



THE REGULAR, AND NOT SO
REGULAR, NEWSLETTER OF THE
GARLIC SEED FOUNDATION

The Garlic Press

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What's Really in Your Fertilizer?

By Bob Anderson, Gourmet Garlic Gardens

Until recently I thought that NPK fertilizers weren't so bad; after all, it was the pesticides that were the real problem, right? I now see I was wrong and that many commercial fertilizers are as bad and some are worse than pesticides and are actually hazardous to your health. Fertilizers have been required to have their claimed amounts of Nitrogen, Phosphate and Potassium, but the other "inert" ingredients weren't regulated so any hazardous waste that contained any amounts of any form of N, P or K could be sold as fertilizer, regardless of what the undisclosed ingredients were.

At the 2001 Garlic is Life Symposium in Tulsa I met the former mayor of a small town in Washington and listened to her story. Patty Martin and some of her constituents discovered that some large industrial companies were disposing of hazardous wastes, including dioxins, lead, mercury, and even some radioactive material by putting it into fertilizer or selling it to companies that did. She was rightfully concerned for the welfare of her own family as well as all the town's other people and rattled enough people's cages to spur an investigation by investigative reporter Duff Wilson of the Seattle Times newspaper. The story attracted nationwide attention and was nominated for a Pulitzer prize. It resulted in the state of Washington passing and implementing a law regulating the content of fertilizers and requiring fertilizer manufacturers to label the contents. They also tested all fertilizers sold in Washington and have published the list of ingredients on the internet - good move!

The EPA had built expensive hazardous waste disposal sites to prevent these dangerous materials from contaminating farmers' fields or public water systems. By selling their wastes to fertilizer manufacturers, industrial companies generating hazardous waste avoid the expense of proper disposal and expose all of America to hazard by pouring the hazardous waste directly upon the farmer's fields, where it can contaminate crops and can run off with the next rain right into the public water systems. They have turned hazardous waste into a profitable venture. Slick, huh? Where did you think all that money comes from that pays those exorbitant CEO bonuses? Who says there's no more opportunity left in America?

I don't have anything against big business or corporations or anything of the sort. Every nation today needs a solid economic foundation to support their infrastructure. I also think a clean environment, like Mother Earth gave us to begin with, is the best environment for all living things, especially human beings and their children. I also think it's in businesses long term best interest to protect the environment that fosters their great profit. Maybe I am wrong, but I think the public will give greater support to organizations they see as working in their better interest and oppose those they see as fouling their environment. To see this is true, one only has to look at the riots in Seattle and other places where big business/government has assembled to discuss ways to exploit the world's resources. If these groups had done things differently and had a better reputation, they would not have had so much trouble and expense. It's when you try to force things on people that problems begin. If people coordinate and cooperate, problems are prevented or minimized.

Corporate staffers need to realize that they all breathe, drink water and eat food, too, and therefore have a vested personal interest in their own health and need to develop ways to do business that are less polluting and learn to work with environmental groups to solve these problems together. People working together can always get more done than people in opposition, because of the difference in wasted energy and resources.

It is possible that previously unsuspected sources of carcinogens have been contributing to American increase in diseases and malignancies? Read more about it to see how you can minimize your own risk. Garlic may be able to remove heavy metals from the body and do other things to ward off some of the effects of pollution, but the best solution is to prevent the pollution just like it was before we started messing with things we didn't fully understand, and still don't. When considered with GMO plants that threaten to mutate the world's similar native species into their own kind, losing millions of years of the wisdom of natural evolution and substituting someone's short-sighted selfish whim instead that could result in the extinction of many biological creatures.

[Ed. Note: For more info, see www.safefood&fertilizer.com]

Organic Growing Versus Chemicals

by Bob Anderson, *Gourmet Garlic Gardens*

Soil conditions and watering are of utmost importance if you want to grow excellent, large healthy garlic. Garlic will grow (barely) in almost any dirt with whatever water is available to it but will thrive in healthy soil with proper watering. If you do not grow organically, you cannot grow garlic as good as those who do. That is a simple fact of nature. Chemical manufacturers may tell you otherwise, but they stand to make a lot of money from you if you grow as they say, whereas I stand to make no money off of you if you grow as I suggest—just a slightly less polluted planet. You figure out who is more likely to be honest with you.

Chemical growers feed the plants at the expense of the soil—and a lot of money. Organic growers feed the soil to the benefit of the plants—for very little money. If you build up your soil with manures and compost and a few trace minerals, your soil will stay healthy for years with a minimum of additions but when you use chemicals, you must add them on an on-going basis if your soil is to grow anything. The reason for this is that the soil is an ecosystem that contains millions of microscopic plant and animal lifeforms that live off one another just like in the jungle or the sea. When the soil is in balance in this way, the plants that grow in it can pull what they need out of it and thrive. Plants need much more than just Nitrogen, Potassium and Phosphorous, they need the wide variety of micronutrients and minerals that healthy, well balanced soil provides. When you add high concentrations of NPK fertilizer, this imbalance kills off vast numbers of these microorganisms and the plants feed on their decaying bodies which gives you a good crop this year, but results in a less naturally fertile soil with far fewer microbes and you have to keep adding more of the fertilizers in subsequent years just to grow a plant that is inferior to a plant grown organically.

When you use chemical insecticides and herbicides, they kill not only the surface pests you aim to kill, but also soak into the ground and kill many of the microorganisms living in the soil as well, resulting in a less fertile growing environment yet. They can also leach into your community drinking water, too. Do you really want to drink pesticide-laden water? Pesticide residues in our drinking water are not neutralized by adding chlorine or fluoride to the water as they are not organic lifeforms but inorganic chemicals that can contribute to many human ailments. Some of the highest cancer rates are among people who apply pesticides and who work with the plants that have had pesticides applied, according to insurance industry statistics. That stuff soaks into the plants and cannot be washed off because it is inside them. If the government requires applicators to wear 'protective clothing, boots, gloves, hoods and masks to apply it, why would you want to eat it?

Conventionally Grown Garlic Contaminated With Chemicals

by Lynn Berry, *citizen journalist (NaturalNews)*

Garlic is recognised as a valuable ingredient in maintaining a healthy life and combating disease. However what looks to be perfectly natural could in fact be treated with chemicals. So the question is where is your garlic

from and how has it been treated?

The bulk of the world's garlic is produced in China where the cost of labour significantly reduces the cost of manual processing that garlic requires. For this reason, in those countries that accept imported garlic (including USA, Australia but not Europe), buying imported garlic is cheaper.

Despite this, Chinese garlic does not meet with food safety protocols (at least those in Australia). According to Henry Bell of the Australian Garlic Industry Association, garlic from China is doused in chemicals to stop sprouting, to whiten garlic, and to kill insects and plant matter. He also reports that garlic is grown in untreated sewage (<http://www.theage.com.au/news/epicu...>)

Garlic can be whitened by using chlorine or with a mixture of sulphur and wood ash. Whitening garlic helps to make it look healthier and more attractive to consumers. In fact this obsession with white foods has led to the bleaching of many food products (flour, salt, sugar) using chlorine dioxide or benzoyl peroxide.

Growth inhibitors are used to stop garlic from sprouting and can be made from hormones or chemicals. When garlic begins to sprout, the garlic clove loses much of its potency. Growth inhibitors together with gamma irradiation extend the shelf life of garlic.

Gamma radiation is also used to sterilise many products, and in Australia, this treatment is not accepted for foodstuffs. This does not prevent food treated by gamma radiation to enter the country.

Australia also requires that all garlic regardless of origin is fumigated with methyl bromide at entry to Australia. Methyl bromide is a colourless gas and a potent chemical used as an insecticide, fungicide and herbicide.

It has a variety of uses: in controlling pests, weeds and soil-borne diseases associated with crops and timber products; in protecting stored grains and dried fruit; in industrial feedstock; in refrigerant; as a fire extinguishing agent; for degreasing wool; and for extracting oils from nuts, seeds and flowers (<http://www.apvma.gov.au/chemrev/met...>)

Methyl bromide is listed as an ozone depleting substance and, under the Montreal Protocol on Substances that Deplete the Ozone Layer, its use is prohibited. According to the UN it is 60 times more damaging than chlorine and is the base of CFCs (Chlorofluorocarbons). However exemptions have been allowed and that includes the use of methyl bromide for quarantine purposes and feedstock applications.

If inhaled or absorbed through the skin, methyl bromide is toxic to both humans and animals causing chemical burns, kidney damage and damage to the central nervous system.

