

Newsletter Extension



Fruit ICM News

Volume 6, No. 37 October 31, 2002

In This Issue:

Calendar Orchard/Berry Floor Grasses Organic Certification Court Action Soil Testing - Part 1 Terminal Market Wholesale Fruit Prices

Calendar

Nov. 12-13: Berry Symposium at The Ohio State University, at University Plaza Hotel and Conference Center, Olentangy River Road, Columbus. Speakers from numerous universities and USDA branches will address four areas: Berry Production and Plant Breeding, Berry Composition, Health Effects, and Marketing and Product Development. The main emphasis will be on the health effects of berries and the recent research that has been done utilizing berries for chemoprevention and other health benefits. Registration for the conference is \$50 per day. For more information e-mail Sandy Kuhn at kuhn.37@osu.edu or Melissa Fitzpatrick at fitzpatrick.73@osu.edu or call the OSU South Centers at 800-297-2072.

Jan. 15-17, 2003: Ohio Fruit & Vegetable Growers Congress & Ohio Roadside Marketing Conference, Toledo SeaGate Convention Centre and Radisson Hotel. Contact Jennifer Hungerford at 614-249-2424 for more information.

Jan. 27-29, 2003: Indiana Horticultural Congress; Planning is currently underway for next year's Hort Congress, which will be held January 27-29, 2003 at the Adams Mark Hotel in Indianapolis.

Feb. 7-8, 2003: North American Bramble Growers' Association will meet in Leesburg Virginia. The meeting will be held at the Holiday Inn at the Historic Carradoc Hall. Contact Jason Murray, Commercial Horticulture Agent, for further information, at jamurray@vt.edu or 703-737-8978. You can view the program at http://www.ento.vt.edu/Fruitfiles/NABGAProgram03.pdf

Orchard/Berry Floor Grasses Selection and Management

Source: Richard C. Funt, Department of Horticulture and Crop Science

Establishing sod between rows of fruit trees or berry crops has shown to be very beneficial to growers. The benefits are reducing erosion on newly planted ground, withstanding heavy tractors and sprayers, particularly under wet spring conditions when pre-bloom sprays are essential, and improving soil health by recycling nutrients.

Perennial covers can improve soil quality, increase soil organic matter, and reduce soil compaction and runoff of rainfall. Ideally, a perennial cover needs to establish quickly, crowding out broadleaf weeds which harbor insects and nematodes; withstand traffic; not compete with the crop, and not require irrigation, fertilizer, and mowing. No single perennial can do it all.

Tall fescues, such as K-31, have been suggested in the past for quick establishment, crowding out weeds and other grasses, and withstanding heavy traffic. New cultivars of tall fescues can be dwarf types and deserve more attention because they require less mowing, have less residue (less harboring of mice and voles), and can be an endophyte (*Neotyphodium coinaphialum*) a fungus which creates a toxin for insects and nematodes. These chemicals can kill, reduce or repel cinch bugs, thrips, bill bugs, sod webworm, and aphids that feed on grass stems.

Dwarf tall fescues usually contain endophytes, which are carried in the seed and colonize the plant as it grows. Endophytes are also found on certain cultivars of perennial ryegrass and tall chewing or hard fescues. The endophyte aids the fescue in storing more organic carbon (reduces global warming) and nitrogen in the soil. Also, the endophyte closes leaf stomata more rapidly to conserve moisture during drought and nutrients, particularly in low-quality soils. Additionally, endophytes protect roots from soil acidity and toxic elements. Non-endophyte types do not do as well under difficult conditions.

Hard fescues fit an orchard integrated pest management (IPM) program and a pick-your-own marketing operation. Hard fescues do not creep into the weed-free herbicide strip, and once established they are competitive with weeds. Mixing an endophyte perennial rye grass with a hard fescue aids in rapid establishment and reduces the start of weeds. Hard fescues can be moved to 2.5 inches, which reduces the attractiveness to voles. They are easy to walk on and are very attractive to the consumer.

