Cross Pollination

December 2008

Coordinator's Corner

The holiday season is the time to rejoice with friends and family and reflect on the many gifts we receive. Not the gifts under the tree Christmas morning. I'm talking about the true gifts of friendship and family that some of us are so lucky to enjoy. It is a pleasure to work with our Halton Master Gardeners, a dedicated group of people who gladly give the gift of their knowledge and passion for gardening. This gift is wrapped in commitment and experience, and topped with a glittering bow of enthusiasm. This gift can be tailored to fit any size interest or budget, can improve your carbon footprint and best of all, it can be regifted without guilt or embarrassment, so that all can share in the wonder of things that live and grow.

A happy and safe holiday season to you, your family and friends, and my sincere thanks for being such a supportive, well-informed and caring group!

Claudette Sims

Halton Region

Master Gardener Meetings

7:30 p.m

- December 3 - Festive Social at June's house
- January 7 - No Program
- February 4 - Trip to Tasmania (Bill Kertzia) and Native plants (Patty King)

Please bring something for the draw table and change to buy tickets - $2.00 each or 3 for $5.00

- March 4 - Weed Free Lawns without Pesticides (Sapphire Singh)
- April 8 - Festival fact sheet review and Eco grass presentation (Doris Calder)
- May 6 – Greening your backyard (Stacy Hickman)

Landscape Ontario Congress January 6-8
www.locongress.com

Toronto Technical Update: January 10 email elizabeth@stewartmarketing.ca

Canada Blooms March 18-20
www.canadablooms.com

The real meaning of plant catalogue terminology:

- "Grows more beautiful each year" means "Looks like roadkill for the foreseeable future."
- "Zone 5 with protection" is a variation on the phrase "Russian roulette."

Prune plants once they've hardened

Weeks, even days matter in fall hardening
Trees and shrubs may look like they're standing still as they drop leaves and stand bare but internally they are working away at a great rate.

Each day they are hardier than the day before. Acquiring ability to survive frigid temperatures -- **hardening** -- **follows leaf fall** in pattern and timing. The leaves at tips and most exposed sides let go first, then the rest peel away in layers until at last the lowest, innermost twigs bare their buds.

At the same time, tips harden, followed by cells further back along the branch, the trunk and finally the base at ground level.

Weeks after the last leaves fall, the base is probably still developing hardiness.

They may seem insubstantial but **even bare twigs afford shelter to basal wood**. They trap some of the warm air rising from the ground. They also send the trunk chemical signals that guide its hardening. To deprive a not-yet hardened trunk of its twigs is to risk its death or severe damage if that pruning is followed by a quick dip in temperature.

So, **wait.-make any drastic cuts on a mild day in late November**, during a winter thaw or just before bud break in spring.

If you prune off a tree's limbs on a fifty degree (Fahrenheit) November day, when the temperature falls 30 degrees Fahrenheit at sunset, the base of the trunk may suffer freeze damage. You won't see it until the bark falls away from that dead spot years later.

Source: Janet Macunovich's Growing Concerns November 2008

Winterizing tips:

Bury marginally hardy items such as the graft union at the base of a rose bush or tip buds of blue- or pink hydrangeas. In zone 5 they benefit from mounding over with loose soil or circling with a wire cage that's then stuffed full of airy mulch.

Source: Janet Macunovich's Growing Concerns November 2008

Use ornamental grasses as salt-spray protection. Cut them now and use them to blanket beds and intercept salt spray. Remove that grass in early spring and much of the salt will go with it rather than soaking in to ruin the soil.

Source: Janet Macunovich's Growing Concerns November 2008

Broadcast low nitrogen slow release fertilizer before spreading fall leaves and other mulches on gardens. You can fertilize now -- set plants up for a fast start in spring without any harm by avoiding high nitrogen and water soluble forms of fertilizers. These would only wash away before spring to become pollutants of water rather than builders of plants.
Use organic, carbon rich products such as cottonseed meal and poultry manure (Groganic; check for it at stores that carry a wide range of fertilizers.)

Source: Janet Macunovich's Growing Concerns November 2008

Are organic foods better because they're grown without fertilizer?