Concern about its use as a timber fumigant was highlighted in New Zealand when 11 workers were affected by motor neuron disease. At the port in Nelson, 11 workers by 2004 had contracted the disease and 5 had died (www.mua.org.au/news/stevedoring/Met...)

The use of methyl bromide has increased in both Australia and New Zealand. In New Zealand its use has increased by 300% since 2001 (<http://www.scoop.co.nz/stories/P008..>)

Concern about Chinese garlic has prompted a US store called Trader Joe's to stop stocking the product by the 1st of April (<http://www.thedailygreen.com/enviro...>)

However, it is not just China as other countries using chemicals banned in the US and elsewhere are sending cheap food products back for sale there. Despite the higher cost, organic garlic will provide you with the taste and health benefits but not the additional toxic consequences of chemicals.

About the author

Lynn Berry is passionate about personal development, natural health care, justice and spirituality. She has a website at www.lynnberry.com.



OUT OF
MY HEAD
Bob Dunkel

What came first- the bulbil or the bulb?

If the bulbil is the bulbs way of making another bulb, is not the bulb, the bulbils way of making more bulbils? In either way we see the mathematics of Nature. Multiplication, division, addition and subtraction....

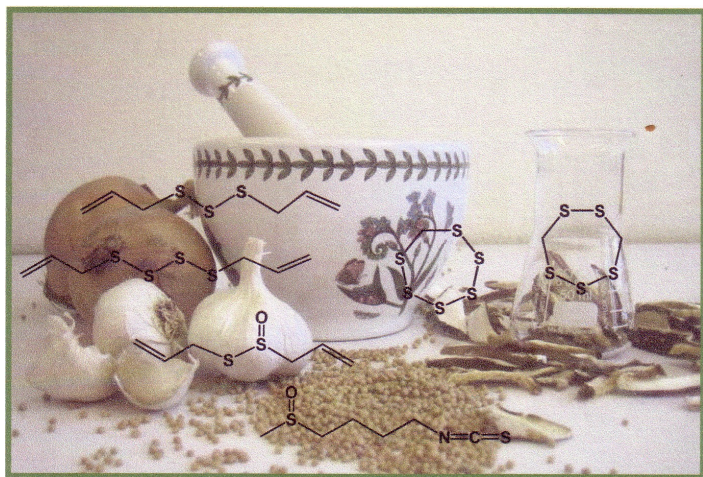
How can we not, in each clove, see the circle of infinity? All that extends from the seed. returns to it. This is that dance that moves us. All things unfold only to refold, and yet, we impose through language and action, perception and intention, our own limitations. This is a universe of two-way light, centered in stillness. The center does not hold. Gravitation is the compression back to seed and Radiation its extension. Look at the bulb, the bulbil, and its circular spiral form. From any point of our perception we see but a part. a section, a cycle of that which is indefinable. It is our interaction, our involvement with purpose that brings fulfillment to our lives. So we play. We break this momentary wholeness into its parts, design geometrical systems of planting, mechanizations of harvest and methods of storage and weed control throughout each season. The spathe opens and bulbils fall away from nothing. We crack open in varietal designs, these cloves from bulbs and find no sense of a nucleus. To many this is a simple process and we take things for granted, especially those we fail to understand. We create the hows, seek to *profit* from our endeavors and yet find every year, every season, every day is not predictable and still we persist..

For so many years our science has betrayed us. Nothing is asexual. Somehow though, we confuse the understanding of true seed. It is our heart that centers us and yet we are constantly misled by our thinking. We believe our brain is our mind and we falter. We learn to manage the shadow of garlic as clove and we have lost sight of the seed. The bulbils hold the records of times unending, for there is the true diversity that latently hides that which we perceive as varieties, but which we learn have no lines of definition. So, we give them names. dress them up in groups of numbers with colors and tastes, that all are functions of environment. We speak of taste and texture as if it is a constant, yet no two fields, never mind any two cloves, are the same. The maximization of sulfur, the silent microbial conglomerates, the fickleness of now unnatural weather, and your own intention and intervention, all contribute to this confusion.

A tiny woman, Maria Jenderek, with the help of flies in cages, has resurrected the memory of true seed. From the center of origin in Central Asia, our friends returned with plants that had viable pollen. and yet it is no wonder that in the laboratories of greed and in the usury of genetic rape, the only vision was of one that could capitalize and copyright this usage of nature. No one can own the seed and no one can steal our heart's innate beauty. for we, each alone and together, harbor the seeds of the Infinite!

May you see, in the mirror of Nature, the beauty of Life and tend to its needs as you grow from seed to seed.

Roots of soil and roots of air
The aura of clove is everywhere
All our fingers, green and brown
Descending up and rising down.
A modified storage leaf, this clove
A partition with a wrapper enclosed
Guarded by four poles:
One is verticality, one descention
One is breadth and one is width
Within this the spirals flow.
The undersides of leaves
The insides of roots
And a false seed stalk
Betray our senses
We feast our eyes on a basal plate
And see a fairy ring of delight
Again, tis but the wonder of seed
In the torus of Time.. and now your turn
to tease the rain, conspire the sun
With knees to the ground
Your time has come
Dance and sing and spin within
The mighty clove is young again



... and from the Earth there arose a great rumbling
And forthwith a fracturing of the crust, and thence
Erupting forth a force of green, initiating the cycle
Once more of water and sun and the great Chlorophyll
Which bestoweth the essence of Allicin
So that throughout this quadrant of sleepy soil
Doth flood forth the spears of this leek-like army
And, as always, whence then and now meet
To become that which will be...
We, ourselves, are hastened forth
Called to duty, back to the fields
To remember to feed, nurture and cultivate
This next generation of Garlic!

(BD)



Leek Moth 2010 Update (*Acrolepiopsis assectella*)

Prepared by Amy Ivy 6/18/10

Host Plants and History

Leek moth is a serious pest of members of the *Allium* family: onions, garlic, leeks, chives and shallots.

The first confirmed sighting of leek moth in the United States was in Plattsburgh, NY during the summer of 2009. It is native to Europe and is now found in Russia, Japan, Algeria and in Ontario and Quebec, Canada. It was first found in Ontario in 1993. As of June 2010 it has been found again in Plattsburgh and now in Canton/Ogdensburg, NY.

Description

The adult moth (*figure 1*) is speckled brown, white and black with a distinctive white spot halfway down its outer pair of wings. It is about 3/8" long and is nocturnal so it will be rarely seen unless trapped.

The larvae (*figure 2*) are creamy yellow, slender, and less than a half inch long when fully grown. The pupa (*figure 3*) has a net-like structure over the cocoon and is attached to dying foliage.

Damage

On crops with hollow leaves (onions and chives) the larvae feed on the inside tissue, leaving characteristic 'windowpane' damage to the leaves (*figure 4*). On garlic and leeks larvae feed on the leaf surface but do not usually feed all the way through the leaf. They are often found in the protection of the folded leaves on leeks and garlic.

Look for whitish dead patches or streaks running lengthwise down the leaves. On onions, split open damaged leaves to look for the caterpillar. Feeding damage has also been seen on the flowering scapes of hardneck garlic.

The first generation (May-June) feeds on the leaves. The worst damage is done by the second generation (July-August) as it moves down the leaves into the bulb. Feeding damage stunts plant growth, introduces rot and can compromise the storage life of onions and garlic.

Life Cycle

There are two to three generations a year in Ontario. It overwinters as an adult in plant debris. The female lays about 100 eggs, singly, at the base of the host plant. Eggs hatch in about a week. Larvae (caterpillars) grow in size over the next two weeks then pupate on dead leaves or nearby structures. Adults emerge about 10 days later.

Control

As of June 2010 there are no pesticides specifically labeled for use on leek moth in New York. Entomologist researchers at Cornell's Geneva Experiment Station are studying possibilities. Check back with our office (see contact information at bottom of page) for further developments.