When establishing either the tall dwarf types or hard fescue, start one year before establishing the fruit planting. Use a post emergent herbicide as Roundup, seed the grass in August or September, and plant the crop in April. A Brillion seeder does an excellent job of sowing grass seed and eliminates raking and rolling. Apply 40 pounds of actual nitrogen prior to seeding and top dress in the spring. Create a relatively firm, level bed and sink no more than one half inch into the soil when walking on the ground. Seed in late summer. Drill the seed shallow (only 1/4 inch) and roll the ground if you do not use a Brillion seeder. About 10% of the seed should be visible on the surface after seeding. Usually a herbicide is not needed while the cover is establishing, particularly during the winter.

Try to mow high. Mow when the grass is 4 inches high and remove no more than 1 inch. Dwarf tall fescue should grow to 5 inches before mowing. Mowing high produces the strongest, healthiest covers. Where rodents are a problem mow to 2.5 inches in the fall, but break up the heavy clippings to reduce vole nesting. Do not overfeed with fertilizer.

Disclaimer: Where trade names are used, no discrimination toward similar products is intended or implied.

Sources:

Mobery, D.P., 1998. Perennial covers for healthy soil. Northland Berry News. p. 21-22.

Peterson, C. Jr. 2002. Tall fescue rescue. Successful Farming (magazine).

Slovey, D. 2002. Choosing and managing the right groundcover. Northland Berry News. Vol. 16 #1 p. 16.

Organic Advocates Take USDA to Court on Organic Certification

Source: Pesticide Action Network Updates Service

On October 16, 2002, one week before the new and long-awaited U.S. Organic Food Production Act was to go into effect, organic farmers and food safety organizations filed a legal petition to force the U.S. Department of Agriculture (USDA) to establish a peer review panel to oversee the accreditation of organic certifiers. Both the new law and USDA's own regulations require this peer review, but to date USDA has not moved to create the panel. The petition was filed by the Center for Food Safety (CFS) and joined by Beyond Pesticides, National Campaign for Sustainable Agriculture, Rural Advancement Foundation International-USA, and Union of Concerned Scientists.

Appropriate certification of organic farms is a critical piece of enforcement for the new organic standards. Up until 2000, the number of certifying agencies in the U.S. remained between 40 and 50. However, since 2000, the number unexpectedly jumped to 122. The Center for Food Safety is pushing for the USDA to properly evaluate the qualifications of the large volume of new certifiers seeking accreditation. Without a Peer Review Panel, consumer groups, many organic farmers, and farmer-based certifying organizations fear that large agribusiness corporations will have an undue influence on who will be certifying organic producers and how that certification will be conducted.

CFS Executive Director Andrew Kimbrell stated, "The agency's refusal to allow for independent oversight of its actions threatens the integrity of the 'organic' label. The decision on who is to certify organic foods needs to be in full view of the public, where it cannot be influenced by corporate interests."

Farmer-based certifying entities are especially concerned that without adequate oversight of the USDA accreditation program, they will be discriminated against by the agency during review and audit of their accreditation applications. The petition cites inconsistencies in clarifications from the USDA National Organic Program (NOP) to different organic certifiers, calling into question the level of fairness and scrutiny of applications of accreditation.

In addition to the lack of oversight for the accreditation process, petitioners raised concern that the USDA is abusing its authority by creating loopholes in enforcement of the organic standards. One company has attempted to pressure the NOP into relaxing the 100% organic feed requirement for organic chicken production. Such exemptions would quickly erode consumer confidence in organic foods and erode the industry.

"Continued failure of USDA to implement citizens oversight or peer review of their organic accreditation program not only threatens organic integrity and consumer confidence, but also fails to

meet already-established international norms," said Michael Sligh, director of sustainable agriculture for the Rural Advancement Foundation International (RAFI-USA) and founding chair of USDA National Organic Standards Board.

To see Center for Food Safety's legal petition, visit http://www.centerforfoodsafety.org/li.html.

