Wisconsin Horticulture Update:
Friday April 22, 2005

County roll call - Brown, Dane, Douglas, Eau Claire, Kenosha, Price, Racine, Outagamie, Washburn, Wood, Milwaukee, Clark, La Crosse, Waukesha, Green, Portage, Grant Marathon, Iron, Forest

Phenology
(The weekly updates on state-wide plant phenology will begin next week.)

Weather Report for April 22, 2005
(Begin report next week.)

County Reports

Plant Disease Clinic – Brian Hudelson

Conifers
Root rot (*Phytophthora* sp.) on Douglas-fir
Sphaeropsis tip blight/canker (*Sphaeropsis sapinea*) on pine (including Austrian, Scots)
Phomopsis tip blight (*Phomopsis* sp.) on spruce (including Colorado blue)
Rhizosphaera needle cast (*Rhizosphaera kalkhoffii*) on spruce (including Colorado blue)
Spruce needle drop (*Setomelanomma holmii?*) on spruce
Swiss needle cast (*Phaeocryptopus gaeumannii*) on Douglas-fir
Dothistroma needle blight (*Dothistroma pini*) on pine (including red, Swiss stone)
Chlorosis on hemlock

Woody Ornamentals
Cedar-quince rust (*Gymnosporangium clavipes*) on hawthorn
Botryosphaeria canker (*Botryhosphaeria* sp.) on dogwood
Tubercularia canker (*Tubercularia* sp.) on weeping beech
Sphaeropsis canker (*Sphaeropsis* sp.) on red oak
Black knot (*Apiosporina morbosa*) on cherry
Fertilizer burn on American chestnut

Herbaceous Ornamentals
Root rot (*Pythium* sp., *Rhizoctonia solani, Fusarium* sp.) on miscellaneous greenhouse plants (including *Phaelenopsis*)
Crown rot/leaf spot (*Pseudomoans* sp.) on *Paphiopedilum*
Bulb rot (*Fusarium* sp.) on tulip
Anthracnose (*Colletotrichum* sp.) on *Phaelenopsis*)
Gray mold (*Botrytis cinerea*) on geranium
Rust (*Puccinia heucherae*) on *Heuchera*
Impatiens necrotic spot (impatiens necrotic spot virus) on miscellaneous greenhouse plants (including *Cineraria*)
Blackleg (*Erwinia carotovora*) on *Dichondra*
Edema on *Coreopsis*, geranium
Iron/Manganese toxicity on geranium

Fruit Crops

Root rot (*Pythium* sp.) on raspberry
Spur blight (*Phoma* sp.) on raspberry

Vegetable Crops
Neck rot (*Botrytis alii*) on onion
Fusarium dry rot (*Fusarium avenaceum*) on potato tubers
Silver scurf (*Helminthosporium solani*) on potato tubers
Black dot (*Colletotrichum coccodes*) on potato tubers
Black scurf (*Rhizoctonia solani*) on potato tubers
Bacterial soft rot (*Erwinia carotovora*) on potato tubers
Salt injury on tomatoes
Cold injury on tomatoes
Pepperspot on miscellaneous brassicas

Questions:

Insects – Phil Pelletteri

Questions:

Fruit – Teryl Roper

(4-25-05) I have had some inquiries about critical temperatures for fruit crops. In the southern part of the state apples are between tight cluster and first bloom in blossom development. The northern parts of the state are somewhat behind. The critical temperature for the various tree fruit crops varies with the stage of development. On pages 54-55 of Bulletin A3314 Commercial Tree Fruit Spray Guide there is a chart showing the critical temperatures along with pictures of the stages of development.

In short, the critical temperature is 28F at this stage of development. If temperatures fall below 28F for any length of time there will be some injury. The cooler daytime temperatures we are currently experiencing should slow development and allow for the historical chance of mean last frost to pass.

Composted Cow Manure – Barb Ingham

I wanted to alert you to a consumer-friendly summary of a research article that has been prepared on the use of non-composted manure in gardens. The research article has been accepted and will be published later this year:

Safe Use of Cow Manure as a Garden Fertilizer. Many vegetable gardeners swear to the benefits of cow manure as a fertilizer. Adding cow manure to soil improves the soil texture and water-holding capacity while providing nutrients needed by growing plants. Unfortunately, fresh cow manure can also contain a variety of disease-causing bacteria and protozoa that could contaminate vegetables. This risk of contamination is serious enough that USDA's National Organic Program rules specifically address when non-composted manure can be applied to soil used for vegetable growing. If the vegetables have edible portions that might be contacted by soil (either directly or via rain/irrigation splash), then the manure must be applied at least 120 days prior to harvest. In Wisconsin, 120 days covers most of the vegetable growing season, so adherence to this

