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Home Gardening Newsletter

Pollen Allergies and the Landscape

Did you know that allergies affect up to 30% adults and 40% of children? Every year, thousands of people suffer from allergies, a condition known as seasonal allergic rhinitis caused by exposure to substances such as mold, pet dander, dust mites and today's topic, plant pollen. Symptoms may include sneezing, runny nose, nasal congestion, itchy and watery eyes and more.

Western North Carolina known for its diverse range of plants, trees and shrubs also has a wide range of pollen prevalent for 9 to 10 months of the year! Most allergy sufferers attribute their discomfort to plant pollen but the truth of the matter is, not all plants have the same likelihood of causing allergies. Plants that are wind pollinated have the highest potential to produce allergens impacting individuals on hot windy days while less so on wet rainy ones. Trees with allergen producing potential include oaks, walnut, poplar and sycamore to name a few while other plants such as Kentucky bluegrass (if allowed to flower), orchard grass, pigweed, ragweed and lamb's quarter are problematic for others. People's sensitivity to certain plants can vary widely so always discuss your allergies with your health care professional.



Since many of these plants thrive throughout WNC, it's impractical to completely eliminate the source of pollen. However, with careful consideration of each plants allergy potential, new plant selections can be established to alter a landscape setting. Plants with colorful or fragrant flowers, usually insect pollinated, are considered "safe," non-allergenic plants because they produce large, heavy pollen grains in relatively small amounts. Typically pollen are covered with a sticky substance and are not usually carried by wind. Some insect-pollinated plants do, however, produce pollen in amounts large enough to cause allergic reactions, such as Russian Olives and Willows.

To minimize your exposure to pollen in the home landscape, several steps can be taken. Individuals can make informed decisions about plant materials choosing "safe" plants that have large or sticky pollen grains reducing the likelihood of transportation by wind and female cultivars which do not produce pollen at all. Allergy sufferers should avoid garden chores that aggravate their symptoms such as toiling in the compost pile, working with mulch or straw, raking or mowing the grass. If unavoidable, then reduce your exposure by wearing gloves, a long sleeved shirt, hat, sunglasses or goggles and a pollen mask. Afterwards follow-up with a shower and a thorough washing of cloths. Keep grasses mowed at appropriate heights (pre-seed) to decrease pollen production. Weeds, molds, and mildews should also be controlled. If there is an existing pollen problem in your landscape, replace that plant with a less allergenic selection.



Fire Blight on Your Apple Pear and Crabapple Trees

Over the years, many homeowners have called our office or sent e-mails with attached photos of blackened leaves at the tips of stems and branches of their apple, pear and crabapple trees. All want to know what is making their fruit trees sick?

The culprit is the disease known as fire blight. Fire blight is caused by the bacteria *Erwinia amylovora*, which can be transmitted by bees, aphids, and other insects, as well as by wind and rain. Weather conditions conducive to its spread occurs when temperatures are 65 to 90°F combined with humid or rainy weather. Typically, this occurs during springtime and into early summer. Once the disease is established, it can be very difficult to control.

Fire blight infects blossoms, fruits, twigs, and branches. The first symptom of this disease starts in the spring when the fruit tree flowers. The blossoms will appear water-soaked, wilted, shriveled, and finally turn brown to black. Affected branches wither and turn black or brownish black, as if scorched. Once infected, branch tips wilt quickly, taking on the characteristic shape of a “shepherd’s crook.” After fire blight gains entry into the tree, the bacteria spreads internally through the stems and begins to work toward the trunk and down to the roots. Infected leaves remain on the branches giving the appearance that a fire went through the tree, thus why the disease is called fire blight.



Once infection has occurred, there are no curative sprays. The only treatment option is to cut out infected limbs to help minimize damage. To help prevent future infections, sprays of agricultural-grade streptomycin and tetracycline applied at early bloom have been the standard commercial control since the 1950s.

The best way to minimize the spread of fire blight is to purchase varieties of apple and pear trees that have some resistance to the disease. Apple varieties more susceptible to fire blight include: Fuji, Gala, Jonathan, Lodi and Yellow Transparent. Varieties less susceptible include: Arkansas Black, Empire, Liberty, Pricilla & Red Delicious (source ATTRA’s Apples Organic Production Guide). Pear varieties moderately resistant to fire blight include: Keiffer, Moonglow, Magness, Orient and Seckel (somewhat resistant). Crabapples with moderate resistance to fire blight include: Adams, Donald, Wyman, Pink Princess, Robinson, Profusion and Velvet Pillar (source Clemson Cooperative Extension Fire Blight of Fruit Trees).