Source: Center for Food Safety Files Legal Action, Press Release Oct. 16, 2002

Contact: Center for Food Safety, 660 Pennsylvania Ave., SE, Washington, DC 20003

Phone: 800-600-6664 or 202-547-9359 E-mail: office@centerforfoodsafety.org

Web site: http://www.centerforfoodsafety.org/

Choosing a Soil Testing Laboratory

Source: Robert J. Precheur, Ohio State University Department of Horticulture and Crop Science

When done properly, periodic soil testing is necessary and the only tool available to quantitatively determine current soil nutrient levels. If, however, a producer is using inaccurate soil fertility data, a producer may apply fertilizer when there is no likelihood that the application will increase yield or profits. Conversely, if the soil fertility analysis data does not indicate a need for fertilizer when it is needed, maximum economic yields may be foregone and income lost.

The most common mistake people make when trying to determine if a soil testing laboratory is accurate is to send split samples to two laboratories. More than likely, results will come back different. In fact, if split samples are sent to 10 laboratories, chances are three or four results will be similar and the other six will probably not align with the rest.

Why go to all of this work when someone has already done this sample splitting? The North American Proficiency Testing (NAPT) program is a national sample exchange program for agricultural laboratories. The program is managed through the American Society of Agronomy (Soil Science Society of America). The majority of the agricultural laboratories participate in this voluntary program.

The goal of the NAPT Program is to assist soil and plant tissue testing laboratories in evaluating their performance through inter-laboratory sample exchanges of actual tests of reference samples and a statistical evaluation of the analytical data for inter-laboratory comparison. With the increasing attention in nutrient management and water quality there is a greater need for soil and plant analysis laboratories to monitor and document the quality of their results.

Factors to Consider When Choosing a Soil-Testing Laboratory:

Laboratories that determine concentrations of plant-available nutrients in the soil are generally not regulated by state or federal agencies. Consequently, it is important for growers to investigate these laboratories by obtaining information about their performance, operation, and service before sending soil samples for analysis. A grower requires assurance that the test results will be of quality, be credible, and

be meaningful.

1. Test Methods

The use of appropriate test methods is very important in order to accurately determine the concentrations of plant-available nutrients in the soil. Research at many land-grant universities over many decades has resulted in soil testing methods that are specific for soils in particular regions of the United States. For example, methods developed for testing the predominant soils in the Southern region of the United States may not be applicable for soils in the North Central region. The North Central Regional Research Committee (NCR-13) has developed methods that work best on soils in the North Central region. A publication of these methods is entitled Recommended Chemical Soil Test Procedures for the North Central Region.

Laboratories that test Ohio soils should use these procedures. Therefore, potential clients need to determine if these testing methods, recognized for Ohio soils, are being used by the laboratory.

2. Laboratory Proficiency

The proficiency of a laboratory refers to its ability to produce accurate and precise test results. It is difficult for a laboratory to independently assess this factor. Thus, regional soil-testing research committees and other organizations established the North American Proficiency Testing (NAPT) program in 1998. This program is backed by the professional scientific organization, the Soil Science Society of America. A main purpose of the NAPT is to provide "double-blind" check samples to laboratories who wish to monitor and improve the quality of their soil-testing data. NAPT not only provides the check samples but also collects and statistically analyzes the data from laboratories in the program. Participating laboratories receive a summary of their performance for each soil-test method. Continued self-evaluation and adjustment improves the integrity of the soil-test results. A prospective client should ask the laboratory management if they are members of the NAPT program. (A list of laboratories in and around OH is provided at the end of this article.)

3. Laboratory's NAPT Results

It is important that a representative of the laboratory review, with the potential client, their NAPT quarterly test results with those summarized for all NAPT participating laboratories. Information for each test parameter of interest to the client should be included. Growers should ask for this comparison in order to make a good decision about a laboratory. If the laboratory refuses, consider selecting another laboratory.

4. Other Customers

The potential client should ask the laboratory to provide the names and telephone numbers of 10 customers. This allows the grower to evaluate the laboratory from the perspective of users like themselves.

5. Units of Results

Ask a laboratory representative what units are used for each test parameter. Some laboratories use lbs/a, ppm, or lbs/1,000 square feet. If results from different labs are compared, make sure the units associated with the results are the same. For a valid comparison, a simple conversion may be necessary. For example, to convert ppm to lbs/a, multiply the ppm value by 2. Certain test parameters may have

unfamiliar units, such as meq/100 g for cation exchange capacity. Ask the laboratory representative to explain the meaning of the units if they are unclear.

