**. Popular heirlooms include 'Red Brandywine,' 'Cherokee Purple,' and 'Costoluto Genovese.' Two slicing tomatoes that do well in foggy climates are 'Stupice,' an early fruiting determinate heirloom from Eastern Europe, and super early 'Oregon Spring' and 'Moskvich.'

Specialty tomatoes and tomatillos (8 types) for paste, drying, salsa, and jams

Famous for their deep, concentrated flavor and perfect for dying in sun or a dehydrator, you can't go wrong with 'San Marzano' or 'Principe Borghese.' The best salsa contains tomatillos and we have four varieties to choose from; heirloom 'De Milpa' has a purple blush on the fruit and is traditionally intercropped with corn, beans, and squash.

If you've never grown **husk cherries** (also known as ground cherries) you're in for a treat. 'Goldie' looks like a tomatillo with the papery wrapper but is in fact a sweet, golden yellow fruit. They're delicious eaten out of hand or cooked.

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The **23 peppers** on offer are also varieties that should do well in our area. We have to face the facts: hot peppers prefer a very hot climate and most of us just don't have enough heat to spice up our home grown peppers. At this plant sale we'll offer a variety of sweet to fairly spicy peppers with excellent flavor, shape, and color.

Sweet peppers (9 types) that melt in the mouth after roasting or liven up a salad raw include a gorgeous, red, 6-inch Bulgarian heirloom called 'Chervena Chushka' that grows on sturdy robust plants and is good for cool summers. We'll have 'Stocky Red Roaster,' a seed stabilized to breed true from a discontinued hybrid pepper that rivals the production and uniformity of hybrids, with the amazing sweet flesh and flavor of an heirloom.

Hot peppers (14 types) in order from mild to spicy

From mild to very spicy, we'll have 'Spanish Padron' and 'Shishito,' which are delicious fried and salted. 'El Eden' is great for drying and grinding for enchilada sauce. 'Mad Hatter' has a touch of heat in an unusual scotch bonnet shape but without the heat of a habanero. 'Krimson Lee' is a sweet, spicy frying pepper and 'Red Ember' cayenne is tasty fresh or powdered to spice up food. 'El Jefe' and 'Arriba' jalepeños combine well to make a beautiful jar of red, green, and yellow pickled jalepeños. 'Prik Chi Faa' is a Thai pepper used in chili dipping sauce and stir fries as well as powdered and smoked. 'Lady Choi' is a spicy yet flavorful Korean heirloom good fresh or dried, ripe or green. 'Hungarian Hot Wax' pepper goes through a sunset of colors while ripening and stays productive through cool weather. 'Szentesi Cherry' is another Hungarian hot pepper with a deep, rich flavor and a playful, round shape. This variety is ideal for pickling whole, stuffing, or drying for a spicy paprika. 'Hot Rod' serrano chilis get hotter as the fruit ripens; pick it at the stage you prefer. Finally, 'Fish' pepper is a rare heirloom that made its way from the Caribbean to the East Coast in the early 1800s where it was cultivated by enslaved African Americans and their descendants. A gorgeous plant, the leaves of Fish Pepper are variegated green and white and the fruits go through a multitude of color changes while maturing. This variety is truly a unique addition to your edible landscape.

Eggplants (10 types)—Asian and Italian

Growing eggplant can be a challenge when summers are cool, and like peppers and tomatoes, the best strategy for success is to grow Asian and small-fruiting varieties. This year we offer 10 types of eggplant. If you're looking for early, smaller-fruiting, round eggplant, try 'Calliope,' which grows with no spines, 'Beatrice,' which is a delicious 4-inch violet eggplant, or 'Rosa Bianca,' a lovely striped purple variety that is popular with chefs.

If you live in a warm summer area away from the coast you can enjoy the glossy purple 'Nadia,' 'Traviata,' or the striking white, egg-shaped 'Paloma.'

Elongated, easy to slice, Asian varieties include 'Kurume Long,' light purple 'Ping Tung Long,' and 'Petch Siam,' a small green heirloom eggplant popular in Indian and Thai cuisine. Finally, you can't go wrong with the variety 'Little Fingers,' which comes on early and grows clusters of finger-sized, dark purple fruits that can go whole into a stir fry.

