

Container Nursery Task Calendar

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The goal of this handout is to provide a timely reminder for management to use for planning purposes. Details will be provided in other handouts. Links will be provided.

Tasks preceded with * are expected to apply to all nursery operations.

Additional information is available by Linking to the Middle Tenn Nursery Production Web site <http://www.utextension.utk.edu/mtnpi/index.html>

Many handouts on individual pests are available at <http://www.utextension.utk.edu/publications/default.htm>

Spraying pesticides when the temperature and humidity adds up to more than 140 increases the potential for foliar burn. Allow foliage to dry by dark.

UT Ext Pub. 1589, "Commercial Insect & Mite Control for Trees, Shrubs & Flowers" is available on-line. You may refer to the on-line version or print a free copy at <http://www.utextension.utk.edu/publications/pests/default.asp#ornamental>

Information concerning how to submit plant disease samples or insects for identification and a recommendation for a fee or how to use the Distance Diagnosis (submitting images of the problem, not an actual sample for free), visit <http://soilplantandpest.utk.edu/plantpestdiagnosis/index.htm> It also explains the fee schedule,

General

- * To prevent the spread of disease disinfect pruners and knives on a schedule for routine work, perhaps morning and after lunch. Some pruning tasks may require more frequent disinfecting.
- * When it is time to apply granular pre-emergence herbicides, do not apply to the entire production area at one time. Stagger applications by at least 6 irrigations

or rain events to prevent too much of the chemical from entering the irrigation water catch basins, especially if water is caught and recycled.

- * Record and post all pesticide applications on the day of the application.
- * Increase irrigation amounts in absence of rainfall during the hotter months. Avoid stress with timely irrigation. Stress invites cankers, borers and causes reduced growth and even death.
- * Do not be afraid to look at the roots, to check moisture of the media by removing the container. To recover media and fertilizer, work over a solid surface (table, tailgate or box).
- * To prevent borers, use Dursban, Onyx or permethrin (Astro and others) or a one time drench with imidacloprid. [Link](#)
- * Determine if anyone in your area: county sanitation dept. or stores selling pesticides will recycle empty pesticide containers. In Warren County deliver clean, dry, triple rinsed plastic **pesticide containers** to the Sanitation Dept. at 1186 Belmont Dr. any Wed. 7:30am to 2pm. Drive to the back and look for several semi-trailers. They will also take used tires. Businesses but not farmers must pay a fee for the tires. Sanitation personnel will be present. 931-473-2505

Dec-March

Dormant oil will suffocate and disrupt cell membranes of the following pests:

[Link to handout on dormant oil](#)

the white cottony **pine bark adelgid** ([white pine](#))

[Link](#)

spider **mites**, rust mites, and eriophyid mites on ([hemlock](#), [juniper](#), [spruce](#), [arborvitae](#), and occasionally [burning bush](#))

[Link](#)

scale on ([Manhattan euonymus](#), [burning bush](#), lilac, etc.)

[Link](#)

some types of overwintering eggs (the **spiny witch hazel leaf gall aphid** on [birch](#) and the **white pine aphid**)

[Link](#)

oak phylloxera (that causes [oak](#) leaves to wad up in July)

Armored white peach tree scale on ash, mulberry, lilac, laurels and more **immature whiteflies; and broad mites.**

(February through March is considered to be the most effective treatment period for outdoor plants with dormant oil but plants will break dormancy earlier when overwintered inside an overwintering house or may never go completely dormant. If plants are treated in an overwintering structure, make sure that the plants are still dormant when being treated with the dormant oil. Choose days that the oil will dry quickly, but avoid temperatures above 85 degrees. It will actually be difficult to use oil inside.)

Jan

- * Ensure the Myron L Agri-Meter or other pH probes have solution in the pH tube.

Feb

- * Ensure the Myron L Agri-Meter or other pH probes have solution in the pH tube.
Test pH of incoming bark.

mid Feb

- * Set Ambrosia beetle traps. Check daily through April [Link](#)

Feb – March

- * Major pruning - Best period to perform major pruning. Establish central leaders in trees. Shape evergreens.
- * Spray dormant oil. See Dec-March above

March

- * Test irrigation water when reservoirs and ground water levels are up.
- * Topdress carry-over containers with a controlled release fertilizer with minors unless they will be bumped to larger containers soon.
- * **Replace filters** in respirators and tractor cabs (charcoal) for safer breathing during pesticide applications.
- * Ensure the Myron L Agri-Meter or other pH probes have solution in the pH tube.
Test pH of incoming bark.

March – April

- * Check Ambrosia beetle traps daily until plants leaf out.

March – May

- * Apply pre-emergence herbicides over the top of new containers before they are spaced but after the poly is removed. Treat any containers carried over winter after they are bumped. Repeat every 75 to 90 days after removing existing weeds by hand. [Link](#)

April

Malus – Apple Scab; spray susceptible cultivars 4+ times, at 7-10 day intervals, beginning at green tip.