6. Categories of Quantity

Some laboratories may place test results into categories. Examples are the categories of low, medium, and high. There may be additional categories or different categories than these. These categories usually denote a range of test values. It is likely that the categories given by one laboratory do not represent the same nutrient concentrations for another laboratory. Ask the laboratory to define each range that is used. In addition, find out if the categories are crop-dependent or calibrated for specific soil conditions (e.g., soil types). That is, results that may be regarded medium for one crop may be considered low for another crop.

7. Turn-Around Time

Ask how long it takes the laboratory to do the routine soil testing and return the results. In order for the results and recommendations to be useful, the turn-around time must be as short as possible. A good laboratory should be able to provide the results in two to three working days for the routine soil tests of pH, lime requirement, phosphorus, potassium, calcium, and magnesium. It is also very important to make sure the laboratory does not sacrifice accuracy by short cutting the methods to attain this turn-around time. It is a good idea to check the turn-around time with those who have used the laboratory. The Internet can be a useful system to obtain test results rapidly. Find out if the laboratory can provide the results on the Internet. In addition, determine if the recommendations for the application of lime and fertilizer can also be obtained on the Internet. In some cases, the laboratory may be able to accept the customer's sample identification information over the Internet, rather than using the sample information form. Most laboratories will also have an e-mail address that will allow direct and rapid communication with the laboratory manager and/or laboratory professional.

8. Lime and Fertilizer Recommendations

Determine if the soil-testing laboratory provides recommendations for the application of lime and fertilizer for the crops of interest. Also ask about the basis for lime and fertilizer recommendations that are used for other crops. Are they calibrated for your specific soil types or growing conditions? Ask if crop rotations and yield goals are considered. In addition, ask if the timing of the application of lime and fertilizer is included in the laboratory's recommendations. The Ohio State University's Fruit Specialists can help you interpret results and make recommendations.

9. Reference Check Samples

Find out if the laboratory routinely uses internal "blind" and "double-blind" check samples where possible. A "blind" check sample is one that the laboratory technician knows is a check sample and is aware of the range of acceptable values for the parameters being tested. The technician uses this kind of check sample to make sure the method and instrument are performing normally. A "double-blind" check sample is one that the laboratory technician does not know is an internal check sample. In this case, the laboratory manager evaluates the data and determines if the test results produced are in the acceptable range. If they are not, then corrective action must be taken to solve the problem.

10. Test Kits

Most soil-testing laboratories supply test kits for their customers. As a minimum, the test kits should

contain the sample information form and soil sample container. Some additional information may be included with the test kit. Find out about the sample kits and how they are obtained from the laboratory.

11. Laboratory Test Prices

Prices for soil testing often vary greatly from one laboratory to the next. Ask about the prices. Determine if the price for each test or test package is given in writing. Also find out if discounts are given for large numbers of samples and whether prices are negotiable.

Soil Testing Laboratories That Participate in the North American Proficiency (NAPT) Testing Program

Kentucky Laboratories:

Waters Lab, 2101 Old Calhoun Rd.,

Owensboro, KY 42301

Work Phone: (270) 685-4039 Fax Number: (270) 685-3989

UK Soils Lab/Princeton Research Education Center

Princeton, KY 42445

Work Phone: (270) 257-9503 Fax Number: (270) 365-2667

UK Soils Lab/Lexington 103 Regulatory Service Bldg. Lexington, KY 40546

Work Phone: (859) 257-2785

Fax Number: (859) 257-2735

Indiana Laboratories:

A&L Great Lakes Labs 3505 Conestoga Dr. Fort Wayne, IN 46808

Work Phone: (260) 483-4759 Fax Number: (260) 483-5274

Sure-Tech Laboratories 2435 Kentucky Ave., Bldg. 9 Indianapolis, IN 46221 Work Phone: (317) 243-1502

Fax Number: (317) 243-1502

Ohio Laboratories:

Spectrum Analytic, Inc. 1087 Jamison Rd. Washington Court House, OH 43160

Work Phone: (740) 335-1562

Fax Number: (740) 335-1104

CALMAR Soil Testing Laboratory

130 S. State St.

Westerville, OH 43081

Work Phone: (614) 523-1005 Fax Number: (614) 523-1004

Logan Labs

184 W. Main St.

Russells Point, OH 43348 Work Phone: (937) 842-6100 Fax Number: (937) 842-2433

Brookside Laboratories, Inc.