Meanwhile, cultural control methods include:

- Using row cover immediately after planting as a barrier to prevent adults from laying eggs on desirable host crops
- Crushing any larvae or pupae found
- Rotating crops, planting in a different location each year
- Raking up and removing host plant debris at the end of the season where adults overwinter

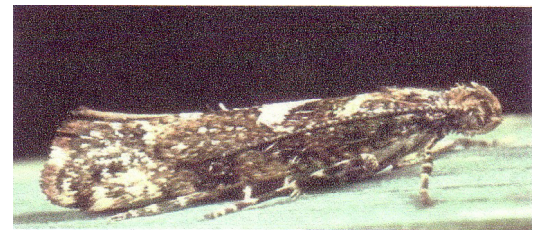


Fig 1 Adult leek moth



Fig 2 Larva (caterpillar) on garlic leaf

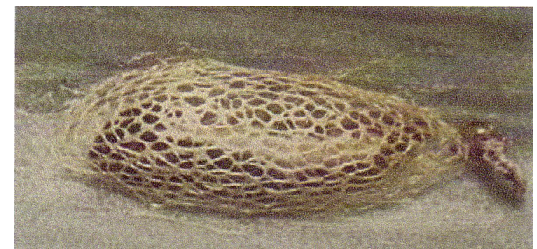
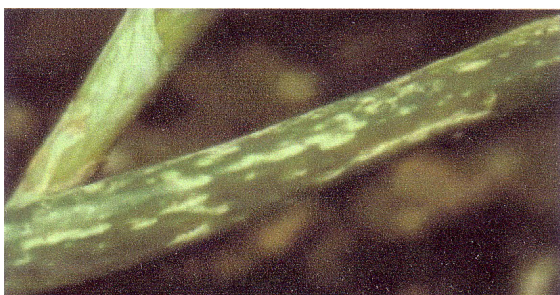


Fig 3 Pupa (cocoon)



Fig. 4 "Windowpane" damage on onion leaves

There are other pests that damage onions and leeks such as thrips and slugs (see below)



Thrips damage to onion leaves. Thrips are a common pest on onions. They feed on the outside of the leaf, rather than tunneling down the inside of the leaf, and cause speckled damage rather than long streaks. Thrips are tiny, about 1/8" long.



Slug damage on a corn leaf. Slugs tend to shred leaves, usually all the way through, rather than making 'windowpanes.'

If you suspect leek moth damage on your onions, garlic, leeks or chives please contact your local Cornell Cooperative Extension office. There is no charge for diagnosing.

County CCE (Cornell Cooperative Extension) Offices and horticulture staff:

St. Lawrence: Steve VanderMark sfv1@cornell.edu (315) 379-9192

Jefferson: Sue Gwise sjg42@cornell.edu (315) 788-8450, ext. 243

Lewis: Joe Lawrence jrl65@cornell.edu (315) 376-5270

Franklin: Richard Gast rlg24@cornell.edu (518) 483-7403

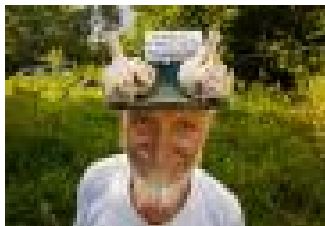
Essex: Emily Selleck els52@cornell.edu (518) 962-4810, ext. 408

Clinton: Amy Ivy adi2@cornell.edu and Jolene Wallace jmw442@cornell.edu (518) 561-7450

Portraits of aging: Ted Maczka

by Judy Steed (thestar.com)

TED MACZKA is an ambassador of garlic and we have been friends with the "Fish Lake Garlic Man" for many years—after 2 years of border issues, Ted can no longer meet with us at the Saugerties Festival and in his honor we dedicate this article and heartfelt thank-you for all he has done for the world of Garlic.



"I preach garlic," says Ted Maczka, 81. That's what he has for breakfast every day: One teaspoon of chopped raw garlic, in the blender, with vodka to cover.

"Instant pickled," he says, blue eyes beaming clear and bright in a tanned and happy face, as he works in his garlic field in Prince Edward County, where he owns 22 hectares.

Born in Poland, Maczka spent two years as a teenager in a Russian camp during World War II where he broke his leg and hip. It was never properly treated; to this day, he has pain and walks with a severe limp.

Eventually, he made his way to Canada, where he worked as a tool and die maker. He "got into" garlic when he realized no one here was farming it, and though he only has a Grade 6 education, "I did a lot of research into the medicinal properties of garlic."

"Canada imported millions of dollars worth of garlic every year. I said, 'why don't our farmers grow garlic?' I knew back home we could grow garlic. I knew they grew good garlic in Russia." Garlic has been used for centuries as a folk remedy and in herbal medicine, to treat the common cold; there is new evidence that it can help manage high cholesterol levels and is a powerful antibiotic.

If you're getting a sore throat or a cold, chew a raw clove of garlic. Maczka says it will take the sore throat away. If it comes back, chew another clove of garlic.

He faced many challenges to realize his dream. His farm,

which he bought in 1971, "didn't have running water unless it was raining." He put in a septic system and toilet, dug a well. A fire caused by the wood stove left him living "in a burned out house." He had a wife—"She was a city girl. I left her there. She didn't want to come to the farm."

Three years ago, he moved into a nearby retirement home with nine older residents. He likes it fine. "I'm out here (at the farm) every day. On Sunday, I take half a day off. I'm a busy man. I have a laptop." He still calls himself an amateur farmer.

He has set up the Fish Lake Research and Experimental Station in an old yellow school bus that's rusting into the ground, packed to the windows with boxes. Arising out of the long grass surrounding his garlic field is more junk—an aged washing machine, sinks, tires, bathtubs and barrels, planted with garlic. In other containers, manure tea is brewing; he gets the manure from a farmer down the road.

The sounds of classical music waft over the garlic 24 hours a day, from a radio in the bus. He believes the garlic responds to classical music.

Who's to argue? His crop is potent. People come from miles around to get their garlic from the Fish Lake Garlic Man.

This is the way to grow old, doing what you love and not worrying what other people think of you.

He has a large ornamental garlic bulb fixed to the top of his car. Dried garlic cloves decorate the flap of his cap. He doesn't mind acting a little "crazy," he says, in his attempts to raise Canada's garlic consciousness.

"I'm happy. I feel I'm doing good. I want to tell everyone: chew two or three cloves of garlic a day and you'll be better."



CULINARY SECTION

A Lighter, Lovelier Garlic

by Martha Rose Shulman, *New York Times*, 5/9/11

I first encountered green garlic one summer in Provence. I was working on a garlic cookbook, so I bought lots of it every time I went to the market. But one day in June I came across an unfamiliar variety. The generous cloves – enrobed in several layers of soft, moist, pinkish skin – were almost juicy, and their flavor was less pungent than that of regular garlic.

This was green garlic, freshly harvested. By now it should be available at most farmers' markets. At some stands, the bulbs look a lot like spring onions, or even leeks, because they haven't set cloves yet. Once the cloves appear, the garlic looks more familiar; still, the green stems will be attached, and you must remove several layers of moist skin to get to the cloves.

The season doesn't last long, so I buy green garlic every week and use it in all manner of dishes. Because it's milder than mature garlic, you can use a lot without overpowering a dish.

Many researchers believe garlic, green or mature, may help lower cholesterol, triglyceride levels and blood pressure. Some of its constituents, including allicin, vitamin C, vitamin B6, manganese and selenium, may provide cardiovascular benefits.

Some people are so enthusiastic about these therapeutic properties that they take garlic supplements. It's hardly necessary; it's easy to get all you want in everyday dishes.

Green Garlic, Potato and Leek Soup

A very pale green springtime cousin of vichyssoise, this purée is comforting when served hot, refreshing when cold.

- ¾ pound green garlic (weight includes stalks)
 - 2 tablespoons extra virgin olive oil.
 - 1 pound leeks, white and light green parts only, rinsed thoroughly and sliced
 - 1 small celery rib, sliced (about ¼ cup)
 - Salt to taste
 - 1 pound Yukon gold or russet potatoes, peeled and diced
 - 1 ½ quarts water, vegetable stock or chicken stock
 - a *bouquet garni* made with a bay leaf and 2 springs each thyme and parsley
 - freshly ground pepper
 - ¼ cup chopped fresh flat-leaf parsley, chervil or tarragon
1. Trim off the tough green ends of the garlic bulbs. If the garlic has formed cloves, separate them and remove the thick shells from the tender cloves. If it has not formed cloves, just remove the outside layers. Chop coarsely. You should have about 1 cup chopped green garlic.
 2. Heat the olive oil in a large, heavy soup pot over medium heat. Add the leeks, green garlic, celery and ½ teaspoon salt. Cook gently for five to 10 minutes until the vegetables have softened but not colored. Add the potatoes, water, *bouquet garni* and salt to taste. Bring to a boil, reduce the heat, cover and simmer 30 minutes.
 3. Purée the soup using an immersion blender. Alternatively, purée in a standing blender working in 1 ½-cup batches, pull a towel tightly over the top, rather than a tight-fitting lid, to prevent splashes. Put through a medium strainer, pressing the soup through with the back of a ladle or with a pestle.

