

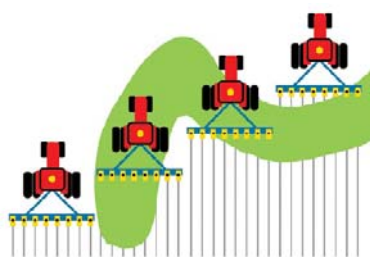
Virginia Cooperative Extension



FARM NOTES

February 2014

Next Generation Crop Fertilization Meeting



Friday, February 28

10:00 a.m.-3:00 p.m.

New Market Fire Hall

9771 South Congress Street, New Market, VA 22844

Please let us know you will be attending by calling 540-459-6140 no later than February 25.

How I Use Yield Monitor Data on My Farm to Improve Our Crop Fertilization Program
Jay Hundley, Cloverfield Farm

Precision Soil Sampling for Crop Nutrient and Lime Application
Tim Woodward, Tellus Consulting

Using Green Seeker (or Similar) Technology to Improve Nitrogen to Corn and Small Grain
Wade Thomason, Extension Grain Specialist, Virginia Cooperative Extension

How to Use Nitrogen Stabilizers to Improve Nitrogen Use Efficiency
Hunter Frame, Extension Crop Fertility Specialist, Virginia Cooperative Extension

Demonstrations of a Veris Machine and Drones to Improve Crop Management
Kyle Sturgis, AgrIntelligence Specialist, Helena Chemical Company
Tim Woodward, Tellus Consulting

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Upcoming Meetings

February 18 - National Cover Crop Conference (Opening session broadcast via internet).

10:00 a.m.-12:00 noon. Shenandoah County Office of Virginia Cooperative Extension Office (600 North Main Street, Woodstock, VA 22664). A live video stream from the opening session of the National Cover Crops and Soil Health Conference. Howard Buffett and USDA Secretary of Agriculture Tom Vilsack (invited) will kick off the Omaha-based national event, followed by a national panel of leading soil health farmers who will provide their perspectives on the promise, opportunities, and challenges of improving soil health.

February 28 - Next Generation Crop Fertilization Meeting, 10:00 a.m.-3:00 p.m., New Market Fire Hall, 9771 South Congress Street, New Market VA.

March 7 - Precision Ag Technology Field Day, Weyers Cave Community Center, 682 Weyers Cave Road, Weyers Cave, VA 24486. 10:00 a.m.-3:00 p.m. Call the Rockingham County Office of Virginia Cooperative Extension at 540-564-3080 to register.



Evaluation of Daikon Radishes **Matt Yancey, Crop and Soil Extension** **Agent – Virginia Cooperative Extension –** **Rockingham County**

Daikon radishes are becoming more popular as a winter cover crop for their ability to scavenge and recycle nutrients, alleviate compaction, and act as a biofumigant (to combat certain crop pests). Radishes are a specific type of brassica that typically winter-kill in Virginia; other cover crop brassicas include rape and turnip.



This project compared five different brands or varieties of Daikon radishes, and evaluated their performance. The varieties compared were: 'Eco-Till', 'Groundhog', 'Nitro', and 'Tillage'. 'Soil Buster' (a blend of WS 10-11 and Kaiwari) was included at the final site, but data is not reported here. All seed was purchased in 2012 and ranged in price from \$15.60 to \$21.90 per acre (at 6 lbs/acre). Each radish variety was planted in strips with 10 pounds of triticale and 15 pounds of hairy vetch in mid-September, 2012 on three farms west of Harrisonburg, Virginia. Established Radish plots were sampled in late-December prior to winter-kill. The length and girth of each radish bulb was measured. Above- and below-ground biomass was separated and analyzed at Virginia Tech for accumulation of carbon, nitrogen, and other nutrients.

The data showed little statistically significant difference among radish varieties. Field variability may have had the most impact in this test as sample size was relatively small. Relative data and summary data are presented here. It is important to note that all varieties produced both large and small radishes, regardless of proximity to neighboring radishes.

