The University of Minnesota has numerous sources of information on turf and related horticultural topics available to the general public. In this issue of University Update, I have included summaries listing names, addresses and phone numbers for these University services.

**Info-U Home and Garden Telephone Information Services**

Info-U is a free, 24-hour home and garden telephone information service located in Coffey Hall on the St. Paul Campus. From your home or office, you have access to answers for commonly asked questions on plants and flowers; lawns, trees and shrubs; freezing and canning, and fruits and vegetables.

If you have a touch-tone phone, you can choose your topic by browsing through the Info-U brochure. Press the corresponding number of the topic desired to hear an audio message on that topic. Remember, the call is free, the information is based on research from the University of Minnesota, and you can access it right from your telephone.

For more information call (612) 624-2200 in the metro area or 800-525-8636 for participating outstate counties.

**Info-U Fax-Back**

Info-U Fax-Back is a new information source from the University of Minnesota Extension Service. Fact sheets on yard and gardening topics are now available via fax machines.

To receive a fact sheet by fax:
1. From any touch-tone phone, call (612) 624-2200.
2. Following voice instructions, enter “105” for FAXBACK service.
3. Following voice instructions, enter the:
   a. fax phone number
   b. local phone number (if desired)
   c. 4-digit title number from the faxback catalog.
   The system will ask if a catalog of titles should be faxed.
4. The INFO-U FAXBACK system will make up to 5 attempts to send the requested information to the fax number given.

In 1994, the INFO-U system processed:

<table>
<thead>
<tr>
<th>Type of Service</th>
<th>Messages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice Messages</td>
<td>17,139</td>
</tr>
<tr>
<td>Current topic calls</td>
<td>1,388</td>
</tr>
<tr>
<td>Rotary calls</td>
<td>3,859</td>
</tr>
<tr>
<td>FaxBack pilot</td>
<td>61</td>
</tr>
<tr>
<td><strong>TOTAL MESSAGES</strong></td>
<td><strong>22,447</strong></td>
</tr>
</tbody>
</table>

Of the voice messages accessed (not counting current topics and rotary calls), 68% are supported by a horticulture specialization.

**Horticulture Topics, by subject matter**

- Compost & general gardening: 11%
- Flowers: 12%
- Fruits & vegetables: 9%
- House plants: 2%
- Household pests: 6%
- Lawns: 23%
- Vegetables: 4%
- Volunteer update messages: 28%
- Woody ornamentals: 9%

**Dial U Clinic Diagnostic Services**

The Dial U Clinic is a fee-supported service of the Minnesota Extension Service and the University of Minnesota. Callers may reach the clinic by dialing 1-900-988-0500 from 9:00-5:00, May through September and 9:00-2:00 the rest of the year. A fee of $2.99 is automatically billed to the caller's phone. This service is available to anyone wishing horticultural or wildlife information or the diagnosis of insect or disease problems on non-production landscape plants (including turf, trees, shrubs, flowers and vegetables). Callers include homeowners, lawn care personnel, foresters, consultants and grounds managers.

If you are a producer of a horticultural crop (such as a greenhouse grower or nursery manager), you need to contact the appropriate University specialist. For disease problems you may contact the Plant Disease Clinic directly at (612) 625-1275.

In 1994 the Dial U Clinic processed 20,508 phone calls and walk-in contacts. Subject areas covered include: homeowner horticulture (44%), entomology (34%), plant pathology (16%) and urban wildlife (6%).

Top five horticulture questions:
1. lawn care (include weed control)
2. pruning/training
3. transplanting
4. overwintering
5. identification of various plants

Top five entomology questions:
1. carpenter ants
2. wasps
3. insect/mite galls (excl. maple bladder gall)
4. ants (household) (excl. pavement and field ants)
5. houseplant insects

(Continued on Page 16)
Top five plant pathology questions:
1. apple scab
2. wilt diseases (oak wilt, DED, verticillium wilt)
3. evergreen problems
4. anthracnose on shade trees
5. mushrooms & slime molds on trees and turf

Top five wildlife questions:
1. bats
2. moles
3. squirrels
4. deer
5. rabbits

Plant Disease Clinic

The Plant Disease Clinic can be reached at (612) 625-1275. Turf samples for diagnosis can be shipped/mailed to: Plant Disease Clinic; 495 Borlaug Hall; 1991 Buford Circle; University of Minnesota; St. Paul, MN 55108. The cost for a routine diagnosis is $20.00. Do not send only dead plants. Samples can be collected from living plants as well as those in various stages of decline. A cup cutter sample is good. Wrapping roots and soil in plastic is acceptable but do not wrap the tops. Complete information should accompany each sample. Send or deliver early in the week since samples often spoil in the mail over the weekend. Prepayment with sample is desirable and if a rapid response is preferred, please include a telephone number.

In 1994 the plant disease clinic diagnosed over 3,000 disease problems.

Soil Testing Laboratory

Soil samples can be delivered in person to Room 135 Crops Research Building, University of Minnesota, or mailed to: Soil Testing Laboratory, University of Minnesota, 1903 Hendon Avenue, St. Paul, MN 55108.

Soil sample information sheets are available from your MES County Extension Educator or by calling (612) 625-3101.

Plant problems may be caused by several factors other than soil fertility. Disease, insects, insufficient light, soil moisture/compaction problems or less than desirable climatic conditions can also enter in. An important first step in diagnosing problems is an evaluation of soil fertility. When fertility is not the problem, the other factors affecting plant growth should be examined. Your county extension educator or state specialist can help if you need more information. The University of Minnesota Soil Testing Laboratory evaluates soil fertility and pH (routine test) as well as tests for excessive salts or fertilizer recommendation can be made. Fertilizer should provide adequate levels of phosphorus and potassium (necessary for good plant growth) without affecting the environment adversely.

The Soil Testing Laboratory analyzes 10-20,000 outdoor samples and 4,000 greenhouse/container samples each year. Approximately 3,000 of these are turf and related yard and garden samples.