Reheat, taste and adjust salt. Add freshly ground pepper. Ladle into soup bowls, and sprinkle chopped fresh parsley, chervil or chopped fresh tarragon over each serving. Alternatively, chill and serve cold. You can thin out if you wish with milk or stock. Yield: Serves six.

Advance Preparation: You can make this a day ahead and reheat. You may want to thin the soup with a little milk or stock.

Nutritional information per serving: 135 calories; 1 gram saturated fat; 1 gram polyunsaturated fat; 3 grams monounsaturated fat; 0 milligrams cholesterol; 21 grams carbohydrates; 4 grams dietary fiber; 45 milligrams sodium (does not include salt to taste); 2 grams protein.



Stinky Replies

(Off Clearer Directions for better cooking)
from Garlic Blogger

On Appeal, the garlic germ has been found not guilty.



Sure, it's a germ, but it's a wheat-germ kind of germ—a nice germ.

I know fussy cooks who take the extra step of removing the tiny stalk of folded baby leaves at the center of the garlic clove. They say this improves garlic's taste, because, they've been told, the germ is bitter.

But ladies and gentlemen of the jury, these wild accusations are unfounded. My client is innocent of all charges, as I will now prove.

On the afternoon of March 15, I removed the accused from three dozen garlic cloves. I chopped a quarter-ounce of the degermed garlic and pounded it into two ounces of butter. Then I chopped a quarter-ounce of the germs that I had removed and pounded this green mixture into another two ounces of butter.

I then spread the two garlic butters on separate slices of bread and asked people to taste them side-by-side.

There was a clear flavor difference between the two butters, but no one found the germ butter was bitter. Everyone said it had a pleasing taste. A few people preferred it, saying it tasted "more garlicky." I thought the flavor had less dimension, less roundness than the regular garlic butter, but I still liked it. I certainly wouldn't take the trouble to get rid of the germ, since it contributes a perfectly benign note and, in any case, represents only about 10 percent of the flavor profile of a garlic clove.

But perhaps opposing counsel will say it takes heat to bring out the garlic germ's bitterness. So I made a spaghetti sauce out of olive oil and chopped garlic germ. Again, it tasted fine, with no bitterness.

Ladies and gentlemen, my client has been the victim of trumped-up charges. The garlic germ is not, and never has been, bitter. But considering the way its reputation has been dragged through the mud, it certainly has the right to be.

Gremolata

Gremolata is a combination of lemon zest, garlic, parsley, and olive oil. Traditionally an addition to Osso Bucco (braised veal shanks), it is also great as a garnish on grilled or roasted lamb, pork chops, beef, and even roasted potatoes. Gremolata is best made fresh; it doesn't keep for more than a day, but is also best if it has an hour or so before serving for the flavors to meld. Fortunately, it only takes about 5 minutes to make. Serves 2

Ingredients:

- Zest of one large lemon
- 1 lg. Or 2 sm. Cloves garlic, crushed
- 2 Tbsp. Finely chopped parsley
- 1 tsp. Olive oil
- ½ tsp salt
- 1/4 tsp. Ground black pepper

Thoroughly combine all ingredients in a small bowl, cover with plastic, and refrigerate for an hour.

Garlic Fried Milk

Adapted from Anita Lo, Bar Q

Ingredients: Garlic Purée

- 26 medium garlic cloves (from about 2 bulbs), peeled
- 1 tablespoon olive oil
- Salt and ground black pepper

Ingredients: Milk Mixture

- 1 ½ cups whole milk
- ¾ cup evaporated milk
- ½ cup plus 2 tablespoons cornstarch
- 1 tablespoon powdered gelatin, sprinkled over 2 tablespoons water
- 1 tablespoon fresh thyme leaves
- 1 tablespoon finely chopped scallions (green part only)
- Salt and ground black pepper

Ingredients: Batter and finishing

- Vegetable oil, for frying
 - 3 cups all-purpose flour
 - ½ cup cornstarch
 - 1 tablespoon baking powder
 - Salt and ground black pepper
 - 3 cups very cold unflavored seltzer (soda water)
1. For garlic purée: Preheat oven to 300 degrees. Spread garlic across a small baking pan and toss with oil and salt and pepper to taste. Roast until very soft, about 30 minutes. Purée in a small food processor, or mash to a paste using a mortar and pestle.
 2. For milk mixture: In a medium saucepan, whisk together milk, evaporated milk, 2 ½ tablespoons garlic purée (save the rest for another use) and cornstarch. Place over medium heat and slowly bring to a boil, stirring with a wooden spoon until mixture is very thick, 1 to 2 minutes. Remove from heat, and add gelatin mixture, thyme and scallions. Adjust salt and pepper as needed. Pour into a 9-by-12-inch baking pan or other shallow dish. Cover and refrigerate until chilled and set, about 4 hours or overnight.
 3. For batter and finishing: Fill a large skillet with ½ inch vegetable oil and place over medium heat. In a medium bowl, combine flour, cornstarch and baking powder. Season as desired with salt and pepper, then whisk in seltzer.

4. Cut chilled milk mixture into 3-inch squares. Dip in batter until well-coated, and fry in hot oil until undersides are brown and crisp, 1 to 2 minutes. Turn and brown other sides, another 1 to 2 minutes. Drain on paper towels and serve immediately. Yield 4 servings.

Double Garlic Soup

(Time 45 minutes)

Ingredients:

- 3 fat bulbs green garlic, root and green parts trimmed, outer layer removed.
 - 3 Tablespoons unsalted butter
 - 3 cups sliced garlic scapes (about ¾ pound)
 - 1 ½ teaspoons fresh thyme leaves, more for garnish
 - ¾ teaspoon kosher salt, more to taste
 - Ground black pepper to taste
 - 1 large Yukon Gold potato, peeled and diced
 - 1 quart chicken or vegetable broth
 - 1 cup half-and-half or whole milk
 - 2 teaspoons freshly squeezed lemon juice, or to taste
 - Freshly grated nutmeg
1. Chop green garlic. In a soup pot, melt butter over medium-high heat. Add green garlic and sauté for 5 minutes.
 2. Stir in potato and broth, reduce heat to medium, and simmer until scapes and potatoes are tender, about 20 minutes. Add half-and-half and purée soup with an immersion blender or pour into a regular blender. Stir in the lemon juice and season with more salt and pepper. Garnish with nutmeg and thyme leaves and serve hot. Yield: 4 servings.

Crazy Cajun Garlic Jambalaya

(Charley Addison, Crazy Cajun Enterprises, Cobb, CA)

Ingredients:

- 1 Pound Breakfast Sausage (country style)
 - 1½ cups diced Smoked Ham or Tasso (to make Tasso, pound coarse Black Pepper into large piece of Ham before dicing).
 - ½ cup chopped Bell Peppers
 - 1 teaspoon Cajun Powder or to taste
 - 1 cup Chopped Onions
 - ½ cup Chopped Cloves of Garlic
 - 2 Chopped Celery Ribs
 - 2 cups Long Grain Rice
 - 3 cups Chicken Broth or Stock
 - 1 12-ounce Jar Crazy Charley Hot or Mild Piquante, or any quality Salsa
 - ½ cup Chopped Green Onions with tops
 - ½ cup Chopped Fresh Parsley
1. Brown crumbled Breakfast Sausage in heavy 4-6 quart pan or skillet. Drain fat.
 2. Add Peppers, Onions, Celery and Cajun Powder. Simmer until just about tender, then add Garlic and cook until tender.
 3. Add Rice and stir until rice is mixed in and coated with sausage and vegetables.
 4. Add Broth and Piquante. Bring to boil, cover and simmer for 20 minutes or until rice is tender. Let stand five minutes covered.
 5. Add Fresh Chopped Onions and Parsley and fluff with a fork just before serving.
 6. Serve with French bread and a garden salad. (Serves 6)

Black Garlic Predicted to Be Hot Ingredient with Chefs in 2011

Fermented, Flavorful Twist on an Old Favorite
By Killeen Gonzalez

According to the "National Restaurant Association" black garlic is going to be one of the hot restaurant menu trends of 2011. But what exactly is black garlic?

What follows is a summary of what it is, where to buy it and what it can be used for.

What it is

The sugars and amino acids in common garlic, through a protracted process of intense heating, cooling, drying and climate controlled humidity are converted into melanoidin. It is the melanoidin that changes the color, flavor, odor and intensity of the common garlic and transforms it into black garlic.

The use of melanoidins to alter the flavors of food and beverages is not a new concept, having also been used for centuries in the production of assorted German beers like "Vienna" and "Munich" malt.