Sanitation practices such as pruning infected twigs and shoots help manage fire blight before growth starts in the spring. Apple and pear trees should be monitored removing symptomatic twigs and branches as seen. Cuts should be made 8 to 12 inches beyond the last evidence of the disease. Prevent the spread of the bacteria by hands or cutting tools by using a 10% bleach or Lysol solution sterilizing pruners and loppers between every cut.

A copper spray in the dormant/green tip stage, and streptomycin sprays during bloom, are needed to manage fire blight on susceptible cultivars. Copper sprays will help reduce the inoculum of the fire blight, but will not provide adequate control alone. Streptomycin sprays at first bloom (5-10% open blooms) protect only the open blossoms; consequently, additional applications are needed every 3 to 5 days during the bloom period. For more information on how to control fire blight go to

<https://content.ces.ncsu.edu/fire-blight>



May Horticulture Tips



Lawns

- Cut tall fescue and bluegrass to 3 inches in height.
- DO NOT fertilize tall fescue now.
- Be sure spring-seeded lawns get one inch of water per week.



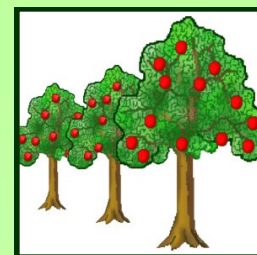
Vegetables

- Transplant warm season vegetable plants (tomatoes, peppers, eggplant, squash, etc.) after danger of frost is past. Drive stakes next to tomato plants at planting time to avoid injuring roots later.
- After mid-May (after soil has warmed to 65 degrees), plant seeds for beans, lima beans, corn, cucumbers, kale, melons, okra, southern peas, pumpkin and squash. Keep seedbeds moist as seedlings emerge.
- Mound soil around potato plants to encourage tuber formation.
- Use a 2-inch thick mulch of straw to reduce weeds and retain soil moisture in vegetable beds.
- Fertilize vegetables 6 to 8 weeks after germination. Consider fish or fish-and-seaweed emulsion for a fast acting, well balanced organic fertilizer.
- Thin seedlings of early planting when they have 1-2 true leaves.
- Watch for worms on cabbage family vegetables and greens. Spray with *Bacillus thuringiensis* (Bt) if needed. Watch for flea beetles on eggplant and tomato, cucumber beetles on cucumbers. Spray only if needed.
- Be prepared to cover early plantings with row cover fabric if a late frost threatens.



Fruits

- Control weeds in strawberry beds and around fruit trees. Fertilize grapevines, blackberries and blueberries if not done earlier.
- Continue with fruit tree spray programs through August. Be sure to follow label instruction for pre-harvest interval. Weekly fungicide sprays will be needed to prevent black rot on grapes.
- Thin apples, pears and peaches to about 6 inches apart when the fruit is the size of a nickel.
- Harvest strawberries.



Trees Shrubs & Flowers

- Plant trees, shrubs and ground covers.
- Fertilize ornamentals as needed.
- Prune flowering shrubs after they bloom.
- Plant summer-flowering bulbs: gladiolus, dahlia, canna, caladium.
- Plant perennials and annuals (wait until after last frost date to plant tender annuals).
- Begin monthly applications of rose fertilizer, plus 1 tablespoon Epsom salts per bush.
- Mulch flower beds with pine needles or pine bark. Remove weeds before applying mulch.



Edible Flowers

Try edible flowers! Plants such as pansies and nasturtiums can be planted in the landscape along with other annuals and perennials. Additional plants with edible flowers include:

Bachelor buttons	Bee Balm	Calendula	Chamomile
Chicory	Chrysanthemum		Dandelion
Daylily	Dianthus	Marigold	Passionflower
Rose (Rosa sp.)	Sunflower	Violet	

Finally think vegetables and herbs! Some can be grown as ornamentals. Chives create an attractive border, cabbage can be tucked into a perennial bed, strawberries make a great groundcover and asparagus can add a light, fluffy texture to the scenery. If space is an issue try container gardening. Additional annuals and perennials include:

Swiss Chard	Lettuces	Tomatoes	Eggplant	Pepper	Corn
Kale	Alliums	Squashes	Celery	Basil	Dill
Pumpkins	Pole beans	Herbs	Many Others		

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