And so much more

That's just a fraction of the complete list, which includes 20 varieties of winter and summer squash and 14 varieties of cucumbers, cabbage family plants (chois, napa, broccoli, cauliflower, collards, kale), numerous other leafy greens (think chard and cutting mixes), alliums (leeks, shallots, scallions), 10 varieties of basil, perilla/ shiso, parsley, cilantro, epazote, and several more annual herbs. On the annual flowers front, we will be offering 20 plus species and 50 plus varieties... oh so many pollinator friendly and cutting varieties of flowers. Always organically-grown, highest-quality plants, 100% of your purchases at the plant sale goes to support the Center for Agroecology. The rare and most desirable varieties will sell out quickly, so join or renew your membership to the Friends of the UCSC Farm and Garden for early entry and a 10% discount on all plants. https://agroecology. ucsc.edu/get-involved/join-the-friends/

For a complete plant list, see https://agroecology.ucsc.edu/news-events/events/plant-sale.html.

-Delise Weir



The plant sale will take place rain or shine in the Hay Barn *Photo: Sandra Morishige*

Calendar of Upcoming Events

Visit https://agroecology.ucsc.edu/news-events/events/index.html for more information and to register for these events.

Javier Zamora: Helping Farm Workers Succeed in California

Thursday, April 6, 3pm—5pm at the Hay Barn
Join us for an afternoon with Javier Zamora, local farmer
and leading voice in the organic community. Zamora will
share his experiences, challenges, and perspectives as a
local organic farmer. A Q&A session will follow the talk.
After the discussion, attendees can enjoy light refreshments and mingle time. Spanish interpretation will be
available.

Roses Are a Celebration! Starting Right with Organic Rose Growing

Saturday, April 22, 9am—12pm at the Chadwick Garden Learn how to grow organic roses in your garden with instructor Orin Martin. This hands-on workshop will cover varieties, site selection, management, pests and diseases, and how to propagate. Cost: \$60. Members get 10% off with code "10-OFF."

Spring Plant Sale

Saturday, April 29, 10am-3pm & April 30, 10am-1pm at the Hay Barn

Our popular plant sale returns to the Hay Barn in 2023! Purchase fruit, veggie, herb, and flower starts for your garden grown in the UCSC Farm greenhouses by Center for Agroecology staff, , and volunteers. Proceeds of the sale support the Center's programming. Members receive early admission on April 29 (beginning at 9am) and 10% off all plants.

Seed Exchange Event with Rowen White, Indigenous Seed Steward

Sunday, May 7 at the UCSC Farm

Save the date for a seed exchange and to hear from Indigenous seed steward, farmer, and author Rowen White.

Herb Talk and Walk

Thursday, May 19, 5:30pm at the Hay Barn or online
Learn to grow and harvest medicinal herbs in your garden. Clinical herbalist Paula Grainger will share some of her favorite herbs which can be found in the Farm and Garden and which grow well in and around Santa Cruz.
Learn how these herbs can be safely and effectively used to improve your and your family's health and wellness.
Cost: \$50 in person or \$5 for virtual. Members get 10% off with code "10-OFF."

Foodways Dinner

Friday, June 2 at the Hay Barn

Save the date for the second annual Foodways Dinner for Student Success. Chef Brandon Jew of Mister Jiu's Chinese restaurant in San Francisco will be planning our dinner menu and joining us at this delicious and inspiring event. Proceeds of ticket sales will support our student programming.

Poetry in the Garden

Saturday, June 3 at the Alan Chadwick Garden
Save the date for our annual poetry event. This year we
are excited to return to the Chadwick Garden after holding this event remotely for the last few years. We hope
you can join us!

Farmstand Reopens

Thursdays, 12:30pm—6pm at the Hay Barn, June 22—October 5

The Center for Agroecology Farmstand will reopen at the Hay Barn beginning June 22. Purchase fresh, organic fruit, veggies, and flowers grown at the UCSC Farm and Chadwick Garden and support the Center's mission to advance agroecology and equitable food sytems.

New Market Share Program Offers Members More Produce Variety

This year the Center for Agroecology is offering an alternative to the traditional CSA Program: the Market Share Program. Market Share customers pay upfront for a season's worth of produce from our Farmstand. The variety and quantity of produce you take home each week is up to you.