What it isn't

Though the concept of black garlic may be new to the majority of American born home chefs, it isn't so revolutionary in other parts of the world. Pacific Rim residents have been creating and using it in cooking applications for centuries.

It wasn't until black garlic's introduction into main stream media that America home chefs started to take notice. In essence black garlic producers can thank the likes of *Gourmet* magazine, *New York Times*, *Restaurant News*, *Top Chef*, *New York Season Five* and *Iron Chef America* Episode 11 Season 7 for raising home chefs' consciousness to the curious ingredient.

Where to Buy it

Despite its "hot" status, black garlic can be difficult for home chefs to find. Not too many American-based grocery stores stock it at the moment so adventurous gastronomes must often turn to the internet or specialty stores to obtain it.

Those that are looking to purchase black garlic online may find it on "Black Garlic," where it sells from \$4 for 1.3 ounces up to \$11 for 5.5 ounces.

What to Do With it

Once one has managed to obtain the elusive ingredient, there are a variety of cooking applications that it is well-suited for.

It's molasses-like flavor, lack of traditional garlic aroma and gelatinous texture makes it a superlative and surprisingly secretive addition.

It seems to work in everything from chocolate-covered garlic to enhancing risotto, pasta, beef, seafood and chicken. Recipes for those that want to try black garlic for themselves are plentiful, even though the ingredient is not.

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Health Section

Why You Must Make Garlic a Daily Super Food

by Paul Passa, citizen journalist, *NaturalNews.com* 9/10/2010

Garlic (*Allium sativum*) has the broadest spectrum of any antimicrobial substance we know of. "It's antibacterial, antifungal, antiparasitic, antiprotozoan and antiviral," asserted Paul Berner, Director of The North American Institute of Herbal Medicine and author of *The Healing Power of Garlic* and several other herbal medicine books. This, along with even more health benefits, has been confirmed by other researchers, many from mainstream medicine.

Garlic's Healing Properties

Tests have found raw garlic **more powerful than even penicillin and tetracycline**. This is without destroying the digestive intestinal flora, which pharmaceutical antibiotics invariably do. It's also effective for TB and even Candida. Also, unlike heavy pharmaceutical antibiotics, garlic does not diminish the immune system. It actually enhances the immune system.

Allicin, the active ingredients released when garlic is crushed, **stimulates the immune system**. Dr. Abdullah and his colleagues at the Akbar Clinic and Research Center in Panama City, Florida, found raw garlic dramatically increased the powers of the immune system's natural killer cells. Abdullah believes the immune boosting power of garlic could even be used to help AIDS patients.

Garlic **prevents cancer and contributes toward tumor shrinkage**, especially stomach, colon, and breast and prostate cancers. The Russians have known this for decades. More recently, this has been formally recognized by Dr. John Pinto, Ph.D. of the normally anti-alternative natural cancer remedy Memorial Sloan-Kettering Cancer Institute.

In the 1970s, Robert I. Lin, president of Nutritional International in Irvine, California, **successfully used garlic to detox lead** from children. That's not a well known attribute of garlic, and it's another reason everyone should use garlic often in our heavily toxic heavy metal environment.

Garlic has been **used successfully for promoting cardiovascular health** even among those who are having arterial or heart problems. Garlic dilates blood vessels to lower blood pressure, removes triglycerides, dissolves internal clots, and prevents oxidation of important lipids that lead to cellular destruction – all without side effects, of course.

Dr. Irwin Ziment, a Los Angeles pulmonary specialist, regularly prescribes garlic as a decongestant and expectorant for common colds and as a **mucus regulator for chronic bronchitis**. University of New Mexico research has discovered that **garlic destroys meningitis in-vitro** (petri dish/test tube).

How to Include Garlic as a Super Food

Even though several studies have discovered even light use of raw and cooked garlic beneficial over non-garlic consumption, it's a good idea to consume mostly raw garlic daily to realize maximum benefits. The garlic must be freshly pressed and consumed after ten minutes and within one half hour to forty-five minutes to absorb the allicin, which is released only when garlic is pressed, chewed, or juiced.

Garlic Could Protect Against Hip Osteoarthritis

Women who consume a diet high in allium vegetables, such as garlic, onions and leeks, have lower levels of hip osteoarthritis.

The new findings by researchers at King's College London and the University of East Anglia not only highlight the possible effects of diet in protecting against osteoarthritis, but also show the potential for using compounds found in garlic to develop treatments for the condition.

A relationship between body weight and osteoarthritis was previously recognised, although it is not yet completely understood. This study is the first of its kind to delve deeper into the dietary patterns and influences that could impact on development and prevention of the condition.

Osteoarthritis is the most common form of arthritis in adults, affecting around 8 million people in the UK, and women are more likely to develop it than men. It causes pain and disability by affecting the hip, knees and spine in the middle-aged and elderly population. Currently there is no effective treatment other than pain relief and, ultimately, joint replacement.

The study, funded by Arthritis Research UK, the Wellcome Trust and Dunhill Medical Trust, looked at over 1,000 healthy female twins, many of whom had no symptoms of arthritis.

The team carried out a detailed assessment of the diet patterns of the twins and analysed these alongside x-ray images, which captured the extent of early osteoarthritis in the participants hips, knees and spine.

They found that in those who consumed a healthy diet with a high intake of fruit and vegetables, particularly alliums such as garlic, there was less evidence of early osteoarthritis in the hip joint. To investigate the potential protective effect of alliums further, researchers studied the compounds found in garlic. They found that a compound called diallyl disulphide limits the amount of cartilage -damaging enzymes when introduced to a human cartilage cell-line in the laboratory.

Professor Ian Clark, of the University of East Anglia's School of Biological Sciences, said: "Osteoarthritis is a major health issue and this exciting study shows the potential for diet to influence the course of the disease. With further work to confirm and extend these early findings, this may open up the possibility of using diet or dietary supplements in the future treatment of osteoarthritis."

Dr. Frances Williams, of the Department of Twin Research at King's College London, who led the research, said: "While we don't yet know if eating garlic will lead to high levels of this component in the joint, these findings may point the way towards future treatments and prevention of hip osteoarthritis."

"It has been known for a long time that there is a link between body weight and osteoarthritis. Many researchers have tried to find dietary components influencing that condition, but this is the first large scale study of diet in twins. If our results are confirmed by follow-up studies, this will point the way towards dietary intervention or targeted drug therapy for people with osteoarthritis."

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Contact: Communications Office, University of East Anglia, press@uea.ac.uk

Queen's chemist sheds light on health benefits of garlic

Published by Queens University
Science News, 1/30/09



A Queen's-led team has discovered the reason why garlic is so good for us. Researchers have widely believed that the organic compound, allicin — which gives garlic its aroma and flavour — acts as the world's most powerful antioxidant. But until now it hasn't been clear how allicin works, or how it stacks up compared to more common antioxidants such as Vitamin E and coenzyme Q10, which stop the damaging effects of radicals.

"We didn't understand how garlic could contain such an efficient antioxidant, since it didn't have a substantial amount of the types of compounds usually responsible for high antioxidant activity in plants, such as the flavanoids found in green tea or grapes," says Chemistry professor Derek Pratt, who led the study. "If allicin was indeed responsible for this activity in garlic, we wanted to find out how it worked."

The research team questioned the ability of allicin to trap damaging radicals so effectively, and considered the possibility that a decomposition product of allicin may instead be responsible. Through experiments with synthetically-produced allicin, they found that an acid produced when the compound decomposes rapidly reacts with radicals.

Their findings are published in the January 2009 issue of the international chemistry journal *Angewandte Chemie*.

"Basically the allicin compound has to decompose in order to generate a potent antioxidant," explains Dr. Pratt, who is Canada Research Chair in Free Radical Chemistry. "The reaction between the sulfenic acid and radicals is as fast as it can get, limited only by the time it takes for the two molecules to come into contact. No one has ever seen compounds, natural or synthetic, react this quickly as antioxidants."

The researcher is confident that a link exists between the reactivity of the sulfenic acid and the medicinal benefits of garlic. "While garlic has been used as a herbal medicine for centuries and there are many garlic supplements on the market, until now there has been no convincing explanation as to why garlic is beneficial," says Dr. Pratt. "I think we have taken the first step in uncovering a fundamental chemical mechanism which may explain garlic's medicinal benefits."

Along with onions, leeks and shallots, garlic is a species in the family Alliaceae. All of these other plants contain a compound that is very similar to allicin, but they do not have the same medicinal properties. Dr. Pratt and his colleagues believe that this is due to a slower rate of decomposition of the allicin analogs in the onions, leeks and shallots, which leads to a lower level of sulfenic acid available to react as antioxidants with radicals.

