



THE NEXT STEP Toward a Healthier Future

A BI-MONTHLY NEWSLETTER OF THE SEBASTOPOL TOXICS EDUCATION PROGRAM

Companion Planting For A Healthier Garden

For as long as humans have grown our own food, we've used companion planting – for natural pest control, higher garden yields, greater nutrition, attracting beneficial insects, and increased biodiversity.

How can you use companion planting for better results in your organic food garden? Here are some helpful tips:

■ **Plant flowers with your vegetables.** Flowers bring hummingbirds, bees, and butterflies to pollinate plants (increasing crop yields) and spread the gene pool (ensuring diversity and strength in seeds saved for next year's crop).

■ **Plant scented marigolds throughout your garden** to repel aphids and other garden-feeding insects. If a plant has aphids, place a marigold flower on it to remove most, if not all, of them. (A high pressure hose works well too.)

■ **Plant mints and other fragrant herbs** among your vegetables and fruits.

Many insects are attracted to a certain plant's smell, so masking its fragrance with a diversity of herbs helps protect your favorite crops. Mint spreads quickly, so put it in a pot if you want to contain its growth.

■ **Plant legumes before and after planting high nitrogen users, like corn, tomatoes, and sun-**

flowers. Legumes (such as peas, beans, alfalfa, vetch, and lupine) restore nitrogen naturally to the soil without using synthetic fertilizers.

■ **Use plant guilds** to better use space and create mutually beneficial relationships for your garden. For instance, the *Three Sisters* is an ancient plant guild used by Native Americans and consists of corn, pole-bean, and squash. The beans climb the corn stalks, so you don't need to make bean poles. The squash fills the area in-between with large squash leaves that shade out most weeds. And eating these three together forms a complete protein for the body! In Sonoma County, be sure to plant the corn 3-4 weeks before the beans so the beans won't pull the corn plants down.

~ Craig Litwin

Snails Be Gone!

Many products for getting rid of slugs and snails contain highly toxic materials like metaldehyde and carbaryl that can put children, pets, and wildlife at risk. Even Sluggo is primarily made from so-called "inert" materials. "Inerts" can actually be quite toxic and, since the manufacturers won't disclose what they are, we can't say they're safe.

So what are some totally non-toxic ways to stop snails? Master Gardener Maggie McKinley gives these suggestions:

■ **Copper strips.** Surround a small area (like a raised bed) with copper strips, which snails can't cross.



Consumer Alert



Many Uses Banned But Still On Store Shelves

The insecticide **chlorpyrifos** (klor-peer-ri-fose) is the most widely-used household pesticide in the U.S. Found in a wide range of home, lawn, and pet care products, 20-24 million pounds are used each year in our battles with fleas, ants, mosquitos, cockroaches, termites, and other insects.^{1[9]} Chlorpyrifos is also used in agriculture (as Lorsban) and by pest control operators (Dursban).

We're so frequently exposed to chlorpyrifos that, in a 1994 survey of 1,000 Americans, 82% had its residue in their urine.² Between 1985 and 1992, over 10,000 adults and 11,000 children reported chlorpyrifos exposures to poison control centers³, making it one of the most reported insecticides in the U.S.⁴

Unfortunately, these exposures are putting us all at risk. Chlorpyrifos kills insects by attacking their nervous systems and causing a seizure. But humans have similar nervous systems and thus are also harmed.

Immediate (acute) symptoms of exposure include headache, dizziness, nausea, weakness, muscle twitching, sweating, convulsions, paralysis, and even death. Long-term effects (even from one exposure) include reduced memory, slowed motor activity, tingling, numbing, behavioral changes, and immune system and reproductive problems (including reduced sperm production).⁵ Chlorpyrifos kills and harms fish at low concentrations, and is toxic to birds, pets, beneficial insects – even plants!⁶

Because of the substantial evidence of harm at common exposure levels, many rejoiced when, on June 8, 2000, the Environmental Protection Agency (EPA) finally announced that **many (though**

See *SNAILS*, over

See *CHLORPYRIFOS*, over

Don't Put Toxics Down The Drain!

Have a household toxic material you want to dispose of safely? The Sonoma County Waste Management Agency sponsors free Household Toxics Roundup Days around the county for just this purpose! Some upcoming dates:

April 28 Rohnert Park

June 16 Santa Rosa

July 14 Sebastopol

Aug. 11 Cotati

Sept. 15 Santa Rosa

Household toxics they'll accept include: pesticides, bleach-based cleaners, paint, paint thinners, solvents, oil, oil filters, antifreeze, car batteries, photo chemicals, pool chemicals, and more. If a product has a warning label, it might be a candidate!

For more information, call 565-DESK (3375) or see <www.recyclenow.org>.



ABOUT STEP

The Next Step is published six times a year for Sebastopol residents by the **Sebastopol Toxics Education Program (STEP)**.

STEP's mission is to support Sebastopol citizens in reducing their toxic use and exposure, creating a healthier and safer Sebastopol for everyone.