By participating in the Market Share Program, you make the choice to support local agriculture in a substantial way. By committing to a season's worth of produce grown at the UCSC Farm, you support us with a market we can count on and plan for. In exchange, you get produce that is picked fresh for you and quality, nutrition and flavor that is unmatched! Farm staff makes a point to choose interesting and flavorful varieties not widely available that will expand your range while also consistently providing the staples that you depend on. And by supporting the Center for Agroecology in particular, not only are you supporting a local farm, but you are investing in our mission to advance agroecology and equitable food systems through education, research, extension and public service.



Market Share Details

Market Share Program customers pay upfront for organic produce from the UCSC Farm & Garden. In return for this investment, Market Share customers receive a 10% discount on produce for the whole season. You can think of it as a prepaid gift card that allows you to shop at the Center's Farmstand this season. By the way, the Farmstand reopens on June 22! This year's Farmstand will take place in the Hay Barn on Thursdays from 12:30pm to 6pm and will run through October 3, 2023.

There are three pricing options for the market share:

- \$125 option for \$150 worth of produce (average of \$10 per week)
- \$200 option for \$225 worth of produce (average of \$15 per week)
- \$325 option for \$375 worth of produce (average of \$25 per week)

If you spend all of your prepaid funds before the season ends, you can make a second purchase of one of the price plans. Credit does not carry over to next season.

EBT is accepted at the Farmstand and for Market Shares and the Center is offering a limited number of reduced price options as well.

How is this program different than a CSA?

Market Share customers pay upfront for produce, but the variety and quantity of produce you take home each week is up to you! Market Share customers can shop at our Farmstand and purchase as much or as little produce as desired without restrictions on what to take home. Having a dinner party? Bring home extra produce to feed your guests. Going on vacation? Skip a week without worrying. The Market Share Program allows customers to have more flexibility in their purchases.

Keep in mind that our Farmstand is first-come, first-served for all customers, so you can purchase as many items as as you want with no limits but there is also the possibility that the Farmstand will run out of items before the end of the day.

Interested in participating in this program? Sign up at https://agroecology.ucsc.edu/support/produce-sales/csa. html.

Digital News & Notes

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UC Santa Cruz Foundation awards \$75K to help address student food insecurity

The UC Santa Cruz Foundation Board of Trustees has affirmed its commitment to reducing food and housing insecurity for students. Following its February decision to provide an additional \$900,000 one-time distribution to support endowed scholarships and fellowships across campus, the board voted Oct. 8 to allocate \$75,000 to the Center for Agroecology and the Division of Student Affairs and Success to support efforts to address food insecurity among students.

"I am deeply grateful that the UC Santa Cruz Foundation board has proactively engaged with university leadership to address this critical need of the campus and especially of our students," said UCSC Chancellor Cynthia Larive. "We are working to pull all the levers we have at our control to address student food insecurity. With the foundation's much-appreciated support, I am confident we will be able to make great progress."

Recent surveys reflect that as many as 41 percent of U.S. college students experience limited or uncertain access to food. A chronic problem that dates back years, it's exasperated by the rampant inflation of food costs hurting families nationwide. UC Santa Cruz recognizes that the need is great: Food-deprived college students exhibit poorer academic performance. Worse, according to the National Student Campaign Against Hunger and Homelessness, the negative outcomes hit Black, first-generation and two-year college students hardest, widening racial and income inequalities.

"We wanted to help and in a very direct way," said UCSC Foundation Chair Richard Moss (Stevenson '85). "Board members were inspired to support UC Santa Cruz in developing a roadmap promoting food security, not only for our campus, but as a model for all UC campuses."

The board's commitment will help UCSC in its effort to surpass the University of California Regents' goal of reducing food and housing insecurity among students by 50 percent by 2025. Systemwide and campus-level research affirm the positive impact of basic needs services on access, affordability, persistence, academic performance, sense of belonging, time to degree, and graduation rates of both undergraduate and graduate students.

UCSC is primed to advance a 2025 UCSC Road Map to Food Security (Design and Action Plan). The capacity to coordinate and engage a greater range of stakeholders in



Photo: Carolyn Lagattuta, UCSC

the Regent level goals is the plan's next step. The foundation grant will directly support students, funding salaries for student project leads who will help develop the road map, convene stakeholders and identify outcomes, as well as "food security" student staff to assist with stakeholder service opportunities and connection events, food production, and peer-to-peer student engagement.