Actually, most organic growers use fertilizer too. It's made from different ingredients though, such as livestock manure or sewage sludge. However, these natural fertilizers are not available in sufficient quantities to meet the demands of today's high-yield farming, nor do they provide nutrients in the fine-tuned combinations possible with commercial fertilizers. For example, using enough manure to provide an adequate supply of nitrogen would mean adding four to five times more potassium and phosphorus than a crop needs. So it's easy to over- or under-fertilize in this type of farming.

As for the notion that organically grown foods are better for you, there is simply no proof. Even leaders of groups such as the Organic Trade Association and knowledgeable organic growers themselves don't make these claims — they know there isn't any evidence to back it up.

Source: www.cfi.ca

Fertilizer Fundamentals 101

(Brush up on your knowledge for the quiz!)

What is fertilizer?

Simply put, fertilizer combines the nutrients that plants need to grow – potassium, nitrogen, and phosphorus – in a form they can digest. Think of it as plant food.

As crops grow, they absorb, or mine, nutrients from the soil. When crops are harvested, so too are the nutrients absorbed by plants. Commercial fertilizers nourish the soil by returning the "food" that next year's crop will require.

Nitrogen is a key element in protein. Like the human body, plants need it to grow. Phosphorus is the plant world's equivalent of carbohydrates – it provides the energy for plants to thrive. And potassium is a mineral that helps plants fight stress and disease. It helps plants grow strong stalks, in the same way that calcium gives people strong bones.

Are there chemicals in fertilizer?

The three main ingredients in fertilizer — nitrogen, potassium, and phosphorus — come from nature. They are not man-made. Fertilizer companies simply convert them into a form that plants can use.

Fertilizer producers can blend nutrients into precise combinations to match the unique needs of different farms, crops, and fields. In this way, farmers can feed their soils with the most effective and efficient blend of potassium, phosphorus, and nitrogen to achieve optimal yields.

Do farmers need to use fertilizer?

In a word, yes. Every season, plants draw from the soil the nutrients they need to grow. When a crop goes to market, so too does the potassium, phosphorus, and nitrogen it has absorbed and used throughout the growing season. When farmers fertilize, they put back into the soil the nutrients their next crop will require.

Soils do not naturally contain all the nutrients that crops need. And while some of the same nutrients in fertilizer are found in soil, they are not present in a sufficient supply for today's high-yield farming.

It can take years — even decades — for nutrients to build up in the levels necessary to nurture a good crop. A single season can wipe out many years' worth of naturally produced nutrients. Fertilizers give Mother Nature a helping hand.

Where does phosphorus come from?

Phosphorus used in fertilizers comes from the fossilized remains of ancient marine life found in rock deposits around the world. This raw ore is processed to create water-soluble compounds that make the phosphorus available to plants as a nutrient.

Phosphorus helps early plant health and root growth. It is involved in seed germination and ensuring plants use water efficiently.

Continued . . . .

Fertilizer Fundamentals *continued . . .*

Where does potassium come from?

Potassium is the seventh most abundant element in the earth's crust. Through natural processes it is filtered into the planet's seas and oceans. As these bodies of water evaporate over time, they leave behind mineral deposits. Fertilizer companies mine potassium from these deposits.

Potassium is a mineral that helps crops fight stress and disease. It helps plants grow strong stalks, in the same way that calcium gives people strong bones.

Where does nitrogen come from?

The air all around us contains huge amounts of nitrogen. In fact, nitrogen makes up about 78% of the atmosphere. Fertilizer producers combine nitrogen with natural gas to change it into a form that plants can digest.

Nitrogen is nitrogen, whether it's used by plants, animals, or people. It is a key element in protein. Like the human body, plants need nitrogen to grow. Often used in greater amounts than other nutrients, nitrogen helps make plants green and plays a major role in boosting yields.

What are the essential mineral nutrients?

Macronutrients: nitrogen, phosphorus, potassium, calcium, magnesium and sulphur

Micronutrients: boron, chloride, copper, iron, manganese, molybdenum, nickel and zinc

Essential or beneficial for some plant species, not all: silicon, sodium, cobalt

Essential for animals but not for plants: selenium

Source: www.cfi.ca The Canadian Fertilizer Institute (CFI) is an industry association representing manufacturers, wholesale and retail distributors of nitrogen, phosphate and potash fertilizers.