

# Marin County Department of Agriculture Weights and Measures Marin Organic Certified Agriculture

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## County of Marin Mission Statement

The mission of the County of Marin is to provide excellent services that support healthy, safe and sustainable communities; preserve Marin's unique environmental heritage; and encourage meaningful participation in the governance of the County by all.

## Newly Certified Members

Marin Organic Certified Agriculture would like to welcome our newest members:

Jesse Kuhn  
Marin Roots Farm  
Petaluma, CA  
Jesse farms 10 acres on the Volpi Ranch. He grows mixed vegetables that include: lettuce, arugula, spinach, chard, chicory, beets, potatoes, basil, onions and beans.

Liz Griffin  
Clark Summit Farm  
Petaluma, CA  
Liz certified 160 acres of pastures and 350 poultry for organic eggs. Liz farms mixed vegetables and fruits on one acre that include: apples, plums, pears, cherries, peas, beans, squash, potatoes, garlic, tomatoes, peppers and cucumbers.

Kevin Lunny  
Lunny Ranch  
Inverness, CA  
Kevin certified 1400 acres of pasture which he harvests for silage. Kevin currently runs grass fed beef cattle and is planning to transition the herd to organic. He has planted 400 certified organic artichoke seedlings and plans to produce, berries and asparagus.

Lia Lund  
Lund Olive Oil  
Marshall, CA  
Lia certified her five acre olive orchard which is comprised of 1200 olive trees. She also has plantings of raspberries, olallieberries and asparagus.

## Re-Certification Notices

Is it that time of the year to get ready for re-certification again? See if your name is listed in the reminder list below and you can get a head start preparing the documentation our inspectors will need for re-certification such as planting records, harvest records, input records, compost records, seed invoices, storage records, sales records and labels.

Name	Year 2004
Janet Brown	July
David Little	July
Jason Jonas	July
Annabelle Lenderink	July
Liz Daniels	September
Margaret Koski-Kent	September
Elmer Nelsen	September
Alan Mart	September

## Put Money Back in Your Pocket

Certified Organic operations can take advantage of the Federal Organic Certification Cost Share Program. This program offers to reimburse up to 75% of certification costs (maximum of \$500) to certified organic operations. The California Department of Food and Agriculture has recently announced that it will accept applications for this program from certified organic operations that received their certification or became re-certified between October 1, 2002 through September 30, 2003 and October 1, 2003 through September 30, 2004. What this means is that certified organic operations certified between the mentioned dates are eligible to receive reimbursement for certification costs during that time span. Certified operations

that missed their first chance at this program from October 1, 2002 through September 30, 2003 are still eligible to apply for certification cost incurred during that time period. Certified organic operations that received reimbursement money from this program the first time can apply one more time, if re-certification occurred from the period of October 1, 2003 through September 30, 2004; this eligibility period also includes operations that are newly certified organic or are getting re-certified between this time period. People interested in participating will need to fill out an application, attach a copy of their organic certificate and attach an itemized invoice of certification cost. To obtain a copy of the application or to attain a better understanding of this program you can call Anita Sauber or Juan Hidalgo at 415-499-6700. Attached to the newsletter is the application form, don't miss out on this great opportunity.

### Cover Crops

Cover crops are important in that they serve multiple purposes in crop rotation systems. Commonly grown to prevent soil erosion, improve soil fertility and to help suppress weeds; cover crops also help in controlling insect pests, plant diseases and in improving soil biota (1). Cover crops could be divided into two distinct types: legumes and non-legumes. Legumes include cover crops such as vetch, fava bean, sweet clover, soybeans and cowpeas. Legumes are known for their ability to add nitrogen to soil, thanks in part to a symbiotic relationship with the bacteria Rhizobia which is found in the root nodules of these plants. Non-legume cover crops include: ryegrass, sudangrass, millet, sorghum, barley, oats and buckwheat. Non-legumes such as grasses and grains do not add nitrogen to soils but uptake excess nitrogen found in soils; also referred to as catch crops.

Cover crops help to reduce the soil compaction impact from rainfall and research has found that "winter cover crops reduce total water runoff and soil loss by 50 percent or more. This estimate is dependent on soil type, slope, coverage of cover crops, tillage practices and intensity of rainfall (3)." Incorporation of cover crops into the soil, a process called green manuring, increases organic matter and it also increases microorganism

populations which will play a crucial role in digesting and breaking down this organic matter. Table 1 shows the yields of biomass and nitrogen of several legumes. When cover crops are incorporated into the soil and breakdown of the organic material begins by soil organisms, some compounds produced are resistant to breakdown. These compounds made up of "gums, waxes and resins" mix with "mycelia, mucus and slime produced by microorganisms to help bind together soil particles as granules or aggregates (2)." Soil aggregation increases ease of tilling, improves aeration, reduces erosion, increases water infiltration and improves water holding capacity.

**Table 1. Average biomass yields and nitrogen yields of several legumes (2).**

Cover Crop	Biomass	Nitrogen
	Tons/acre	Lbs/acre
Sweet clover	1.75	120
Berseem clover	1.1	70
Crimson clover	1.4	100
Hairy vetch	1.75	110

The breakdown of organic material by soil microorganisms helps to release plant nutrients and makes those nutrients available to crops that may follow. The production of nitrogen by legumes is one of the great advantages of cover crops. Addition of nitrogen into the soil from legumes ranges from 40 to 200 lbs per acre. Table 2 shows nitrogen yield of some cover crops in California.