"Championing student success means doing all we can to ensure equal and equitable access to the full student experience," said Akirah Bradley-Armstrong, Vice Chancellor for Student Affairs and Success. "Too many of our students struggle with food insecurity and too few have access to the means and resources to resolve this struggle. While the university has long tried to fill these gaps, this funding is critical to ensuring student well-being and equipping each of our students with the time and energy they need to better focus on their learning in and out of the classroom. In order to truly center our students in all we do, we must first be certain their most basic needs are met."

The foundation board was seeking to support an across-campus initiative that aligned with the Student Success Initiative. Campus and Foundation leadership worked with Darryl Wong, executive director of the Center for Agroecology, and Tim Galarneau, education and research specialist at the center, to develop the plan for this project.

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Farm and Garden Happenings

After what has felt like an endless wet winter, spring is finally here at the Farm and Garden! Things are beginning to blossom, the fields are green with foliage, and we are excited to see what this next season has in store. After recently pausing our Fall 2022 Apprenticeship Program and strategically evaluating the structure of our organization, Center for Agroecology staff members are eager to embark on their next chapter.

Research Updates

Many exciting research projects are happening at the farm right now, a few of them being collaborations with UCSC's School of Engineering. Electrical and Computer Engineering Professor Colleen Josephson is using the farm as a field research site for studying the potential of microbial fuel cells to power soil moisture detection systems on farms. The farm is one of the only sites in the world to test this technology in the field, as Josephson's group and her collaborators experiment with the efficacy of microbial fuel cells, also called mud batteries, outside of a laboratory.

The Center is collaborating with UCSC Electrical and Computer Engineering Professor Dejan Milutinovic and a team of engineering students (pictured below) to develop technology for fully autonomous farming using small tractors powered by solar or wind energy. The team will focus on three areas: the tractors' ability to visually perceive its surroundings, tractor navigation along rows of plants, and incorporation of underrepresented farmers and farm communities in development of this technology.



The Center's Faculty Director Stacy Philpott and her research team recently published a study showing that community gardens and urban farms positively affect biodiversity, local ecosystems, and the well-being of humans that work in them.

The Living Solar Panels project on the UCSC Farm explores the potential of cacti as a carbon-neutral source of renewable energy due to the unique properties of the plants' photosynthesis process. As a cactus photosynthesizes, a hydrogen ion imbalance occurs within the plant which can be measured as a voltage – the team of students hope to harvest this as energy. Twenty prickly pear cacti, located near the old CSA Garden on the UCSC Farm, will serve as the testbed for this project over the next two years.



Farm and Garden Signage

Have you seen the new signage at the Farm and Garden? Along with a welcome sign and map at each entrance, both the Farm and the Garden now showcase signage with information in Spanish and English about the Center for Agroecology, its programs, and activities. The Self-Guided Tour of the Farm booklet has also been updated and is currently being translated into Spanish. We hope the new signage (which the Friends of the Farm & Garden helped fund!) will make the Farm and Garden more welcoming and accessible to more people. If you haven't seen the signs yet, come check them out!

Center Spotlight: Sharon Zo, Volunteer

On a sunny Saturday morning this past February, we hosted our first-ever workshop on grafting, led by Sharon Zo. Participants learned how to handle a grafting knife. practiced grafting cuts, and learned tips and tricks for a successful graft. They also learned about some of the locally-grown apple varieties and went home with an apple tree they had grafted. Sharon is considered a "super volunteer" by farm and garden staff. The year before the pandemic began, she was at the farm almost daily, working and learning alongside staff, apprentices, and students. Chadwick Garden Manager Orin Martin described her love of fruit trees as "palpable" and grafting skills as "world-class." "Sharon has that rare innate sixth sense of what might work. She is also always oh-so willing to share what she knows with others." We sat down with Sharon to learn more about her interest in grafting and her work on the farm.

When did you first get connected with the farm?

I attended a Friends' fruit tree workshop with Orin Martin back in 2016. After that first workshop, I planted three apple trees. Then I took Orin's pruning workshop twice a year for a few years. I had an old, non-bearing pear tree in my yard, but after applying what I learned from Orin, it started bearing fruit! In 2019, I volunteered at the Chadwick Garden several days a week and had a chance to learn even more about fruit trees and growing food, working alongside the apprentices and interns.

