Be on the lookout for Japanese Beetles (JB) especially on new shipments of nursery stock from JB infested areas. JB are small metallic beetles that feed on over 300 species of plants including many ornamentals, corn, soybean, trees, especially linden and roses.

The ND Department of Agriculture (NDDA) has been surveying for this pest since 1960. Prior to 2012 only 2 beetles had been captured since the beginning of the survey. Those 2 beetles were found in Burleigh County in 2001. In August of 2012 a JB was found in Grand Forks. That same day several beetles were found in traps placed in West Fargo. Shortly after these incidences some nurseries started noticing JB on newly arriving stock. All beetles found in 2012 were traced back to a single nursery supplier. By the end of the summer, NDDA hung a total of 131 traps across the state and trapped a total of 139 beetles. Several other states also reported interceptions of JB from nursery stock shipped to their nurseries. JB is known to be established in most states east of the Mississippi river as well as localized populations in the central states and a few western states.

At this time NDDA is not certain the beetle established in North Dakota, and we are working on a plan to increase our trapping efforts in order to determine the extent of the JB infestation. We would like nurseries, especially those receiving stock from suppliers in Minnesota and those close to

Continued on page 3
NDSU Plant Diagnostic Lab

When pest problems arise, and the diagnosis is a mystery, the NDSU Plant Diagnostic Lab (PDL) is a great resource for many of your diagnostic needs. Outlined below are a few tips for handling plant pest and identification problems when working with PDL.

Photographs: Supplying photographs can be very helpful when submitted with a physical sample, particularly for tree and turf problems. Multiple photos are most informative. Photos should show the entire planting site (the 'big picture'), individually affected specimens or affected areas. Photos of symptoms are also helpful. High resolution photographs that are in focus are encouraged. Please email them to ndsu.pdl@ndsu.edu (preferred) or mail them.

Plants: For general plant problems, try to send several affected plants showing a range of symptoms. Dead plants rarely are informative so avoid sending completely dead plants. Try to send entire plants, when feasible, since some above-ground symptoms can be attributed to a problem with the lower stem or roots. Try to keep soil from contacting leaves as soil may cause the leaves to rot. Loosely wrap above-ground parts in dry paper towels to absorb condensation (to prevent decay), then place the entire sample in a larger plastic bag.

Mushrooms and fruits: Wrap mushrooms or fruits in DRY paper towels or newspaper and place in a sturdy box to avoid crushing.

Home Mold Samples: Small pieces of contaminated material, such as sheet rock paper and wood can be sent to the lab to determine if mold is present. Identification can sometimes be made to genus, and usually to family of fungus. However, extent of contamination cannot be determined from a sample, and in situations with extensive contamination, a professional may need to visit the site to better determine an appropriate course of action.

Insects: Send small insects in a small vial of alcohol (about 70% rubbing alcohol or household hand sanitizer works). Do not send insects in an envelope. Crushed insects can rarely be identified. Pack large insects, such as moths, in cotton. Please DO NOT SEND LIVE INSECTS. If sending live insects cannot be avoided, be sure they are contained properly in vials or double-bagged in resealable plastic bags that have been properly sealed.

Turfgrass samples: Plugs of intact turf that are 3” to 5” across and 2” to 4” deep (deep enough to include the roots) are ideal. The best sample consists of a completely diseased plug, a healthy plug, Continued on page 3
Nonhardy Update:

The 2013 nonhardy list can be found at www.nd.gov/ndda/program/nursery-program. The latest list clarifies some old cultivars and reviews new cultivars. Any input regarding the nonhardy list is greatly appreciated. For anyone needing nonhardy labels, a template is also available on our website. Minnesota has released their version of a nonhardy list this year. You can find the Minnesota list at http://www.mda.state.mn.us/en/licensing/licensetypes/nurseryprogram.aspx.

Japanese beetle (cont’d from page 1)

where JB was found in 2012 to hang traps in their nurseries and report all results to NDDA. If you are willing to help by hanging a trap, the process will be fairly simple. When you request traps, we will send them to you and ask that you place them in late May to early June. The traps should be hung 3-5 feet above the ground, and we have stands that can be provided. The traps should be placed about 10 feet from host plants especially roses. Each trap/lure combo will cover about 5,000 square feet so traps should be placed at least 70 feet apart if possible. The traps will then need to be removed in late September or early October. Traps can be checked periodically throughout the summer or just once at the end. We will request photos of any suspect positives and if it is a JB we may send you a postage paid envelope to send the sample to us for official confirmation. To participate in the trapping survey, please contact Samantha Brunner (sbrunner@nd.gov 701-328-4765) for more information.

Emerald Ash Borer Update

NDDA has begun work on the 2013 EAB trapping campaign. This year it is expected that approximately 500 traps will be placed throughout the state following a protocol established by USDA-APHIS similar to last year. This year’s plan will almost exclusively use the trap sites provided by the new protocol. There are currently 18 states with at least one county quarantined for EAB.

In January, NDDA partnered with North Dakota Forest Service and NDSU Extension to present two first detector trainings during the ND Nursery and Greenhouse Association and ND Urban and Community Forestry Association conference. Sixty people attended the training bringing the total trained since 2010 to nearly 300. The trainings were well received and each participant received a binder full of information and outreach material.

Preparation for EAB Awareness Week 2013 is in the works. EAB Awareness Week has been set for May 19-25, 2013 to coincide with the kickoff to summer, right before Memorial Day. Stay tuned for more details later.

NDSU PDL (cont’d from page 2)

and a plug from the transition zone between diseased and healthy turf. Photographs are helpful, too.