Alternative Answers: Garlic for Strong Nails

from Diana Moore, www.ricandi.homestead.com

Did you know that crushing a clove of garlic and then rubbing it into your nails will make them white and strong?

It is so easy to do. Rub the garlic into each nail, let it dry (only takes a minute to do) and then wash off with soap and water. Repeat every five days until you get the desired results (normally within 3 weeks, but you can see improvement within a couple of treatments).

If there is any residue smell, just soak hands in either baking soda and water or lemon and water.

Be careful if you have sensitive skin as sometimes it can burn.

It is the first time my nails have looked so healthy.

Garlic World News



Garlic growers take on China

by Jim Prevor, *Perishable Pundit*, May 4, 2011

CONSUMER demand for fresh Australian garlic has seen a resurgence in local production.

Adelaide Hills organic garlic growers Megan OHara and Richard Casley-Smith have increased their crop area by 600 per cent and will produce about 15 tonnes next summer to help meet demand. In

the sixth year of garlic growing, they have brought in expensive machinery from France to run a fully-mechanised operation for the first time.

"A lots of farmers have decided to grow garlic this year because there has been a great call from the public for Australian garlic," Ms O'Hara said. The public doesn't want the cheap garlic from China which has been sprayed with methyl bromide, a toxic poison."

Ms O'Hara said they also are involved in a research and development program to assess the potential of growing specialty varieties of garlic for food and medicinal purposes. About 90 per cent of the garlic eaten in Australia each year is imported and accounted for 37 per cent of the value of fresh vegetable imports in 2009-10.

Leading artist Ms. O'Hara's garlic oil painting is among works to be exhibited at the Jam Factory launch of the Premier's Food Industry Awards, recognising outstanding achievement and excellence in food.



China
Garlic Sprouts Cut and then Frozen

Eye-Opening Visit To China's Garlic Growers

by Jim Prevors, *Perishable Pundit*, *Pundit's Mailbag*

Our piece, *More Food Safety Lessons from Chinese Ginger Recall*, brought an important letter from a person with much *experience* in the industry:

I read with interest the news reports and Punditry regarding the recent Chinese fresh ginger recall, and subsequent comments from Jim Provost of I Love Produce.

I spent about 10 years of my career in the garlic and ginger businesses, with product from China playing a greater role as each year rolled on. It became clear that travel to China was appropriate, so I made the trips and learned much about the production and processing of both garlic and ginger. I offer the following observations.

- While shippers in China routinely tout their growing operations as large-scale farms, the majority of export product is produced on small, uninspected, independent family plots. Farm implements consist of livestock, small, 1940's era single-cylinder diesel-powered walk-behind machines, and, of course, human hands and backs.



- I visited numerous packing sheds, and observed on many occasions women in their 70s crouching on the dirt floor sometimes with sneezing children on their laps, grading, sizing, and hand-trimming garlic or ginger using a small knife with a curved blade. I saw many fingers bandaged with what appeared to be masking tape, frequently stained red from a bloody wound.

- Many garlic packing sheds inventoried numerous pallets of empty cartons. Some of these cartons were labeled "Product of Uzbekistan" or "Product of Thailand". These cartons are intended for export to the USA. Mislabeling the product is done in an effort to circumvent the US Dept. of Commerce anti-dumping duty assessed on garlic produced in China.

- When I asked through my interpreter if a shipper could provide organically produced product, the packing house manager went to his desk to retrieve a rubber stamp. The stamp simply said "ORGANIC." I was quoted the same price for "organic" garlic as for the conventional product.

- At a peeled garlic processing facility (actually an open air, fly-infested shed adjacent to a malodorous drainage ditch), I observed workers dumping peeled garlic cloves into a large tub filled with a cloudy, viscous liquid. Upon inquiry about this step in processing, I was told that the tub was filled with a sulfite solution, which ensures that the cloves retain a bright white hue in shipping and handling.



The packaging for this product was for the Japanese market, arguably the world's most demanding market.

• Wheat and other grain crops are cut by hand and sickle. Separating the grain from the chaff is accomplished by laying the stalks on the nearest road, where the passing truck tires pass over the stalks at high speed, with the vehicle's wind leaving only the grain on the road surface. I observed this all over Shandong Province, with many laborers standing on the roadside with big 100-lb burlap sacks labeled "Cargill." Once a suitable pause in traffic occurred, the laborers used handmade straw brooms to whisk the grain from the pavement into the sacks. Did Cargill's office in China authorize this?



Finger cutter



Fingers

These observations, along with many others, have led me to the conclusion that food safety is only a pleasant thought in the parts of Shandong Province I visited. Claims that US marketers of Chinese produce can control, or even monitor production are laughable.



China is not a place where you can rent a car at the airport and drive out to the field to check up on a grower. China is not a place where a US company can open an office and take charge of anything. China is an unregulated place where the shippers understand capitalism very well and will tell buyers exactly what they want to hear. Remember, outsiders don't control anything in China — only the Chinese do.

The Garlic Wars

by Patric Juillet, *Daily Kos*, 03/11/11

I adore garlic. And who doesn't? Apart from my porridge and desserts (though I have made a garlic flavored ice cream in the past), it's in everything I cook. I can't tell enough of you how incredibly healthy it is. So, what's up with this bulb? A garlic war on your doorsteps, no less. How so? Here are the stakes.

The U.S. consumes about 300 million pounds of fresh or peeled garlic, annually, and consumption is growing as garlic moves from a primary ingredient in many ethnic dishes to a mainstay in American kitchens and restaurants. The growing consumption would seemingly paint a bright picture for California garlic production, but the drop in acreage gives a clue otherwise. The reason: China.

Here's the math: China went from 50,000 pounds of garlic a decade ago to 2 million to 3 million pounds last year, flooding the market with fresh and dehydrated garlic. So what's the problem, we're getting cheap garlic. Well, yes, but much of the garlic exported to the U.S. is dehydrated and may contain high levels of lead.

Garlic is a huge commodity in China and there are two distinct markets, one for fresh garlic and one for the dehydrated kind. Most of the raw material is processed at small factories that dry the garlic flakes and sell it to processors. There are also many small factories that grind the garlic flakes and then sell that to processors. As a result, the dehydrated garlic can change hands several times, making traceability difficult. And that is at the crux of the problem: how does one know if imported garlic has been dehydrated properly? Would you rather pay a few cents more for freshly grown garlic in California or cut corners and buy the cheaper stuff?



In fairness, the Chinese government has attempted to consolidate food regulation with the creation of the **State Food and Drug Administration** in 2003, and officials have also been under increasing public and international pressure to solve food safety problems, but we did get the pet food

scandals, the lead-painted toys, the melamine milk and quite a few others. I have no beef with the Chinese producers; I know that they will, in good time, resolve and bring the standards of food safety to the North American and European levels.

How to buy garlic: Choose garlic that has plump, firm bulbs. Look for bulbs with the roots still intact — imports from China often have the root shaved off. Avoid garlic that is soft or light in weight, as this is a sign of age or dehydration. Avoid garlic that is "sprouting," as it can add a bitter taste to food.



The Chinese are shipping fresh garlic into the U.S. at a cost of \$12 to \$16 per 30-pound box. It costs U.S. growers and packers \$25 to \$30 per 30-pound box. China grows two-thirds of the world's garlic, mostly in small plots. Its fresh garlic is not as flavorful as California garlic, which is keeping California garlic in the marketplace against the cheap imports.

Garlic becomes hot commodity outside stock market

21Food.com - 28 April 2011

Over the past 18 months a financial bubble has been building that rivals land speculation in its momentum and lack of reason. In China the price of garlic has skyrocketed. The roller coaster began in 2008 when the price dropped significantly due to overproduction in the market. Subsequently, in 2009, acreage planted to garlic was cut back. Also in 2009, the swine flu swept through Asia, causing panic and, believing garlic to have natural antibiotic properties, demand exploded. At first the laws of supply and demand prevailed and the price rose accordingly. Then speculators took notice and wholesale prices have been surging

well into August of this year. Had you invested in crude oil or gold futures in the year 2009 you would have seen a robust return of 100 percent and 27 percent respectively. Had you put your money in Chinese garlic, you would have enjoyed a more than 600 percent return for your investment.