Malus & Pyrus - Fireblight; Begin spraying Streptomycin at 20% bloom to reduce severity, repeat at 5-7 day intervals, (repeat at 3 day intervals during period of rapid growth or heavy rain). No value after bloom. [Link](#)

Plum - Black Knot; at pink bud, spray to prevent. Repeat at full bloom. [Link](#)

April

Red maple - Shoot Boring Caterpillar; Spray Talstar (bifenthrin) once, anytime from bud break to when the first two pair of leaves have come out (usually in mid- to late April). This is a change. [Link](#)

- * Ensure the Myron L Agri-Meter or other pH probes have solution in the pH tube. Test pH of incoming bark.

April, May

Plum - Black Knot; Spray 2 to 3 weeks after full bloom.

Drench **newly potted maple & oak** one time to prevent flatheaded apple tree borers (FHAB) and the potato leafhopper for 1-3 seasons, depending on rate used. Use imidacloprid. Alternative is trunk sprays mentioned below. [Link](#)

April – Sept

Malus - Aphids; Scout & spray foliage.

- * Monitor pH & soluble salts every 2 weeks.

Mid April

Ash - Lilac borer; Spray recommended insecticides to protect. [Link](#)

Mid April - Early May

Apples & crabapples—Cedar-Apple Rust; Cedar-Quince Rust on Hawthorne - spray susceptible cultivars 3-4 times, at 7-14 day intervals, beginning with new growth. [Link](#), [Link](#)

Late April

Dogwood - Dogwood borers; Spray trunks with recommended insecticides from 2 sides with hand-gun or back-pack. [Link](#)

Early May

Treat **newly potted maple & oak** to prevent flatheaded apple tree borers (FHAB). Spray trunks from 2 sides with recommended insecticides unless drenched with imidacloprid. FHAB has now been proven to attack maples & oaks and cause significant losses during the first 3 years after being transplanted into the field or container, despite widespread belief among growers that borer attack is only an issue during the first growing season. Refer to Borer handout. [Link](#)

May

Malus, Pyrus, plum, quince, spirea, serviceberry, pyracantha, hawthorne, mtn. ash— Scout for Fireblight. [Link](#)

Scout:

[Link from each](#)

conifers for mites

crapemyrtle foliage for a leaf eating beetle

maple, oak, & dogwood for leafhoppers & thrips

willows for leaf beetles

tulip poplar for yellow poplar weevils

white pine for pine bark adelgids.

May – August

- * Apply preemergence herbicides over the top of containers every 75 to 90 days after removing existing weeds by hand. Pull or spray weeds as needed in the gravel to avoid seed formation. [Link](#)

Dogwood–Powdery mildew; Begin spraying dogwoods to prevent mildew.

[Link](#)

Early June

Spray **newly planted maple & oak** to prevent flatheaded appletree borers if an imidacloprid drench was not applied. [Link](#)

Scout for young bagworms on conifers that hatched in late May. Spray ASAP when found with recommended insecticides. Sevin is no longer effective. [Link](#)

Scout for potato leafhoppers on **red maple**. They may begin arriving prior to mid-May. The imidacloprid drench made to prevent borers will suppress or control leafhoppers, depending on rate applied. [Link](#)

June – Aug 15

Scout:

conifers for bagworms & mites.

oaks for oak phylloxera causing new foliage to wad up

red maples for potato leafhoppers which causes hopper burn: short internodes, cupping, & marginal foliar burn.

- * Spray Japanese beetle adults where necessary. Sevin XLR is more rainfast. The imidacloprid drench application made to prevent FHAB will control Japanese beetle adults but they must eat in order to ingest a fatal dose.

June – Sept

- * Order poly for overwintering houses.
- * Test irrigation water when reservoirs and ground water levels are low.

July - Sept.

Liquid fertilizer applications may be made up until Sept. 15 without injury.

Mid July

Dogwoods - dogwood borers; Spray trunks from 2 sides

[Link](#)

Ash - banded ash clearwing borer. Spray recommended insecticides to protect.

[Link](#)

August

Pruning– Avoid heavy pruning Aug - Oct because new growth may not have sufficient time to harden sufficiently to avoid cold injury from the first cold period.

Sept – Oct

* Coordinate the fall weed control program with covering (enclosure). Pull weeds and apply the selected granular pre-emergence herbicide the appropriate number of days prior to enclosure.

[Link](#)

* Begin cutting wood strips in spare time to secure the poly. Make repairs.

Mid to late Nov

* Cover overwintering structures generally by Thanksgiving.

* Gather & secure liquid pesticides to prevent freezing.

* Store dry formulations of pesticides in the dry.

* Winterize irrigation systems, sprayer tanks & pumps.

* Check, drain or replace antifreeze in all vehicles.

* Ensure the Myron L Agri-Meter or other pH probes have solution in the pH tube.
Test pH of incoming bark.

Dec

* Ensure the Myron L Agri-Meter or other pH probes have solution in the pH tube.
Test pH of incoming bark.

Reviewed by Dr. Frank Hale, UT Ext Entomologist, 10-24-08 and Dr. D. Fare
Comm/Cont Prod/Container Task Calendar