

## TIPS FROM TECH

From the United States Department of Agriculture Research Service comes word that organic farming can provide more food than no-till! One difference is that organic farming can build up soil organic matter better than conventional no-till farming. A nine-year study at Beltsville, Md. showed this surprising result. It was expected that soil health would be compromised by the actual tilling itself, but the study showed the addition of the organic matter in cover crops and manure more than offset any losses.

Organic plots had the most productive soil, more carbon and nitrogen and yielded 18% more corn. Another fact appearing in glimpses here and there that may surprise us is that organic 'human scale' farming can feed people more efficiently than massive agribusiness. Even though it has been acknowledged that organic, low-input, low-or-no pesticide, integrated, small scale, and sustainable food production is much better for the environment, there has always been a lingering doubt that such methods can really feed the starving.

Some critics are actually afraid to try sustainable agriculture methods for fear that even more people will go hungry. They dismiss the thousands of years that small-scale and family agriculture was adequate most of the time. A compilation of forty years accumulation of diverse studies has revealed that the necessity of massive agribusiness is a myth. Of course, without the worldwide distribution system we might not have fresh strawberries in December, having to rely on jam or frozen berries, but it does not mean that we would be limited to turnips in the off-season.

Good, don't you think, that local and seasonal eating has become chic? Research needs to address the reasons why too many people go hungry because they can not afford the food that is available.

Another interesting bit of information from Virginia Tech is the story of a native shrub, American Beautyberry, *Callicarpa*. In late spring it has unnoticed small flowers in the leaf axils but in late summer through fall the shrub is brightened by clusters of small purple berries, which stay on after the leaves fall. And those leaves may be a help to tick-ridden weeders. I rarely come in from a session in my weed-patch without a few ticks hitching a ride.

Agricultural Research Service scientists in Oxford, Mississippi isolated compounds from a *Callicarpa* that enable the plant's crushed leaves to repel mosquitoes. Folklore had always suggested those crushed leaves repelled biting insects so scientists were intrigued. They found two *Callicarpa* components, callicarpinal and intermedeol, that may repel blacklegged ticks as well. It is the blacklegged ticks that are the principal carriers of Lyme disease. These components were also tried against nymphs of lone star ticks. Sounds promising and I for one hope they get on with it.

It may be mere coincidence, but spraying work shoes, socks, and pant legs with a mosquito repellent may discourage those harmless seed ticks. Harmless they may well be, but the biting and itching is mightily annoying.

Not a glamorous shrub, but one of our most admired plants is corn!

Although not a great fan of popped corn or swags of colored corn hanging on front doors, I do find an ear pulled from the corn patch, hulled, and plopped into boiling water one of the prime delights of summer. For pollination you need a square patch, not a skinny row, but now I read that lots of corn is being grown by home gardeners not just to eat, freeze, and pop but to grind! People are grinding corns to make their own meal for

cornbread, pudding etc. I suppose it is no stranger than grinding coffee beans for a better cup of coffee?  
Johnny's Selected Seeds has corn for connoisseurs – dozens of varieties in as many colors as you can imagine.

A newly popular heirloom snack food is parching corn. Some cultivars with rich, nutty flavor can be “parched” – heated to enhance flavor in a dry pan or even in the microwave. Hopi pink and Red Mandan are two varieties available from Abundant Life Seed Foundation, Box 772, Port Townsend, Wa. 98368, catalog \$2. Parents don't seem to have a lot of success finding something for kids to do that is more fun than video games, but they might like to grow their own snacks. Actually, once the connection is well established that what is on the table depends in some way on what is cared for in the corn patch, resistance to common labor may dissipate, just a little?