Dutch elm disease testing: Live, symptomatic branches that are at least 1” in diameter and trimmed to 6-8” long pieces should be submitted, preferably with leaves still attached.

Plant identification: PDL also offers assistance with plant identification for those unknown weeds in your lawn or any plant that you are curious about. Photos are especially helpful, as well as plant samples.

The NDSU Plant Diagnostic Lab is primarily self-supported so a small fee is charged for its services. Submit the form on the following page, filled out as completely as possible, with any samples. For more information, visit the lab’s website at www.ag.ndsu.edu/pdl.
**Plant Diagnostic Laboratory**

**Walk-ins:** NDSU campus – 206 Waldron Hall  
**Website:** www.ag.ndsu.edu/pdl  
**E-mail:** NDSU.PDL@ndsu.edu  
**Telephone:** 701-231-7854  
**Fax:** 701-231-7851

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**Information Request Form**

<table>
<thead>
<tr>
<th>Culture:</th>
<th>Soil Testing Lab:</th>
<th>Specialist:</th>
<th>Other:</th>
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<table>
<thead>
<tr>
<th>Date In:</th>
<th>Lab #:</th>
<th>PDIS #:</th>
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</table>

<table>
<thead>
<tr>
<th>Results:</th>
<th>Date:</th>
<th>emailed</th>
<th>phoned</th>
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</table>

<table>
<thead>
<tr>
<th>Condition:</th>
<th>good</th>
<th>fair</th>
<th>poor</th>
</tr>
</thead>
</table>

**Submitted By:**  
**Company:**  
**Address:**  
**City/State/Zip:**  
**Phone:**  
**Fax:**  
**Cell:**  
**E-mail:**  
**Extension**  
**Individual**  
**Grower**  
**Hort/Turf professional**  
**Consultant**  
**Company Rep**  
**Other:**

**Charges:** Routine Diagnosis: $15 ND resident; $25 non-resident; Special Culture: $30; ELISA: $35; Plant/Insect ID: $15; Fungus/Mold ID: $30  
**Do you accept additional charges to complete the diagnosis?**  
**Yes**  
**No**

**Send samples to:**  
NDSU Plant Diagnostic Lab  
NDSU Dept 7660, PO Box 6050  
Fargo, North Dakota 58108-6050  
**Private shipper:**  
NDSU Plant Diagnostic Lab  
306 Walster Hall, Fargo ND 58102

**Services requested:**  
- Routine Diagnosis  
- Plant ID  
- Culture/ELISA  
- Insect ID  
- Special Test  
- Mold ID  
- Other:

**Results and Billing:**  
**Send results to:**  
- Submitter  
- Client

**Send bill to:**  
- Submitter  
- Client

**Sample collection instructions:** See reverse for details.

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<thead>
<tr>
<th>Host:</th>
<th>Planting Date:</th>
<th>Symptom development:</th>
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<tbody>
<tr>
<td>Variety:</td>
<td>Date sample collected:</td>
<td>Occurred in previous years</td>
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<tr>
<td>County location:</td>
<td>Date symptoms noticed:</td>
<td>Date symptoms noticed:</td>
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<tr>
<td>Turfgrass: Year established:</td>
<td>Sod</td>
<td>Seed</td>
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<tr>
<td>Trees/shrubs/ornamentals:</td>
<td>Approx. age:</td>
<td>Height:</td>
</tr>
<tr>
<td>Years at site:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Location:**  
- Crop/Field  
- Greenhouse  
- Golf course  
- Lawn/Turf  
- Landscape  
- Home - interior  
- Nursery/Orchard  
- Pasture  
- Garden  
- Shelterbelt  
- Other:

<table>
<thead>
<tr>
<th>Size of Planting</th>
<th>Symptoms</th>
<th>Parts Affected</th>
<th>Distribution in Field</th>
<th>Field History</th>
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<tbody>
<tr>
<td>Total Acres, or</td>
<td>Yellowing</td>
<td>Stems/trunk</td>
<td>High areas</td>
<td>Soil pH:</td>
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<tr>
<td>Total # of plants</td>
<td>Stunted</td>
<td>Roots</td>
<td>Low areas</td>
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<tr>
<td>Incidence</td>
<td>Wilting</td>
<td>Leaves</td>
<td>Scattered plants</td>
<td>Soil drainage:</td>
</tr>
<tr>
<td># Acres affected</td>
<td>Rot</td>
<td>Flowers</td>
<td>Groups of plants</td>
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<tr>
<td>sq. ft. affected</td>
<td>Dead areas</td>
<td>Fruits/seeds</td>
<td>Uniform</td>
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<tr>
<td>% of area affected</td>
<td>Dieback</td>
<td>Entire plant</td>
<td>Wet areas</td>
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<tr>
<td>Abnormal growth</td>
<td>Leaf drop</td>
<td>Branches, %</td>
<td>Sunny spots</td>
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<tr>
<td>Other:</td>
<td>Abnormal</td>
<td>Other:</td>
<td>Shady spots</td>
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<tr>
<td># of plants affected</td>
<td></td>
<td></td>
<td>Edge of planting</td>
<td></td>
</tr>
<tr>
<td>% of plants affected</td>
<td></td>
<td></td>
<td>Other:</td>
<td></td>
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</tbody>
</table>

**Culture practices:** Where applicable, please provide active ingredients or trade names, application dates, and rates:

- Fertilizers:
- Herbicides:
- Insecticides:
- Fungicides:
- Tillage practices:

**Please describe problem in detail on reverse side**