New York Berry News

CORNELL UNIVERSITY

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What's Inside

Warm weather continues to be the order of the day, along with generous (excessive...) amounts of rainfall this month.

Lots of new and newsworthy information in this month's issue: new tools now available for controlling White pine blister rust on currants and gooseberries, assistance for flood-affected farmers, a brief on the "Farmer-to-School" program, NASGA summer tour and winter conference details, more on specialty crops and the farm bill, opportunities for improving marketing skills. Feature articles include 2 reports by new authors on strawberry weed and powdery mildew research, and an article by Kevin Iungerman on strawberry renovation. Dive in!

CURRANT EVENTS

July 26. **Tools and Methods for Strawberry Production** Shenk Berry Farm, Lancaster County, PA. Contact Heather House at 814-349-9856 or http://www.pasafarming.org.

August 8. **Bramble Disease Management,** Penn State University Campus, Centre County, PA. Contact Heather House at 814-349-9856 or http://www.pasafarming.org.

August 8-10. **Empire Farm Days** Seneca Falls, NY PRIDE of NY Trade Show. For more information, call 1-800-554-4501 or e-mail sue.santamarina@agmkt.state.ny.us

August 12. **Introduction to renewable energy for home and business**. Apple Pond Farm & Renewable Energy Education Center, Callicoon Center NY, 12714 Call: 845 482 4764.

August 10-13. **Northeast Organic Farming Association (NOFA) Summer Conference**, Amherst, Massachusetts. For more information: http://www.nofa.org/conference/index.php.

August 22-23. **North American Strawberry Growers Summer Tour**, Portland Maine. For more information: http://www.nasga.org .

August 24. **Organic Kiwi Berry Production** Detailed descriptions and directions to events can be found at our website www.pasafarming.org 1:00-4:00pm Kiwi Korners, Montour County, PA. Contact Heather House at 814-349-9856

September 16. **Advanced Renewable Energy Workshop** 10:00 - 2:00 Cost: $75.00 Apple Pond Farm & Renewable Energy Education Center, Callicoon Center NY, 12714 Call: 845 482 4764

September 16-17. **Northeast Small Farm and Rural Living Expo.** Sussex County Fair Grounds, Augusta, New Jersey. For further information, visit the Expo web site at http://www.smallfarmexpo.org.

September 30- October 8. **New York Harvest for New York Kids Week** For ideas visit: http://www.nyfarms.info/farmtoschool.html or http://www.prideofny.com/farm_to_school.html or http://farmtoschool.cce.cornell.edu/

October 6-7. U**.S. Highbush Blueberry Council Fall Meeting**, Regency, Bar Harbor, Maine. For more information: 207-288-9723.

December 5-7.- **Great Lakes Fruit, Vegetable and Farm Market Expo**, DeVos Place, Grand Rapids, Michigan. For more information: http://www.glexpo.com .

December 11-13. **New England Vegetable and Berry Conference**. For more information: www.nevbc.org .

NOVA RECEIVES 2ee RECOMMENDATION FOR CONTROL OF WHITE PINE BLISTER RUST ON CURRANTS AND GOOSEBERRIES.

July 12, 2006. The Department of Environmental Conservation has approved a FIFRA 2ee Recommendation for the use of **Nova 40W Agricultural Fungicide** (EPA Registration No. 62719-411) on currant and gooseberry to control the un labeled pest white pine blister rust.

All applicable conditions and restrictions on the federally registered product must be observed along with use directions set forth in the 2ee recommendation. Any user must have the 2ee recommendation in his or her possession at the time of application. A copy of the 2ee use directions and letter are available from the Pesticide Management Education Program website at http://pmep.cce.cornell.edu/regulation/nysdec-lib/2ee/nova_2ee_706.pdf.

CABRIO RECEIVES 2ee RECOMMENDATION FOR CONTROL OF WHITE PINE BLISTER RUST ON CURRANTS AND GOOSEBERRIES.