What do you love about the Farm & Garden?

The farm has such an ecological and holistic approach to growing – I love being there, tuning into plants and working with really wonderful people. I also love that it's very inclusive, drawing in people of all different ages and abilities. I always feel welcomed and appreciated.

Do you have a favorite season and activity?

Apple harvest season! My second favorite would be winter pruning season. Pruning and orchard care is my absolute favorite activity on the farm. The other activity I really enjoy is propagation and working in the greenhouses.

How did you get into grafting?

I learned to graft through the California Rare Fruit Grower's Society (CRFG). I have a strong interest in heirloom/rare varieties of apples and pears, which are at risk of becoming scarce or lost forever as a result of the industrial farming system. I believe having diverse varieties is important, plus the fruit is far more interesting and more nutritious than commercial varieties. Grafting helps maintain this genetic diversity.



I've had the opportunity to graft apples, pears, plums, citrus and avocado trees. I've grafted in the pedestrian orchard at the farm. For some reason the fruit from the Red Gala trees planted there taste awful, described by some as "styrofoam balls with red skin." Orin decided it would be nice to have early season apples so they were grafted over with 2 varieties, Sunrise and Alkamene in 2019. We had our first harvest of new varieties in 2021. The grafts I did on an avocado tree over a year ago are growing vigorously and have lots of flowers. If all goes well, we'll probably get fruit from them this year.

Where else are you applying your skills?

I've recently moved and have started to install a new fruit tree orchard at my home. In advance of planting the trees, I have been able to use what I learned on the farm to prepare the soil, including growing a cover crop. While I was at it, I took the opportunity to give a talk on soils and cover cropping to the CRFG members. I've enjoyed sharing knowledge I gained from the farm to CRFG and vice versa.

I also hope to help my new neighbors with their fruit trees. All my neighbors are complaining that their apples tend to be small and wormy so I'd like to teach them about pruning, fruit thinning, orchard floor hygiene and using pheromone lures for the codling moth problem. And possibly a grafting class if any are interested!

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The Center for Agroecology has played a leading role in creatively tackling food security. The center supports a different type of food pantry—harvesting and delivering over 20,000 pounds of fresh organic fruits and vegetables each year—as well as supporting a non-transactional cafe where students eat free of charge. In an effort to further support students' needs, the produce is grown, harvested and delivered by students who earn more than minimum wage.

"Food security isn't just about access to food, it's also about having meaningful employment that supports all of the costs of being a student," Wong said

In addition to helping fund the development of an actionable plan for UC Santa Cruz, foundation trustees have committed to promoting the effort through their individual networks and to hosting a food security benefit event in 2023 to launch the plan.

-Christy Tall, UCSC

Friends Membership Renewals

Need to renew your Friends of the UCSC Farm & Garden membership? You can find renewal information and a secure donation link online at connect.ucsc.edu/joinffg. Contact us at agroecology@ucsc.edu with any questions. Thank you for your support!

Ways to Support Pájaro Farm Workers Affected by Flooding

Recent storms have caused catastrophic events in and near our community, including the breaching of the Pájaro Levee which caused flooding of homes, businesses, and farmland in and near the community of Pájaro just south of Santa Cruz County. Three thousand people, many of them low-income farm workers, are displaced. Many of the displaced are not able to work and earn income due to flooded farm fields, adding more uncertainty to their dire situation.

You can support the folks who work to grow and harvest our food by donating to or volunteering with the following local organizations offering aid to the displaced:

The **Center for Farmworker Families** is a local organization that works to promote awareness about the difficult life circumstances of binational families while proactively inspiring improvement in binational family life. They are providing monetary aid to Pajaro farm workers. Donate funds through their website, https://farmworkerfamily.org.

Local organization **Campesina Womb Project** is providing direct aid to farm workers. Donate to the cause through their GoFundMe: https://www.gofundme.com/f/direct-aid-for-the-pajaro-farmworkers.

You can also donate to the general flood relief fund organized by **Community Foundation Santa Cruz**: https://www.cfscc.org/funds/disaster-fund.

You can volunteer to help sort food donations with **Second Harvest Food Bank Santa Cruz**, https://www.thefoodbank.org/volunteer-trial.