limit is often impractical for same-year applications. **Can a shorter fertilization-to-harvest interval be safely used by Wisconsin vegetable growers?** Probably not, recent research done by Steve Ingham, UWEX Food Safety Extension Specialist, has found that applying fresh cow manure 90, 100, or 110 days prior to harvest may significantly increase the likelihood that bacteria from manure will contaminate vegetables. And, even if the 120-day limit is followed, fecal bacteria from birds, other wildlife, and possibly the cow manure, too, may still contaminate soil and vegetables. The **interval between fertilization and planting is even more important** than the fertilization-to-harvest interval. The safest options for Wisconsin vegetable growers are to:
1) use sterilized manure (available from gardening stores),
2) use properly composted manure for same-year applications, or
3) apply non-composted cow manure in the fall of the preceding harvest year; the winter weather will destroy pathogens that may be present in the fresh manure.
The risk of vegetable contamination cannot be eliminated if non-composted cow manure is applied in the spring. If spring fertilization is done, both the fertilization-to-planting and fertilization-to-harvest intervals should be maximized, perhaps by only fertilizing soil used in growing late-season vegetables. Thorough washing and peeling of vegetables can also reduce the risk of contamination, but will not ensure safety. Cooking vegetables will also reduce or eliminate the contamination risk. *S.C. Ingham et al. 2005. Evaluation of fertilization-to-planting and fertilization-to-harvest intervals for safe use of non-composted bovine manure in Wisconsin vegetable production. J. Food Protection. 68:in press.*
An x-file publication with details is being prepared and will be announced when available.

General Questions/Discussion:

This is an informal program for this week. You received the program format for each week along with hosts. Cathy Mann will compile the plant phenology each week and sent it to Bob and Brian for inclusion into the WHU. The county report will be done each week as it keeps everyone abreast of what is happening across the state. We also will Specialists providing information on specific topics of interest each week.

Q. Marathon – We have had people call in to alert us of white spruce dying.
A. Can you give us a better description and details of trees dying…how are they dying? Also if you can send us a digital picture of the stressed and dying plants, this can also assist us. A sample of stressed plants sent to the Plant Diagnostic Lab http://www.plantpath.wisc.edu/pddc/ can confirm specific disease problems.
(Price Co) The Forest Service has been analyzing the problem as white spruce decline. White spruce decline could be brought on by many things including the drought of two years ago, trees being planted in soils and environments that normally, does not support white spruce establishment and growth, or possible pest problems.
http://cecommerce.uwex.edu/pdfs/A2614.PDF
http://ohioline.osu.edu/hyg-fact/3000/3059.html
http://ohioline.osu.edu/hyg-fact/3000/3033.html

Q. What about soybean rust?
A. Brian will be spending a fair amount of time with soybean rust and with meetings relating to spread of soybean rust. It is assumed that it was brought from South America to North America via last season's hurricanes. It has been reported in three counties in

Florida so far. It infects a weed plant 'kudzu' as well as cultivated plants in the legume family like beans, peas, lima beans, white clover, sweet clover, etc. There is a phone number with updated Wisconsin information 1-866-787-8411 or an USDA web site http://www.usda.gov/wps/portal/usdahome, look for the rust icon. Also check out the x-file information:
http://www.plantpath.wisc.edu/pddc/pddcgraphics/Publications/FieldForage.htm.

Q. What about white pine blister rust and when to prune?
A. Dormant pruning of infected branches and pruning to open up the canopy will allow plants to dry each day and reduce infections. Also look for the alternate host for white pine blister rust…gooseberry and currants.
http://www.uwex.edu/ces/wihort/gardenfacts/X1118.pdf.
The problem of trees falling over in the pine grove could also be insects at work. Like the Zimmerman Pine Moth http://www.ext.colostate.edu/pubs/insect/05591.html.
Send a sample to the diagnostic labs or wait until June 1 when we will be in Wausau for an Agent/Master Gardener training. Have samples available for us.

Announcements:

April 28, 2005 (7 PM)
Apple Grafting Workshop
UWEX office in the Administration Building in Juneau. Call 920-386-3790 for information and registration.

April 29, 2005 (12:00 noon)
Rain Gardens: Planning and Implementation
Brown Bag Program (contact your local UW County Extension Office for access)
Rain gardens are gardens that are designed to soak up the rain water that comes to your home area and would otherwise end up as water run-off. They are landscaped areas planted to wild flowers and other native vegetation and incorporated as part of the home landscape. The benefits of holding back the run-off helps prevent pollutants, soil and organic vegetation from finding its way into streams and lakes. Join Susan Wade and others for a discussion of planning and implementing a home rain garden.

May 3, 2005
Rain Gardens & Native Plants
Portage, WI
Randy Maurer will show how to effectively use rain gardens, what specific plants to use and how to maintain them. He will also discuss how to grow and maintain a native plant garden. At Edgewater Greenhouse, 2957 CTH CX, Portage at 6:00 p.m. Registration required. For more information contact Edgewater Greenhouse at (608)742-6558 or email Carole to register.

May 4, 2005
Composting: Soil and Sustainiability
Olbrich Botanical Gardens, Madison, WI
Composting is an easy and inexpensive way to enhance your soil while reducing waste and protecting local lakes from harmful runoff. Joan Laurion, owner of Compostbasics, and patent holder for low-tech, large-capacity composters, will explain all the how's and why's of composting in this class from 6:30 to 8:30 p.m. Registration deadline April 27. $13 ($11 members). For more information contact Olbrich Botanical Gardens, 3330 Atwood Ave., Madison, WI 53704; phone (608) 246-4550.

May 5, 2005
Home Composting
Rotary Gardens, Janesville, WI
With Mark Konlock, UW-Extension Walworth Co. Horticulture Educator at 7:00 p.m. $7 ($5 member). For more information, contact Mike Maddox at (608) 752-3885 ext 17.

For suggestions or responses, please refer them to:
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