*(**Editor's note**: This news brief, listed in the table of contents of last month's issue, was inadvertently omitted from the June newsletter. Sorry for any confusion this may have caused!)*

June 7, 2006. The Department of Environmental Conservation has approved a FIFRA 2ee Recommendation for the use of **Cabrio EG Fungicide** (EPA Registration No. 7969-187) on currant and gooseberry to control the un labeled pest white pine blister rust.

All applicable conditions and restrictions on the federally registered product must be observed along with use directions set forth in the 2ee recommendation. Any user must have the 2ee recommendation in his or her possession at the time of application. A copy of the 2ee use directions and letter are available from the Pesticide Management Education Program website at http://pmep.cce.cornell.edu/regulation/nysdec-lib/2ee/cabrio_2ee_606.pdf.

COMMISSIONER REMINDS FLOOD-AFFECTED FARMERS OF ASSISTANCE- *Documentation is Critical to Receiving Available Assistance*

Jessica Chittenden, Director of Communications, NYS Department of Agriculture & Markets, 10B Airline Dr., Albany, NY 12235

July 13, 2006. New York State Agriculture Commissioner Patrick H. Brennan today reminded farmers in flood-affected counties to make use of government assistance that may be available to them. The United States Department of Agriculture (USDA) estimates the dollar loss incurred by farmers in counties affected by recent flooding to be approximately $40 million, which includes crop and livestock losses, as well as damages to structures and land.

The devastation that resulted from the flooding is putting a strain on all residents of the affected area, especially farmers, the Commissioner said. While our farmers try to pick up the pieces, I remind them to take a moment and apply for the various types of assistance available. Every little bit helps.

The Commissioner added, I also encourage farmers to document any and all losses they may have incurred through photographs, invoices and paid bills. Farmers with crop insurance should contact their insurance agents."

To date, 20 New York counties have been designated as Presidential Disaster Areas, within which farmers have experienced severe flooding resulting in significant damages to personal property and economic losses to their businesses. USDA estimates 290,500 acres of crops were destroyed by flooding, along with 28,250 acres of land. Structurally, New York farmers sustained damage to 60 barns, 115 farm structures including silos, and 122 pieces of farm equipment

President of New York Farm Bureau John W. Lincoln said, Farmers facing severe devastation from the flooding need significant help in order to recover their losses and sustain their businesses. We are thankful for Governor Pataki and

Commissioner Brennans efforts, and we will continue to work with our state and federal partners to obtain additional disaster assistance funds."

Three government agencies are currently offering financial assistance for which New York farmers could be eligible: the United States Department of Agriculture Farm Service Agency (USDA FSA), New York State Department of Labor (NYS DOL) and the Federal Emergency Management Agency (FEMA).

USDA Farm Service Agency
Farmers who have experienced crop, cropland, livestock or milk losses, should contact their county USDA FSA office. FSA offers a variety of programs to help farmers, including Emergency Loans and the Emergency Conservation Program

Emergency Loan funds may be used to restore or replace essential property; pay all or part of production costs associated with the disaster year; pay essential family living expenses; reorganize the farming operation; and refinance certain debts. If funded, the Emergency Conservation Program provides money to rehabilitate farmland damaged by floods. FSA has requested $4 million under this program to aide farmers.

Producers with crops destroyed by the flooding need to notify their FSA office to report the failed crops before replanting new crops. **The deadline to report planted acres in disaster declared counties has been extended to Monday, July 31, 2006.** At this time, a crop disaster program has not been funded, but this information will help producers if one is approved.

New York State FSA Executive Director Brymer Humphreys said, "I've seen the devastated crops and farmland throughout the impacted region. It is gratifying to see neighbors helping neighbors, but farmers also need to take the time to document their losses and contact our offices for any assistance they may need."

Also, farmers who obtained Non-insured Assistance Program (NAP) coverage for their vegetables or hay should contact their local FSA office immediately to report any losses.

Farmers should also check back routinely with their FSA office to report new or additional damages and to learn of any new funding opportunities. To find your local FSA office, go to www.fsa.usda.gov/ny/.

