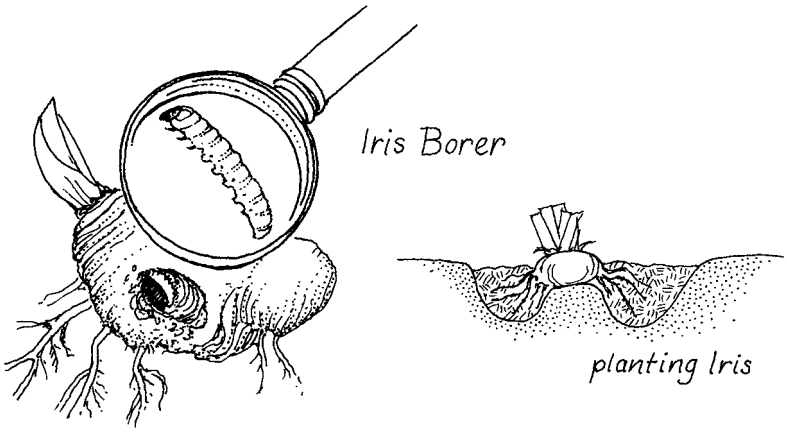

2/3 of the rhizome needs to be exposed to the air. You will notice along the rhizome that the roots tend to come off either side. You want this part of the root fully covered. When planting them back in, the best way to make sure you get the rhizome well exposed but the roots buried is to make a ridge or hill in the centre of the hole by digging down at a slight angle on both sides. Sit the rhizome straddling the ridge and put the roots down on either side. The roots will get covered when you fill in but the rhizome stays up on the ridge. Be sure to encourage the root development by adding either rock phosphate, bone meal or a high phosphorous fertilizer into the hole before planting, and water them in well. Any and all bits and pieces of rotted rhizome and discarded foliage should be placed in a sealed plastic bag and left to sit in full sun to bake for a couple of weeks. After that you can safely incorporate them with other organic matter you have in your compost pile.

Defining Pesticides

What are the generally accepted definitions of pesticides, herbicides, and fungicides?

Pesticide" is the general or catch-all term that is used to describe anything that kills pests of any sort. There are also subcategories of pesticides, such as herbicides used to kill plant material, fungicides to kill fungi, insecticides for insects, algaecides for algae, rodenticides for rodents and aracnacides for spiders and mites. Any of those can be lumped under the term "pesti-

cide". There are a few naturally occurring pesticidal compounds such as nicotine, pyrethrums, and the alkaloids in Rhubarb leaves, but the vast majority of commercially available pesticides are man-made chemicals that tend to persist in the environment or leave residues that bio-accumulate. These can also combine with other natural or man-made substances to create compounds that are equally harmful to human health – and pose a special risk to the health and development of children.

Restriction on the Cosmetic Use of Pesticides

Our municipality is debating a by-law to restrict the cosmetic use of pesticides and I honestly don't know what to think. The pesticide industry presents lots of convincing research that seems to show that these products are safe, effective and disappear quickly from the environment, so why not use them? On the other hand, those calling for the ban seem to have their own studies that show that these products are linked to serious problems, everything from birth defects to cancer. Who do we believe?

Well over 120 towns and cities across Canada, as well as the entire province of Quebec, have opted to reduce or ban the cosmetic use of pesticides, but I don't think I know of a case where that debate hasn't been long, ugly and pretty polarized. Essentially, the pesticide industry is fighting hard every step of the way to have us believe that we need their products in order to have pest-free gardens and healthy public green spaces. A lot of money is at stake. Good horticultural practices and alternative control methods, things like integrated pest management, will give you the same results, but these companies don't necessarily want you to know that. We've all used pesticides at some point and they work. It's only recently that researchers have begun to suggest that a neurotoxin designed to kill a bug might actually have an impact on our own nervous systems. Some of these toxins can build up and combine with other things in the environment to a point where they could become a threat to human health. A lot of the most common pesticides in use in Canada today were developed and certified back in the '50s and '60s before anyone suspected they might pose a danger or even knew which questions to ask. Many of these were "grandfathered" so they are not obliged to meet the burden of proof of today's tougher standards – but they