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SNAILS, continued

Before installing, be sure no snails are in the garden. This method is effective but the initial cost can be high. Strips can be used year after year.

■ **Diatomaceous earth.** Sprinkle diatomaceous earth around your garden to stop snails, slugs, and earwigs. (When they cross it, they get cut and dry up.) The downside is that it does need to be re-applied after it gets wet from watering, dew, or rain. Be sure to get diatomaceous earth *for gardens*; the product used *for pools* won't work here.

■ **Beer.** Put some beer in a shallow dish in your garden. Snails are attracted to the beer's yeast, climb in, and drown with smiles on their faces.

■ **Hand pick.** Most effective and least costly is to hand pick snails early in the morning or evening. If you do this daily and start now, within a few weeks you should have them under control. They breed rapidly, so you can't just pick them occasionally. Be sure to get the babies before they breed. Remember that snails crawl. If you put them in a bucket, add some water with salt or cooking oil to prevent them from climbing out.

~ Nan Fuchs

CHLORPYRIFOS, continued

not all) uses of chlorpyrifos will be banned.

However, consumers note: **Banned chlorpyrifos products can still be sold until Dec. 2001, with no notice to consumers.**⁷

And your home, school, or workplace might still have products with chlorpyrifos on their shelves.

So, read product labels to avoid chlorpyrifos!

~ Patricia Dines

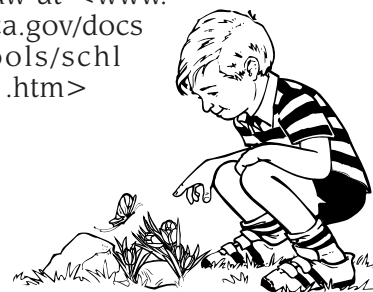
For this article's footnotes, see <www.healthyworld.org/F2> or send a SASE and request "Footnotes (2)."

Thank you to everyone who returned your STEP survey cards. Your input helps us create this newsletter to serve *your* specific needs. Many of your suggestions are already reflected in this issue!

Have an article idea? Want to share your success story, write an article, or otherwise be part of this volunteer community group's work? Contact us at the address to the left!

Good News For Parents

What pesticides are being used at your children's school? Now it's easier to find out! On Sept. 25, 2000, after many years of work by dedicated parents and others, the **California Healthy Schools Act** was passed. It requires California schools to inform parents about pesticide use, and encourages pesticide use reduction. Parents and schools can get more information about implementation of this law at <www.cdpr.ca.gov/docs/schools/schlmenu.htm>

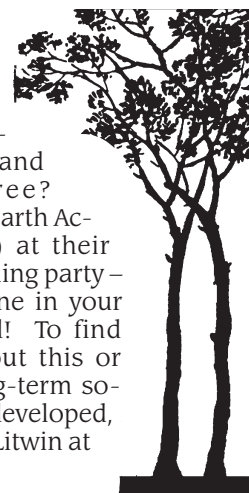


"After reading [your first newsletter], I decided to dispose of my worst garden pesticides and buy safe ones. Thank you for tactfully raising my awareness."

Signed, a Sebastopol resident

You Can Help Keep Sebastopol Beautiful!

Want to help keep Sebastopol city land herbicide-free? Join Planting Earth Activation (PEA) at their next weed-pulling party – or organize one in your neighborhood! To find out more about this or about the long-term solutions being developed, contact Craig Litwin at 829-2108.





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ARTICLE
EXCERPT WITH
FOOTNOTES

For a copy of the full newsletter, or for more information about STEP, write:
P. O. Box 1776, Sebastopol CA 95473

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~ Patricia Dines

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FOOTNOTES

- 1 EPA website <www.epa.gov/pesticides/announcement6800.htm> and <www.epa.gov/pesticides/op/chlorpyrifos/summary.htm>
- 2 "Important News from Victor Poison-Free Pest Control/Woodstream on Dursban/Chlorpyrifos Ban," June 9, 2000, <www.victorpest.com/dursban/trend.htm>
- 3 EPA, Office of Prevention, Pesticides and Toxic Substances, 1994, Review of poison control center data call in. Memo from J. Blondell, Health Statistician Health Effects Division, to Steve Knott, Section Head, and Larry Dorsey, Chief. Washington, D.C. (Dec. 5.) As reported in Chlorpyrifos Factsheet, Part 2. Caroline Cox. *Journal of Pesticide Reform*, Volume 15, Number 1, Spring 1995.
- 4 Chlorpyrifos Factsheet, Part 1, Caroline Cox. *Journal of Pesticide Reform*, Volume 14, Number 4, Winter 1994. From Northwest Coalition for Alternatives to Pesticides (NCAP).
- 5 Ibid.
- 6 Ibid, Part 3.
- 7 "EPA Bans Common Pesticide", *USA Today*, June 8, 2000. Reported on <www.victorpest.com/dursbanban.htm>