NYS Department of Labor
For immediate operational and/or personal needs, farmers can apply for the State Individual & Family Grant (IFG) Program offered through the NYS DOL. The IFG Program provides up to $5,000 in grants for documented flood losses not covered by insurance or other government programs. The IFG can also cover insurance deductibles on losses covered by insurance

Individual farm families can apply separately for two grants under the IFG and be eligible to receive both. They can apply for a grant to help offset personal needs, and they can also apply for a grant to help address immediate business needs.

Forms are available at www.labor.state.ny.us/grant_info.shtm, by calling 1-888-7-NYS-AID (1-888-769-7243) or by visiting your local Disaster Assistance Service Center listed below.

* Binghamton High School, 31 Main Street, Binghamton
* Endwell Fire Station, 3508 Country Club Road, Endwell
* Susquehanna Valley High School, 1040 Conklin Road, Conklin
* Deposit High School, 171 Second Street, Deposit
* Bainbridge Town Hall, 15 North Main Street, Bainbridge
* Walton High School, 47-49 Stockton Avenue, Walton
* Hancock Central School, 67 Education Lane, Hancock
* Sidney Civic Center, 21 Liberty Street, Sidney
* Little Falls Senior Center, 522 East Main Street, Little Falls
* Fonda-Fultonville Middle School, 112 Old Johnstown Road, Fonda
* Anna S. Kuhl Elementary School, 10 Route 209, Port Jervis
* SUNY Campus, Lee Hall, Ravena Parkway, Oneonta
* Livingston Manor Central School, 19 School Street, Livingston
* Owego-Apalachin Middle School, 3 Sheldon Guile Boulevard, Owego

Federal Emergency Management Office
For those farmers who have suffered losses or damage to their primary residence, FEMA can provide assistance, which could include money for temporary housing or to repair damage. Money may also be available for medical bills, household

items, clean-up costs, damaged vehicles, and more. To learn more about FEMA assistance, visit www.fema.gov or call 1-800-621-FEMA (1-800-621-3362).

Commissioner Brennan also reminds farmers who have sustained damage to previously installed environmental stewardship practices that meet specific conservation program standards, to contact their local soil and water conservation district office to complete a damage assessment report. Damage assessment reports can be helpful in obtaining federal disaster assistance for repairing these important environmental management systems.

The 20 New York counties declared as Presidential Disaster Areas include Broome, Chenango, Cortland, Delaware, Fulton, Greene, Hamilton, Herkimer, Madison, Montgomery, Oneida, Orange, Otsego, Rensselaer, Schenectady, Schoharie, Sullivan, Tioga, Tompkins and Ulster Counties. Those 20 counties are home to 11,000 farm families and 2.3 million acres of farmland. In 2003, the 20 counties generated $1.16 billion in farm receipts. The 20 counties represent one-third of the States agricultural industry from a farm, land and revenue perspective.

For more information on assistance available for farmers affected by flooding, please visit the Departments website at www.agmkt.state.ny.us.

NEW "JEANNE" GOOSEBERRY RESISTS DISEASES

Laura McGinnis, Public Affairs Specialist, USDA-ARS, Beltsville, MD, 20705

July 20, 2006 . Agricultural Research Service (ARS) scientists have developed and released a new disease- and pest-resistant dessert gooseberry called "Jeanne."

Sweet and sturdy, this new high-quality, late-fruiting gooseberry was developed by ARS scientists at the National Clonal Germplasm Repository (NCGR) in Corvallis, Oregon. Jeanne is named for a former NCGR employee.

Jeanne gooseberries. Image courtesy National Clonal Germplasm Repository.

Gooseberry production is limited in the United States, partially due to restrictions imposed in the last century. Like other Ribes species, gooseberries are generally susceptible to white pine blister rust. While the disease causes them little harm, it can be devastating--even fatal--to pine trees.

Jeanne gooseberries are highly resistant to white pine blister rust and to powdery mildew, the biggest disease threat to U.S. gooseberry production.

The plant's robustness protects it from insect threats as well. Jeanne is highly resistant to pests like aphids and sawflies. This and its high-quality fruit make it ideal for home plantings or commercial gooseberry production in the Pacific Northwest and similarly temperate climate zones.