Unfortunately, you cannot add garlic to your portfolio as there is no futures market for it. In other words, it is not traded on any stock market. Those who made big bucks (or rather yuan) on garlic went straight to the farmer to buy it, stored it and sold it in parcels as the price went through the roof. Jerry Lou, a China strategist at Morgan Stanley in Hong Kong, said local investors have made serious money in garlic. "It's been a great bull market for commodities across the board," said Larry Schneider, director of business development at Zaner Group, a brokerage firm specializing in futures and commodities. "But I can't remember when anything shot up like this." So, why is a column about local food focusing on a crop going wild on the opposite side of the planet? Because in a global economy everything is local. Fifty percent of the garlic on U.S. supermarket shelves comes from China. For a time, the huge supply and low price was driving prices down, making it difficult for U.S. growers to compete. This year, American garlic growers can benefit from the boom. Though we haven't seen the price frenzy of China, the wholesale price of domestic garlic did increase 70 percent from March 2009 through March 2010, according to Bill Christopher, co-owner of California-based Christopher Ranch, the biggest domestic supplier of raw garlic in the U.S.

Vermont growers who sell locally likely didn't participate in that price hike because our prices were already high. We still may benefit, though, if out-of-state prices begin to catch up to ours and the choice of buying locally becomes economically competitive. I have noticed that the fever to get into the garlic trade has been climbing; as of six years ago it seemed like everyone and their plumber was starting to grow garlic commercially. (Truly, my plumber, Tom, grows a small crop as a sideline.) My neighbor, a part-time farmer, has increased his garlic acreage every year. My former employee, Eliza, left my farm to start growing garlic exclusively. And even though I have been on hiatus from commercial farming for two summers, I still plant up to 50 pounds of garlic each fall to keep the seed stock going. With prices of organic seed garlic cresting \$20 a pound, it is well worth the effort should I return to full-scale farming anytime soon.

With all of this land turned over to grow garlic are we heading toward a bubble of our own? If I had the ability to predict future commodity prices such as this one I would have a nicer tractor by now. I can say that demand for local garlic remains high in Greater Burlington, and stores that sell it, such as City Market, have historically exhausted supply by early December. The wholesale price of Vermont garlic has remained steady for the past several years, and my guess is it would take more than an epidemic to send it into a frenzy. This sits well with me because with the frenzy comes the inevitable crash. Still, I got an interesting follow-up call from James Morrell, the produce buyer from City Market, after we had spoken about the garlic situation in China. Morrell told me that though he did not see a significant increase in conventionally grown garlic prices over the summer, in the past week, for no apparent reason, the wholesale price shot up 6 percent

Chinese Garlic Banned from Entering Taiwan from a third party :COA

www.freshplaza.com, 5/11

The cabinet-level Council of Agriculture (COA) on Tuesday reiterated its commitment to preventing Chinese garlic from entering Taiwan through a third location, particularly countries in Southeast Asia.

As garlic is one of the 830 items of Chinese products banned from entering Taiwan, the COA said the government is doing everything possible to avoid a transshipment of Chinese garlic via a third country or area.

To serve that end, the COA's Agriculture and Food Agency had notified local importers in a mid-November meeting that strict measures would be adopted to screen Chinese garlic transshipped into Taiwan from a third party.

Local importers are required to attach documents, including transport contracts, customs clearance reports, and government-issued papers to verify the origins of their imported goods and other related documents to identify the producers, producing venues and the size of plantation areas, the council stressed.

Imported garlic will be sent to Taiwan's overseas office for re-examination if it is hard to identify its place of production, it added.

The COA said it also has suggested the Bureau of Foreign Trade ban garlic imports from Vietnam, from where large amounts of Chinese garlic are transshipped into Taiwan.

The COA's statement came after hundreds of garlic farmers from central Taiwan's Yunlin County staged a protest in front of the county government headquarters on Monday.

The farmers discarded many boxes of China-produced garlic which were transshipped into Taiwan from Vietnam to protest against what they claimed was the central government's lack of concern for Taiwanese farmers' livelihoods.

According to some of the protesting farmers, garlic cultivated in Vietnam is not enough to meet its own local demand, not to mention the possibility of exporting it to other countries.

If Chinese garlic continues to enter Taiwan through transshipment from Vietnam, it would deal a heavy blow to locally-produced garlic, which is set to hit the domestic market one month later, said a chief delegate of a local farmers' association.

Garlic is one of the major farm products in central and southern Taiwan, with 5,400 hectares of farmland across the country devoted to its cultivation.

Garlic production in Taiwan is valued at NT\$2.1 billion (US \$66.03 million) annually, the COA said.

Garlic grown in Yunlin County accounts for 85 percent of Taiwan's overall production.

Can India Ease the Current Garlic Shortage?

India Prices are set to Fall in Feb.

By blog.garlicking.net, 1/11/11

Adding a pinch of garlic could make all the difference to your palate and purse as the commodity soars to new heights on the back of a global shortage. Market prices have touched record highs on the back of good domestic and export demand with the Chinese crop said to be low due to climatic problems.

Traders expect the market to ease by February when the new Indian crop reaches market. Retail prices of ginger have increased by 200-300% in a short span of time and on Friday, garlic was quoted at Rs 300-310 per kg (\$3-\$3.10 per lb) in Madhya Pradesh, while it went above Rs 330-360 (\$3.30-\$3.60 per lb) in the Mumbai market

"Prices are at the highest ever level and exports have come down. India has exported a lot of the commodity owing to a global deficit with production in China on the lower side," said Kanubhai Mehta, a prominent Mumbai-based trader.

From being a net importer of garlic, India has turned into a big supplier of garlic in the global market due to a shortfall in the Chinese crop and good domestic production, traders said. Apart from the traditional market of Bangladesh, Indian garlies are now exported to Pakistan, Thailand and Malaysia. According to Spices Board data, garlic exports increased during the last fiscal by 1,314% in volume terms and 769% in value terms. In the current fiscal, exports are continuing the trend with nearly 15,250 tonne (metric ton) exported during the April-October period alone, registering an increase of 127% over the same period of last fiscal.

"Chinese crop for 2011 is also expected to be bad, raising concerns on the availability for next year. But we hope that good production in India would help in easing the market," Mehta said. Spices Board sources pointed out that India used to import nearly 15,000-20,000 tonne (metric ton) of garlic per annum from China due to the good domestic demand. China is the world's largest producer of garlic with more than 60-65% of the total share with India coming second or third with an output of eight lakh tonne (800,000 metric tons). India is also major consumer of garlic with both South and North Indian cuisines featuring it. India produces the small cloved varieties, with a high number of cloves, which the domestic market consumes.

However, for export bigger clove garlic with lesser number of cloves is preferred. Board estimates the 2009-10 garlic production to be around 10 lakh tonne (1 million metric tons). India's garlic production is expensive due to low productivity, poor genotypes, and high cost of farming. In India garlic is mainly cultivated during winter season and reports indicate a rise in acreage. Demand for garlic is seen increasing rapidly with the higher sales of branded food pickles and curry products. It is also widely used for producing herbal products pastes and medicines.

I have seen Indian garlic powder (treated) being sold in Los Angeles market at \$1.40/lb compared to Chinese at \$1.60/lb.

Garlic's hot streak should last well into 2011

by Andy Nelson, "Crops and Markets," thepacker.com, 9/8/10

Unprecedented high garlic prices show no signs of easing up anytime soon, grower-shippers and importers said.

"In our 61 years of business, we have never seen such a market," said Louis Hymel, director of purchasing and marketing at Orlando, Fla.-based Spice World Inc.

"Prices will likely stay at their current levels through the Chinese and California seasons, which don't end until May," said Paul Auerbach, president of Maurice A. Auerbach Inc, South Hackensack, N.J.

"The perception is that Chinese garlic is the cheap item, but it's three times higher than normal," he said.

On Sept. 7, 30-pound cartons of netted 3s from China sold for \$34 on the Los Angeles terminal market, up from \$10-11 last year at the same time, according to the U.S. Department of Agriculture.

A 30-pound carton of white California garlic at the Atlanta terminal market on Sept. 9 was \$53.50-54.50, \$20 more than at the same time in 2009 and \$30 more than in 2008.

"Prices will likely stay at current levels until at least Chinese New Year Feb. 3," said Jim Provost, who imports garlic as president of West Grove, Pa.-based I Love Produce.

"Chinese garlic prices are at historically high levels we've never seen before," Provost said. "It's been a very unusual year."

"Fresh garlic prices in recent years have seen double-digit

growth, largely due to shorter supplies and quality concerns from China," said Maria Brous, director of media and commodity relations for Lakeland, Fla.-based Publix Super Markets Inc., which buys garlic from California, Argentina and Mexico.