308 S. Main St.

New Knoxville, OH 45871 Work Phone: (419) 753-3448 Fax Number: (419) 753-2949

CLC Labs

325 Venture Dr.

Westerville, OH 43081

Work Phone: (614) 888-1663 Fax Number: (614) 888-1330

Michigan Laboratories:

Agri-Labs, Inc. 420 W. Chicago

Bronson, MI 49028

Work Phone: (517) 369-6052 Fax Number: (517) 369-5522

Litchfield Analytical Services

535 Marshall St.

Litchfield, MI 49252

Work Phone: (517) 542-2915 Fax Number: (517) 542-2014

MSU Soil & Plant Nutrient Lab

A81 Plant & Soil Sciences Bldg.

East Lansing, MI 48824-1325

Work Phone: (517) 355-0211 Fax Number: (517) 355-1732

References:

1. Brown, J. R. (ed.). 1998. Recommended Chemical Soil Test Procedures for the North Central Region. North Central Regional Research Publication No. 221. Missouri Agricultural Experiment Station SB

1001. Columbia, MO.

- 2. Neufeld, J. and J. Davison. 2000. Practical Considerations When Selecting a Soil Testing Laboratory for an Educational Program. Journal of Extension. August, 2000, Vol. 38, No. 4.
- 3. North American Proficiency Testing Program. University of Missouri, Lincoln Univ.
- 4. Watson, M. E.. 1999. Guidelines for Choosing a Soil-Testing Laboratory. Ohio State University Fact Sheet. Horticulture and Crop Science. HYG-1133-99.

Terminal Market Wholesale Fruit Prices October 31, 2001

The intent of listing terminal market prices is to provide information available in the public domain. It is not intended for price setting, only to assist growers in evaluating the value of their crops. Producers need to remember that the prices listed are gross, and consideration must be given to marketing costs, including commission, handling charge, gate fees, and possible lumper fees.

Source: Chicago http://www.ams.usda.gov/mnreports/HX FV010.txt

Detroit http://www.ams.usda.gov/mnreports/DU_FV010.txt
Pittsburgh http://www.ams.usda.gov/mnreports/PS_FV010.txt

| | Chicago | Detroit | Pittsburgh | | |
|--|--|--|--|--|--|
| Apples, ctns trypk, U.S. ExFcy | | | | | |
| Golden Delicious | | | WV 88s 21.75 100s 19.50 | | |
| McIntosh Fancy Cortland | WI 64s, 72s, 80s 25-26 WI 72s 16.00 | | | | |
| Apples, ctns trypk, Comb U.S. ExFcy-U.S. Fancy G. Delicious Red Delicious | | | WV 125s 14.75 138s 11.50 WV 125s 14.50 138s 11.50 | | |
| Apples, ctns celpk, U.S. ExFcy | | | | | |
| Empire | | NY 100s 25-26.00 120s 21.00 | | | |
| McIntosh | NY 80s 26.00 | NY 100s 25-26.00 120s 20-21.00 | | | |
| U.S. Fancy McIntosh | NY 80s 16.50-17.00 96s 26.00 100s 16.50-17.00 | | NY 80s 19-20.00 100s 18.50 120s 15.50 | | |
| Apples, ctns celpk, Comb U.S.ExFcy-U.S. | | MI 96s 23.50-24.00 | | | |

