Home/Garden

Chemicals can often hurt — not he

By PETER TONGE
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CHARLESTOWN, R.I. — The vanity license plate on Mike Merner's station wagon states his passion plainly: GROW.

Mr. Merner is a professional landscaper in southeastern Rhode Island. As such he grows and cares for a wide variety of plant species, from the azalea to the yellow-berried yew.

But mostly, he grows lawns — for other people. He's a lawn maintenance expert, in other words, and a very successful one at that.

In recent years his reputation has grown as the man who can produce and maintain a vigorous, healthy lawn that is largely weed- and pest-free.

More significant, to an increasingly concerned public, he maintains lawns that are free of health hazards to people and pets. The children can romp and the family dog can roll on the lawn right after any one of his treatments.

It wasn't always that way. Merner studied conventional turf management at the University of Rhode Island in the '60s — when the theory of the day was that a healthy lawn was impossible without regular applications of herbicides and pesticides. It took him about 14 years to find out otherwise.

Merner followed the all-chemical route when he worked for a golf course. For a few years afterward, he set up as an independent landscaper.

But it wasn't long before he began to notice the deteriorating health of the soil and the increasing frequency of turf problems. It seemed that the problems arose in direct proportion to the destruction of the soil life by the heavy use of chemicals.

"I found that the more I did, the more I had to do," he says of those early days. "I was creating a chemical dependency in lawns" — lawns that needed a repeated "fix" to stay green.

"Toxic rescue chemistry" is the phrase increasingly used by critics to describe the heavy, all-chemical approach that does nothing to maintain the teeming populations of microorganisms naturally present in a healthy soil. It produces a misleading surface green that belies the lack of substance in the root zone.

So Merner concluded that the key to a vigorous lawn lay in developing a healthy soil and a balanced ecosystem. It took him seven years to slowly drop his lawns' dependence on chemicals and come "to the delightful conclusion that we do not have to douse the earth with any toxic synthetic chemicals in order to have a beautiful, healthy lawn."

A growing though still small number of fellow professionals now think along similar lines. Sheila Daar, a landscape contractor and consultant on integrated pest management from Berkeley, Calif., is one of them, but she contends that the feasibility of maintaining an attractive, healthy lawn without the use of pesticides remains one of the "better-kept secrets" in the lawn-care industry today.

Eliot Roberts, director of the Lawn Institute in Pleasant Hill, Tenn., has no problems with what he sees as the judicious use of chemicals. Even so, he maintains lawns that have never had a fungicide application in 50 years. "They have never needed one," he says, and doubts they ever will, because of the consistent, if not exclusive, use of natural fertilizers. Organic methods make sense, in his view, "because they allow and assist nature in building up and maintaining a healthy soil."

Quoting the title of a book to make his point, Dr. Roberts contends that "it's the dose that makes the poison." Professional lawn-care companies have often been guilty of putting on too much chemical. But by far the worst offender is the homeowner — who invariably "puts on more, rather than less," in the hope of solving his problems. The result is an even more severe lawn problem.

Roberts prefers organic fertilizers, because they never overfeed the grass. Damage to soil life is next to impossible from any reasonable application.

Among chemical fertilizers, he finds those applied in liquid form with a hose-end applicator more acceptable, because excessive, soil-damaging applications are highly unlikely.

Jeff Ball, an author and host in the National Gardening Association's video series, is a convinced compost user, but also has little quarrel with the periodic use of liquid chemical fertilizers on his lawn.

He contends that lawns growing in soils rich in organic matter can accept controlled applications of chemical nutrients. But he avoids herbicides and pesticides that would kill or deplete those all-important soil-forming organisms. Not only do these soil organisms break down dead growth, they prevent the formation of that nemesis of all highly chemicalized lawns — thatch.

This is overly dense, soft growth — from heavy doses of chemical fertilizer — that is most vulnerable to insects and disease, in the view of all those interviewed. To maintain soil life, they use pesticides that are host specific, such as milky spore that attacks only the Japanese beetle grub. It is the kill-everything-in-sight pesticide that has done so much damage to our lawns and gardens, in their view.

Merner is so confident of the overall lawn health resulting from his "reformed" approach that he will guarantee any lawn he maintains against insects and disease.

"Initially my system costs a bit more (than the all-chemical approach)," he says, "but in the long run I'm far more reasonable, because I have fewer problems to contend with."

Organic lawns are slower growing, less succulent, and more hardy, in Roberts's view — and require less water to maintain an attractive turf. "This advantage, alone, often offsets

The beneficent bean

The bodacious beneficent bean. It's easy to grow, easy to harvest and easy to store. If you don't like one variety, there are hundreds of others to tempt you and an equal number of ways to cook them.

Pat Leuchtman

Between The Rows

Bean seed can rot if planted when the weather is cold and wet. Wait until there is no chance of frost and the soil has warmed up.