"This year exports [from China] have come almost to a complete stop," Brous said. "With less exports and an already tight market in the U.S., prices have increased across the board."

According to the USDA, as of the second week of September, season-to-date imports of Chinese garlic have dropped 33%.

A garlic buyer for a large supermarket chain in North Carolina, speaking on condition of anonymity, said Sept. 9 that not only does he expect high prices to stay, but they will likely increase.

"They [prices] just go up from here," he said, attributing the high prices mainly to the market situation with Chinese garlic. "I don't think they're going down anytime soon."

Gilroy, Calif.-based Christopher Ranch "is taking care of the long-term customers," said Patsy Ross, vice president of marketing. "Beyond that, the company is struggling to meet continually growing demand."

"It's hard to turn people down," Ross said. "It's definitely a year where you wish you would have planted a little bit more."

"There are several reasons for the extremely strong market," Hymel said, "but at the top of the list is a big shortage from industry leader China."

"China is especially short this season on the large sizes favored by U.S. and European customers," Auerbach said.

"In addition to the smaller Chinese crop, growing worldwide demand for garlic also is playing a role in the strong markets," Auerbach said. "California shippers, for instance, are seeing stronger demand from Mexico and other export markets," he said.

"In the first half of September, Spice World was shipping product from California and China," Hymel said.

Hymel reported excellent quality in the domestic crop this season. "Our California crop is excellent this year – one of the nicest in years," he said.

"The company will ship California-grown from cold storage well into 2011, and will add Argentinean product in January," Hymel said.

"Auerbach, which also will add Argentinean product around the end of the year, hasn't seen such anticipation for Argentinean garlic in some time," Auerbach said.

"When the Argentinean deal winds down, Spice World will supplement its Chinese and California supplies with product from Mexico – first from central Mexico, then from the Baja peninsula," Hymel said.

"Shipments from Argentina and Mexico could help shippers better meet demand," Ross said, "but there are no guarantees. There are a lot of 'ifs' out there," she said.

How Safe is Chinese Garlic?

www.laobserved.com

FDA records show that since 1994, fresh and processed garlic have been targeted for automatic detention and surveillance. Numerous shipments from several companies – five Chinese, one Canadian and one Argentine – were refused because of insects or insect damage, mold or filth between 1994 and 1996. The Canadian firm had repacked Chinese garlic and shipped it, peeled, in five-pound jars. Thirteen fresh garlic shipments from China were refused at California ports. A Washington Post search of nearly 900 FDA "refusal actions" from May 2006 to April 2007 turned up 18 shipments of garlic products from several countries. Some examples of rejections: from China, chili garlic sauce, because manufacturing infor-

mation was not provided; from Canada, garlic paste, made in unsanitary conditions and inadequately labeled; from Argentina, "filthy" garlic bulbs.

Michael Doyle, director of the Center for Food Safety at the University of Georgia, says that garlic has natural inhibitors against pesticides. Marion Nestle, professor of nutrition and food studies at New York University and author of "What to Eat," says the skin also protects somewhat against pesticides, if any were used. "Pesticide residues can be removed by washing," she says. "E. Coli and other bacteria on fresh garlic would probably be only on the exterior," Nestle says. She and Doyle agree that besides peeling and discarding the skin, the one sure fire way to kill off microorganisms is to turn up the heat.

Chinese Dehydrated Vegetable Market Report – December 2010

www.spices.be

We made a new market survey over the last weeks to verify the current situation. Let's recap first what happened over the last 12 months. In 2009 and 2010 fresh garlic prices were sky high and sold as if it was white gold. There was almost no dehydration made unless at very high prices and subject to prepayment. We noticed prices above 8,000 USD since July 2010. The big carry-over stocks of 2007 and 2008 were used throughout 2009 and 2010 to overcome the double crop failure. These stocks are now almost all sold off. What is left is dark brown flakes with high micro.

Right now we observed a weaker note and we analyzed if the dip is a temporary correction or if this can be a trend towards new crop? We observed the following fundamentals:

- The fresh garlic crop was short and we believe that there is little fresh garlic available. The prices of fresh garlic are still very high and as a result, there won't be any dehydration made till new crop in 2011.
- There was a lot of trading in the period June till October 2010. Most of the overseas buyers have taken the short to mid-term positions to secure deliveries. The few parcels left from good old crop materials were all sold over the last 6 months.
- There is hardly any good garlic flakes available for grinding and what is available will be picked up soon. We expect an empty market as from Chinese New Year in February till August 2011.
- There is still a considerable volume inferior quality available which are very dark brown flakes and we believe that these are not suitable for our European customers. The granules and powder made from these flakes are dark yellow to dark brown and have an off taste and flavor. The stocks are in commodity speculators hands who tend to sell these off now and shift their interest to cotton which is the new hot item in China. This explains the weaker note of the last weeks.
- The October planting of garlic for 2011 was generally perceived as a good acreage. This confirms the weaker sentiment. It is too early to predict how the crop of 2011 will be.
- We observed that some processors in Xinxiang are bleaching the brown flakes with H2O2 peroxide. The brown flakes become white and may be sold as premium quality at a discounted price. We warn our customers whenever cheap premium top grade flakes are offered at discounted prices, it may well be made from bleached garlic flakes. One can detect easily as the flakes hardly have taste or flavor and also the treatment results in a very low micro count and different density.

Our reading and conclusions after our market survey is that good standard and premium quality garlic is hardly available and is still offered at a very high price. The few good parcels left are of-



fered now and the current dip may well be a good opportunity to cover forward as we expect this dip not to last for long. After Chinese New Year the market will be empty for good standard and premium quality. We expect on the other hand that the garlic market can be disturbed by traders offering very dark brown garlic as standard quality and bleached flakes as premium quality at discounted prices. It will be very much a matter of being very selective and evaluating pre-shipment samples when buying in the first half of 2011. We recommend to take full coverage till new crop 2011 is available in September 2011. We noticed prices for premium top grade in the range of 7,500-8,500 Usd/MT while good quality old crop standard qualities are not offered between 2,500-3,500 Usd/MT. Garlic offered below 2,500 Usd is a big question mark what you will get.

Crops in Crisis: California Garlic

www.foodandwaterwatch.org

Smuggled Garlic Anyone?

In 2000, about \$100,000 worth of Chinese garlic was imported into the US. by 2005, that number had surged to over \$50 million. With a 376% import tax on Chinese garlic, how did this happen? Joe Lane, head of one of the two top California garlic producers, The Garlic Company, hired a team of lawyers to crack the case. They came up with some startling discoveries.

To avoid paying the import tax, merchants often smuggle Chinese garlic into the country, lying about the weight and value of the box, or even hiding the garlic underneath ginger (there is no tax on ginger). Chinese companies have also found ways to take advantage of a loophole that allows new sellers to import garlic duty-free for the first year. Many "new" companies have cropped up, only to "go out of business" after a year, when the taxes are due. In 2004, U.S. Customs failed to collect \$25 million in duties on declared garlic.

It's interesting that while the federal government is preoccupied with negotiating new trade agreements, there is minimal effort to enforce those rules that are already in place.

When you buy garlic at the grocery store, it's about 50/50 whether the bulb will be from California or China. The bulbs look the same, and they don't have to be labeled. But the stories behind Chinese and California garlic are as different as they look similar.

California garlic is grown, peeled and processed in the Central Valley. Workers at a garlic plant in California make about \$12-\$14 per hour, plus benefits. On the other hand, Chinese garlic generally comes from a farm where the workers are paid about \$1-\$3 per day. The garlic is then shipped across the world to California, by merchants who often keep far more of the profit for themselves than they pay to the farmers.

With such vastly different stories, it's no surprise that Chinese garlic sells for as low as \$11 for a 30-pound box, about half of what California growers need to keep afloat. The difference in price has hit California growers hard. Joe Lane's fresh garlic sales have decreased by about 80 percent in the past decade, Christopher Ranch has taken 40 percent of its garlic fields out of production, and Thomson Land Company has stopped growing garlic altogether.

However, despite the tough times, Joe Lane is "becoming more optimistic." Food safety concerns are making clients, especially high-end restaurants, switch back to garlic from California, where they can be more secure about sanitary regulations. Flavor is also a consideration, Lane explained. "People tell me, 'We may spend less on Chinese garlic, but then we have to use twice as much to get the flavor we want,'" So will California garlic weather the storm? "Maybe we still have a chance to compete with them," Lane said. "I hope so."



Press #49: Summer 2010

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Fig. 8.—Trimming and sacking garlic in the field. *