**Table 2. Cover crop productivity and N acquisition from experimental studies. California data (1).**

Cover crop	N content
	Lbs/acre
Purple vetch	148
Lana vetch	203
Oats/vetch	166
Austrian pea	158
Fava beans	93

Nitrogen production will vary depending on the growth of the legume and other factors

such as weather, poor crop stand, and drought. Other nutrients such as phosphorus, potassium, calcium, magnesium and sulfur are taken up by cover crops from the subsoil and slowly made available during the breakdown process. Table 3 shows nutrient yields of different cover crops.

**Table 3. Nutrient accrue ment by selected cover crops (2).**

Cover crop	K	P	Mg	Ca
	lbs/ac	lbs/ac	lbs/ac	lbs/ac
Hairy Vetch	133	18	18	52
Crimson clover	143	16	11	62
Austrian W.P.	159	19	13	45
Rye	108	17	8	22

Cover crops help to reduce weed populations by preventing bare soils. Rye, millet and sudangrass are particularly used not only to add organic matter to soil but also to control weeds. These are used for weed control for their ability to grow fast and get established quickly. Research has found that some cover crops such as rye are allelopathic. Allelopathic plants produce natural toxins or “allelochemicals” which inhibit or reduce the growth of adjacent plants. In no till cropping systems the mowing of allelopathic cover crops can help to control and reduce populations of weeds.

Cover crops planted early enough can help to increase the population numbers of beneficial insects prior to the planting of cash crops. Cover crops provide shelter for beneficial insects while they hunt insect pests. Farming techniques such as conservation tillage or no tilling can further help to protect beneficial insect populations because the un-tilled cover crop residues left on the field will serve as shelter till the beneficials can move onto the cash crops. In addition, incorporation of cover crops into the soil has been shown to help reduce the incidence of various plant diseases.

Some things to consider in selecting a cover crop are cost of seed, its hardiness for winter or summer use, how well it can fix nitrogen, how it will do in the available soil, its ability to out compete weeds and the cash crop that will follow(4).

Additional information regarding various types of cover crops used in California can be obtained

from the UC SAREP Online Cover Crop Database at <http://www.sarep.ucdavis.edu/cgi-bin/ccrop.exe>

### Seed Used for Organic Production

The USDA National Organic Programs Standards (NOP) requires that organic producers must use organically grown seeds. An exception in the NOP rule, however, allows organic producers to use Non-organically produced, Untreated seeds when an equivalent organically produced variety is not commercially available (5)[NOP Section 205.204(1)]. The key here is the meaning of the phrase **commercially available**. As an organic certifier commercially available means that a producer does not have to use organically grown seeds if the seeds cannot be found in the right quantity, variety, and/or quality. For example, if I am a small organic farmer of lettuce, I do not have to use organic seed if it only comes in bags of 25,000 organic seeds when all I need is 1,000. I do not have to use organic seed if the variety of lettuce I am looking for is either not found organically or it is of poor germination quality. However it is important that producers **document the reasons why organic seed was not used**.

Documentation needs to include recorded attempts, made for each seed type you intend to use, to try to find organic seed such as a list of different organic seed companies that were called to verify that they did not have the seed you were looking for. In addition you need to record the reason why **non-organic untreated** seed is being used such as quantity not found or variety not found.

Organic producers should always seek organic seed first and request information regarding the live seed percentage. Producers should also keep in mind the following questions when ordering seed: Is this seed organic? Who certified this seed company? If the seed is untreated is it GMO free? Can the seed company provide me with documentation that states the non-organic untreated seed is GMO free? Is there documentation that verifies that prohibited substances have not been used on the non-

organic untreated seed? Is this information listed on the seed packet, invoice or catalogs (6)? It is a good idea for producers to be able to answer these questions since some of them will come up during the annual records review and on-site inspection by the certifier.

Additional information on organic seed suppliers can be found in the ATTRA web site:

<http://attra.ncat.org/attra-pub/altseed.html>

Also the California Certified Organic Farmers (CCOF) Magazine issue for the Spring 2004 has a good organic seed article and organic seed source directory.

### Conservation Security Program Update

The Conservation Security Program (CSP) will reward agricultural producers who meet high standards of land conservation and stewardship and encourages producers to maintain those practices or improve upon them. This program is open to any producer who wishes to participate regardless of the size of their farm; however, sign up priority is being given to selected watersheds throughout the country. This program will offer producers financial rewards of \$20,000 to \$45,000 per year for 5-10 years depending on the conservation practices of the farm. Find out if you qualify for this program by visiting the National Resources Conservation Service (NRCS) web site and downloading the Self-Assessment Workbook at

[www.nrcs.usda.gov/programs/csp/index.html](http://www.nrcs.usda.gov/programs/csp/index.html)

Don't miss out on the opportunity to get rewarded for your conservation practices.

### Biological Control Conference

The California Conference on Biological Control IV will have as a focus organic farming and will feature researchers from the University of California, federal government agencies and the industry. This conference takes place **July 13 - 15** at the UC Berkeley campus and will address topics on pest management, the soil food web, a healthy soil, farming systems and the use of compost to control pests. The registration fee for this workshop is \$120 per person before July 2 and

meals are included. To get more information on this conference you can go to

<http://www.sarep.ucdavis.edu/news/0406bpr.htm>

You can register on line at

<http://nature.berkeley.edu/biocon/>

## Marin County Agriculture Department News

### Marin County Livestock & Agricultural Crop Report 2003.

Thank you to everyone that took the time to participate in the Marin County crop report survey for 2003. The crop report is a summary of all livestock and agricultural commodities grown and produced in Marin County. The report includes the types of commodities, value and amount produced. You can access the 2003 crop report at

[www.co.marin.ca.us/depts/ag/main/index.cfm](http://www.co.marin.ca.us/depts/ag/main/index.cfm)

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