Beans are one of the most nutritious of vegetables; different varieties are high in protein, phosphorous, potassium, iron and thiamine. And what they take out is as good as what they put in; many beans are rich in the kinds of fiber that help lower cholesterol levels.

Beans fall into several categories. String beans, most of which now pride themselves on being stringless, are available as pole or bush varieties. These are not the most nutritious members of the bean (Phaseolus) family although they do provide some protein, thiamine, riboflavin and niacin — the B vitamins. Yellow wax beans have slightly less nutritional value.

Although all the beans which can be dried have the greatest nutritional value, navy beans are the nutritional champions. They are very high in protein, phosphorous, potassium and thiamine and extremely high in iron.

Lima beans are the most tender members of the family and have the longest growing season which usually makes them difficult to grow easily in New England.

Some beans go in and out of fashion and with all the interest in gourmet cooking, there have been new developments in French haricots verts. These green beans are long and slim because the beans develop more slowly than regular green beans. They develop good flavor while still retaining the tenderness of a young vegetable. Triomphe de Farcy is an old variety, but Aramis, Camile and Bahalores are newer and available from several seed companies.

Some beans give clear signals to the gardener. The Dragon Langerie (Dragon Tongue) wax bush bean has purple stripes on the eight-inch yellow pod when it is ready to be used fresh as a snap bean. The stripe will disappear during blanching indicating it has cooked sufficiently. When the stripes change to red the beans are ready to be harvested and dried.

The Royal Purple Burgundy bean is a bush bean that doesn't mind cool weather and, lest you worry that your family will be dubious about purple beans on their plates, the purple pods turn green after just two minutes of blanching, after which they can be frozen.

Beans certainly do not object to good soil, but they can be grown successfully in full sun in any ordinary, well-drained garden soil that is almost neutral.

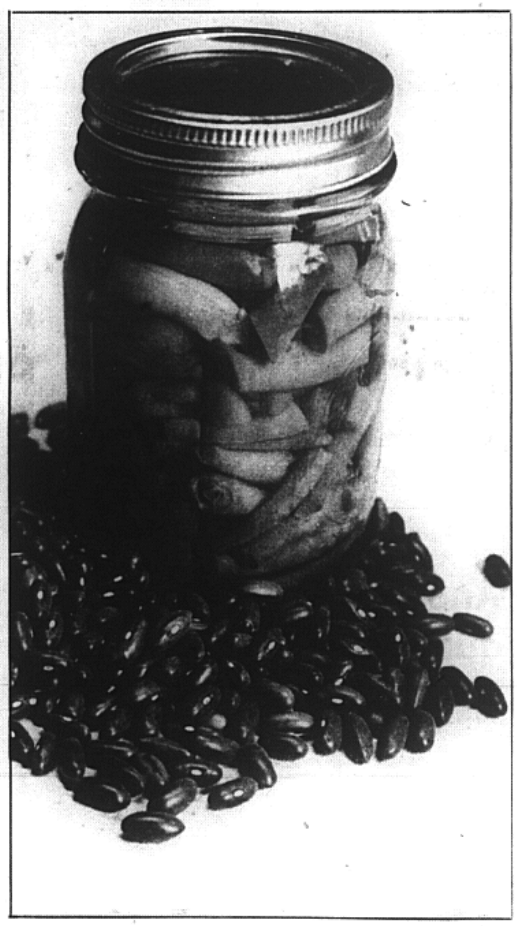
Bean seed can rot if planted when the weather is cold and wet. Wait until there is no chance of frost and the soil has warmed up. Seed should be planted about one inch deep and in an intensive bed or wide row they should be planted about eight inches apart in any direction. You can plant more thickly, but plan on thinning once the beans start to grow. Put off applying a mulch to keep down weeds until the soil is fully warm.

Beans are most sensitive to drought while they are flowering and pods are setting. Water deeply once a week during this stage if the weather is dry. Never work in the bean patch while plants are wet or you are likely to spread disease.

Once beans start to mature keep picking them to keep the harvest going. To extend the harvest further, plant patches every two weeks or so.

Vermont Cranberry beans, Jacob's Cattle beans, navy beans and all the other beans that are good for drying can be allowed to start to dry on the vine. Then pull up the vines and hang them in a shed, or where the ventilation is good but they'll be protected from the damp. Then you can open the dried pods one at a time, or thresh them in a feed bag or pillow case, beating them to get the pods to release the beans. Put the cleaned, dry beans in jars and store in the pantry until you need them for those hearty winter soups and stews.

Sources: The Cook's Garden, Box 65, Londonderry, VT 05148; Johnny's Selected Seeds, 310 Foss Hill Rd, Albion, ME 04910; Le Marche Seeds International, P.O. Box 190, Dixon, CA 95620; Pinetree Garden Seeds, New Gloucester, ME 04260; Shepherds Garden Seeds, 7389 W. Zayante Rd, Felton, CA 95018



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