(continued on Page 3)

Cover Crops and Soil Health Forum to Take Place This Winter at Hundreds of Locations Nationwide

You are invited to attend a free, live broadcast of the *National Conference on Cover Crops and Soil Health* and discuss how to build soil health, improve yields, curb erosion, manage pests, and build resilience in your farming system. On February 18, locations in every state across the country will host [Cover Crops and Soil Health Forums](#).

The Virginia Cooperative Extension Office in Woodstock, VA (600 North Main Street) will be one of the host

locations. The meeting will begin at 9:45 a.m. with connection to the forum at 10:00 a.m..



Photo by Edwin Remsberg

Facilitated discussions on local issues pertaining to cover crops will follow a live-streamed broadcast of opening sessions from the national conference, including a dialogue with Secretary of Agriculture Tom Vilsack (invited) and Howard G. Buffett, plus a panel discussion with expert farmers. Because the national conference attendance is limited, the local forums represent a way to include farmers, educators, and researchers across the country in the emerging conversation about the use and benefits of cover crops.

For more information about the *Cover Crops and Soil Health Forums* and a list of forum locations, visit www.SARE.org/covercropconference.

Evaluation of Daikon Radishes *(continued from Page 2)*

The nitrogen uptake and carbon to nitrogen (C:N) ratio of the radishes are important figures to recognize. A ratio of 24:1 is ideal to expedite residue decomposition and nitrogen release. A high C:N lacks the nitrogen required to decompose a high-carbon residue, possibly resulting in temporary nitrogen tie-up, as microorganisms pull nitrogen from other sources. of soil nitrogen to breakdown the plants and a lower ratio allows for rapid plant breakdown and release of excess nitrogen. The C:N ratios found in our radish study are very favorable, and radishes overall scavenged about 26 pounds of nitrogen/acre.

Sample Measurements are relative numbers (for example a length of 105 is 5% greater than a length of 100).*

	Stand Count	Foliage Dry Weight	Tuber Dry Weight	Total Dry Weight	Length	Girth/ Circumference
Eco Till	0.94	1.17	1.19	1.18	1.07	1
Groundhog	1.04	0.83	0.75	0.79	0.87	0.9
Nitro	0.96	1.01	1.08	1.05	1.04	1.03
Tillage	1.06	1.11	1.11	1.11	0.98	1.02
Averages	106,000 plants/acre				5.2 inches	3.3 inches



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Throughout the year Virginia Cooperative Extension organizes multiple educational meetings. The following agribusinesses graciously provide funding to help support these meetings. Their support is very helpful to our educational effort.

AMVAC	MidAtlantic Farm Credit
BASF	Monsanto Company
Bayer CropScience	Page Cooperative Farm Bureau
Binkley & Hurst	Rockingham Cooperative Farm Bureau
CFC Farm & Home Center	Southern States – Front Royal
Dow AgroSciences LLC	Southern States – Luray
Farm Family Insurance	Southern States – Winchester
First Bank & Trust Company	Syngenta
Helena Chemical Company	Valley Fertilizer & Chemical Company
Hubner Seed	Wightman Insurance Agency
James River Equipment	Winchester Equipment Company
Mathias Brothers	

Robert A. Clark
Senior Extension Agent
Agriculture and Natural Resources

The information given herein is for educational purposes only. References to commercial products or trade names are made with the understanding that no discrimination is intended and no endorsement by Virginia Cooperative Extension is implied.

If you are a person with a disability and desire any assistive devices, services, or other accommodations to participate in these activities, please contact Robert A. Clark, Senior Extension Agent, Agriculture and Natural Resources, at the Shenandoah County Office of Virginia Cooperative Extension at (540) 459-6140 during business hours of 8:00 a.m. and 5:00 p.m. to discuss accommodations five days prior to the event.

**TDD number is (800) 828-1120.*

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