are still out there in the marketplace. One of the most popular lawn treatments in this country has been "under review" for more than 20 years. Even though they have yet to determine whether or not it is safe, you or I can go into any hardware store or garden centre in this country today, buy it, apply it and have our children play on that lawn the same day. So where do we turn for advice? One of the most objective, comprehensive and science-based studies on pesticides was produced by the Ontario College of Family Physicians in 2004. After reviewing all the scientific literature available on this subject, the researchers were surprised to discover how strong and convincing the medical evidence was regarding the potential health risks posed by the use of some pesticides. They had not expected so clear and conclusive a result. Likewise, the International Agency for Research on Cancer has also determined that some substances used in pesticides are known, probable or possible carcinogens. So you have to ask yourself, is it really worth the possibility of putting your health at risk for the sake of a few broadleaf weeds? A weed is a weed. Your long-term health, or your children's, is far more important. If you want to have a look at the Ontario College of Physicians' study, you can find on their website at www.ocfp.on.ca. Or pick up a copy of Theo Colborne's book "Our Stolen Future". It's a very approachable discussion of this issue and reads a bit like a mystery novel, but is based on real science. Both of these can be useful resources if you want to become better informed on this topic, minus the hype of the industry lobbyists or the "no spray at any cost" faction. In the end we all have to ask ourselves: if chemical-based pesticides are only being applied for "cosmetic" or aesthetic reasons, for the sake of appearances, are these chemicals really something we want to have in our parks and home gardens or should we consider achieving those same ends through alternative gardening methods?

Japanese Lilac is Stripped and Cracked

There is a beautiful white Japanese Lilac in our backyard that is about 30 years old, and the foliage is coming out nicely, but two disturbing things happened this winter. Many of the branches seem to be stripped of bark and it looks like the work of animals, although we don't see any animals doing it. And then the main branch seems to have a

large crack going right around it. What is the maximum age for these plants and should we be putting a seal in where the bark has been removed?

Age should not be a factor until this plant is 40 or 50 years old. It's more likely a result of the freeze-thaw cycle throughout the winter which can cause frost cracks quite easily. The best approach is to position a plank south of the tree about 6 inches away from the trunk and leave it during the winter months. Last thing in the fall, put this plank up, tie it into place on top and bury the other end into the soil. This will cast a shadow on the trunk to keep the sunlight from heating it up. Otherwise, every day during the winter when the sun beams down that plant thaws and then later, when the sun sets and the temperature drops, the liquid inside freezes, expands and cracks the trunk or branches. Once this cycle has started, it is very hard to stop. The shade from the plank will prevent these extremes and the plants generally heal quite nicely. You don't have to worry about a sealant for the cracks that are there. In fact, it is preferable for these to stay open and air dry to prevent fungal growth and so the birds can get in there to go after any insects.

Tomato Troubles

Last summer we had a terrible time with our tomatoes. They all got some sort of blight, turned black and we got nothing edible out of them. We picked off all the tomatoes and threw them out so that they would not infect the compost, but we left the plants in the garden and they are still there. What should we do?

Take the plants out of the garden, then till the area thoroughly and add some compost. Plant the tomatoes somewhere else for the next couple of years but make sure it's a good bright sunny location. If you could divide your garden into 4 quadrants and rotate the tomatoes through a 4-year cycle, that would be ideal. If you can't do that, at least alternate the location every year – every 2 is even better and every 3 would be better still. Just be sure you have got good strong light for the tomatoes in each position because that is the biggest requirement they have. If all else fails and you can't get them into a bright spot elsewhere in the garden, put them into pots in a bright sunny spot. The only challenge with tomatoes in pots is that they are very thirsty, so you have to water them just about daily. In your case, you will want to plant them as far away as possible from