| | MI 2½" min 13-14.50 MI 2½" min 14.50- 15.50 MI 2½" min 14-15.50 MI 2½" min 16-16.50 MI 2½" min 15-15.00 MI 2½" min 14.50- 15.50 | |
|--|---|--|
| | | |
| | MI 2½" min 12.00 | WV 2½" min 12.50 |
| MI 2½" up 16-16.50 2¼" min 15.00 | MI 2½" up 15.75-16.25 MI 2¼" min 12.25- 12.75 | PA 2½" up 14-15.00 |
| MI 2½" up 15.00 MI 2¼" min 12.50 | MI 2½" min 12.00 2¼" min 11.25-11.75 | WV 21/4" min 12.50 |
| | MI 2½" min 12.00 | |
| IL 2½" min 15-16.00 MI 2¼" min 15.00 | MI 2 ¹ / ₄ " min 11.25-11.75 | |
| | MI 2½" min 12.00 2¼" min 12.25-12.75 | NY 2½" min 12.50 |
| IL 2 ¹ / ₄ " up 15-15.50 MI 2 ¹ / ₄ " min 12.50 | MI 2½" min 12.00 2 ¼" min 11.25-11.75 | WV 2 ¹ / ₄ " min 12.50 |
| | MI 2½" min 12.00 | WV 21/4" min 12.50 |
| No Grade Marks | U.S. Fancy | U.S. Extra Fancy |
| | | PA 3" min 12.50-13.00 |
| | MI 2¾" up 14-15.00 MI 2½" up 12.00 | No Grade, no size marks WV Empire12.50 |
| MI 2½"min 16.00 2¼" min 13.00 | | No Grade, no size marks |
| IL 2 ¹ / ₄ " up 14-16.00 MI 2 ¹ / ₄ " min 12.00 | MI 2¾" up 14-15.00 2½" up 12.00 | WV Golden Delic. 12.50 |
| | MI 3"min 15.00 | |
| | MI 2¾" up 14-15.00 | |
| IL 21/4" up 14.00 | MI 2½" up 12.00 | |
| | MI 2¾" up 14-15.00 | |
| | MI 2¾" up 20.00 2½" up 15.00 | |
| | 2½" min 15.00 MI 2½" up 15.00 MI 2½" min 12.50 IL 2½" min 15-16.00 MI 2¼" min 15.00 IL 2¼" up 15-15.50 MI 2¼" min 12.50 No Grade Marks MI 2½"min 16.00 2¼" min 13.00 IL 2¼" up 14-16.00 MI 2½" min 12.00 | MI 2½" min 14.50- 15.50 MI 2½" min 14-15.50 MI 2½" min 16-16.50 MI 2½" min 15-15.00 MI 2½" min 14.50- 15.50 MI 2½" min 15-15.00 MI 2½" min 12.00 MI 2½" min 12.25- 12.75 MI 2½" min 12.00 MI 2½" min 12.00 MI 2½" min 12.00 MI 2½" min 12.00 MI 2½" min 12.00 MI 2½" min 12.00 2½" min 12.25- 11.75 MI 2½" min 12.00 MI 2½" min 12.00 MI 2½" min 13.00 MI 2½" up 12.00 MI 2½" up 12.00 MI 2½" up 12.00 MI 2½" up 12.00 MI 2¾" up 14-15.00 MI 2 |

| Red Delicious | | No Grade, no size marks WV Red Delic.12.50 |
|---|----------------|---|
| Red Rome | MI 3"min 15.00 | |
| Apples, bins loose Empire, Golden Delicious, Red Delicious | | WV \$190 (each variety) |

The Ohio Fruit ICM News is edited by:

Ted W. Gastier
Extension Agent, Agriculture
Tree Fruit Team Coordinator
Ohio State University Extension Huron County
180 Milan Avenue
Norwalk, OH 44857

Phone: (419)668-8210 FAX: (419)663-4233 E-mail: gastier.1@osu.edu

Information presented above and where trade names are used, they are supplied with the understanding that no discrimination is intended and no endorsement by Ohio State University Extension is implied. Although every attempt is made to produce information that is complete, timely, and accurate, the pesticide user bears responsibility of consulting the pesticide label and adhering to those directions.

Copyright © The Ohio State University 2002

All educational programs conducted by Ohio State University Extension are available to clientele on a nondiscriminatory basis without regard to race, color, creed, religion, sexual orientation, national origin, gender, age, disability or Vietnam-era veteran status.

Keith L. Smith, Associate Vice President for Ag. Adm. and Director, OSU Extension.

TDD No. 800-589-8292 (Ohio only) or 614-292-1868

| Back |