

Youth Horticulture Contests

Nebraska youth and 4-H'ers interested in horticulture now have some new options for participating in the National Junior Horticulture Association (NJHA) projects, contests and activities. Changes for 2007 mean states now can enter any number of participants in speech, demonstration and photography contests—past rules limited number of participants.

NJHA projects and contests are open to all youth ages 5–22.

- For ages 5–14, go to Young America Horticulture Projects section at http://njha.org/projects_youngam.html
- For ages 15–22, go to <http://njha.org/projects.html>

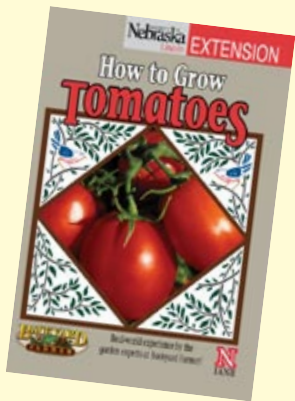
Many of the projects 4-H'ers complete for the 2007 Nebraska State Fair will qualify for this contest. All NJHA projects, contests and activities are due Sept. 15. The grand national award winners earn a \$100 cash award.

This year, the national NJHA convention is Oct. 5–8 in Fort Wayne, Indiana. Youth do not have to attend the national horticulture convention to participate in most of these projects. However, students interested in going to the national convention can travel with the Nebraska 4-H team that participates in the horticulture contest at the convention each year. For the horticulture contest, only one team is allowed, but there are open and FFA divisions.

For more information about these contests, call UNL Extension Educator Anne Streich at 472-1640.

Backyard Farmer' Offers How-to Video on Tomatoes

Tomatoes may just be the most popular plant grown in Nebraska gardens and patios. To help growers, Backyard Farmer now offers a "How to Grow Tomatoes" DVD. The DVD includes video features from last season's Backyard Farmer series. It offers helpful, practical information on tomato cultivars, diseases, troubleshooting and more. Segments include: Getting Started, Transplants, Planting, Staking, Disease Pests, Special Problems, Harvesting and a Summary. Also included is UNL Extension NebGuide G1650, "Tomatoes in the Home Garden." For more information or to order the DVD, visit the Backyard Farmer Web site at <http://byf.unl.edu> or call (800) 755-7765.



Garden Guide

THINGS TO DO THIS MONTH
By Mary Jane Frogge, UNL Extension Associate

Hand pick bagworms from your evergreen and deciduous trees.

Check deciduous trees for fall webworm. Use a broom or rake to get them out of small trees.

Check on water needs of hanging baskets daily in the summer. Wind and sun dry them much more quickly than other containers.

Clean up fallen rose and peony leaves. They can harbor disease and insect pests over the winter if allowed to remain on the ground.

Remove old vegetable plants which have stopped producing to eliminate a shelter for insects and disease organisms.

Mound soil over the lateral or brace roots of corn stalks for extra support against strong winds.

Pick summer squash and zucchini every day or two to keep the plants producing.

Water the garden early in the day so plants can absorb the moisture before the hot sun dries the soil. Early watering also insures the foliage dries before night. Wet foliage at night increases susceptibility to fungus diseases.

Many herbs self-sow if the flowers are not removed. Dill produce seeds that fall around the parent plant and come up as volunteers the following spring.

To reduce the number of pests on your fruit tree for the coming year, pick up and destroy all fallen fruit.

Bt (*Bacillus thuringiensis*) is used by many gardeners to protect cole crops from chewing caterpillars.

White flies are attracted to yellow, so use yellow sticky boards to reduce their populations.

Every weed that produces seed means more trouble next year. Control weeds before they go to seed.

Cytospora Canker of Spruce

One of the most important diseases of spruce in landscape plantings is Cytospora canker. This disease is caused by a fungus and is frequently found on Norway spruce, Colorado blue spruce and its cultivars. White spruce is also susceptible and there are a few reports on Serbian spruce. In addition to the spruces, Cytospora canker is sometimes found associated with Douglas fir, hemlocks, larches and balsam fir.

Symptoms

Dying of a lower branch with subsequent needle browning is usually the first symptom. The brown needles may remain on the branches or they may fall off. As the disease progresses over several years, higher branches show damage. The actual cankers are often first seen at the base of branches near the main trunk of the tree. On the more susceptible species (Norway spruce), trunk cankers develop which may result in girdling and death of the tree.

The bark of the cankered area is not visibly different in color, nor does it become sunken as in cankers on many deciduous trees. However, resin flow is usually associated with Cytospora canker and the white patches of dried resin are quite conspicuous on the bark. Resin flow can, however, be associated with any injury to branch tissue.

Cankers often cannot be located without cutting into the bark. Removal of the outer bark from cankers reveals brown, dead areas of the inner bark and cambium. Within the cankered areas, a careful search using a magnifying hand lens will often reveal black pinhead sized structures that produce the spores of the pathogen. Careful removal of layers of bark make these structures even more visible. During wet weather, yellow-to orange-colored masses of spores oozing out of these black structures in tiny tendrils can be observed. Sometimes these tendrils or gelatinous spore masses are visible to the unaided eye.

Causal Fungus

Cytospora canker of spruce is caused by the fungus, *Cytospora kunzei* var. *piceae* (also reported as *Valsa kunzei* var. *piceae*). The spores (conidia) described above are readily disseminated by splashing water, wind-driven rain, by man during pruning and also by insects and birds.



Photos by Joseph O'Brien, USDA Forest Service, www.forestimages.org

Cytospora canker infections usually start low in the tree, and progress upward through the crown.



Cytospora canker infestation

The fungus generally becomes established through wounds.

Disease Management

Cytospora canker is more common on trees over 15 years old. This disease is more prevalent on trees of low vigor. Those trees with shallow roots, weakened by drought, low fertility, mechanical injury or insect damage; and trees growing in an unfavorable site are more susceptible to Cytospora canker.

The following practices lessen the likelihood of this disease.

- Avoid bark and stem injuries.
- Control insects and mites; especially spruce gall adelgids and spider mites.
- Fertilize according to horticulturists' recommendations.
- Water during extended dry periods. Water thoroughly so that soil is moistened 18 to 24

inches deep.

- Follow accepted pruning practices.
- Vertically mulch to relieve soil compaction, poor aeration and inadequate water penetration.

Once established, the following may aid in suppressing disease development. Remember that affected branches cannot be saved.

- Prune and remove or destroy affected branches. To lessen the spread of the fungus, prune only when the trees are dry. Pruning tools should be disinfested with 70 percent alcohol between cuts. It will generally be necessary to prune back to the main trunk. No effective chemical control measures are available.

Source: Stephen Nameth, C. Wayne Ellett and Jim Chatfield, Ohio State University

Sign Up for Free E-mail Horticulture Newsletter

HortUpdate is a FREE e-mail newsletter from the University of Nebraska-Lincoln Extension which provides timely information to the lawn and landscape industry. This e-mail includes current lawn and landscape problems with control recommendations and a seasonal 'To Do' list. To subscribe, go to <http://extensionhorticulture.unl.edu>