How does Jeanne measure up against other cultivars? According to NCGR research leader Kim Hummer, the plant produces green berries which ripen to a deep red as they mature to their full size of about 5 grams. Jeanne also boasts a higher yield than similar cultivars such as Invicta and Captivator, producing about 3.3 pounds of the flavorful fruits per plant during the growing season.

Scientists project that Jeanne, whose dark, sweet berries are well suited to desserts, juices and jams, could extend the production season because it blooms and produces fruit about one to two weeks later than other red gooseberry plants.

The NCGR has provided Jeanne plant material to several nurseries that will propagate the gooseberry for homeowners. Cuttings and rooted cuttings are available for research. Interested scientists should contact Hummer.

ARS is the U.S. Department of Agriculture's chief scientific research agency.

FARM TO SCHOOL: MAKE IT HAPPEN IN YOUR COMMUNITY! A PROJECT OVERVIEW

Farm to School programs are developing all around the country. This Northeast Sustainable Agriculture Research and Education Program-funded professional development project will help NY CCE educators (and other interested professionals and community leaders) increase farm to school connections in their communities around NYS. It was developed and is being implemented by the Cornell Farm to School Pro gram, in partnership with NY Farms! and the NYS School Food Service Association.

The project has four main activities:

1. The development of a tool kit designed to walk participants through establishing a farm to school connection, including resources, assessments (targeted at farmers, school food service directors, distributors, school administrators, and (eventually) parents), and a guide highlighting strategies to making things happen. Project participants who commit to initiating a farm to school project and receive technical support for doing so (up to 35 people) will receive a hard copy of the tool kit (nearly complete). It will also be made available on-line.

2. A workshop designed to introduce project participants to (1) the project, (2) farm to school basics, and (3) the tool kit. We have hosted two of these workshops and are scheduling at least two more for later summer, early fall.

3. A tour of a food service facility (school and college) designed to help project participants understand the intricacies of school food service - led by school food service directors. Henceforth, the tour will be held the same day as the workshop. We will hold the workshops in a couple of different regions to limit long-distance travel and make attendance easier. For those who have attended the workshop already, they will be able to sign up to attend the tour only.

4. Up to 10 hours of technical support for up to 35 participants who commit to initiating a farm to school project (very broadly defined to include something as basic as a one day "NY harvest event" to a full-scale purchasing program). Those who wish to receive technical support will be required to complete and submit a letter of commitment, guaranteeing their intent to initiate or enhance a farm to school project and to being a technical support recipient. The letter of commitment is needed because we are limited by time and financial resources to the number of participants we can support. Those receiving technical support will also be provided with opportunities to network with and learn from other through conference calls and in-person meetings as funding permits.

WHERE WE ARE AFTER YEAR I

Much of Year I was spent developing a very comprehensive Farm to Cafeteria Toolkit designed to help Extension Educators and other professionals and community leaders develop or enhance a Farm to Cafeteria project. The toolkit represents a guide to recruiting partners, assessing farm to school readiness, planning a farm to school project, implementing the project, and finally, evaluating the project. In addition to walking users through a farm to school project development process, the toolkit is full of useful resources designed to help along the way. At this point, the toolkit has been reviewed by several extension educators and farm to school practitioners and we are revising and preparing a final draft.

In addition to developing the toolkit, we hosted two workshops designed to address farm to school challenges and opportunities and introduce potential participants to the project and toolkit. In between the two workshops we also hosted one tour of a school food service facility where the logistical aspects of farm to cafeteria programs were explored in more detail.

While developing the toolkit, planning workshops and tours, we responded to many requests for technical assistance regarding Farm to School. While funding is limited, our responses ranged from directing inquirers to web and print resources to facilitating Farm to School project start up meetings. These inquiries are proof of the continuing interest in and support for Farm to School in New York State.

WHERE WE ARE GOING IN YEAR II

As we move into Year II, we are focusing on:

- Finalizing the toolkit and publishing it on the web.
- Redesigning our workshops and tour, so that it is better integrated with the revised toolkit, and setting dates for the next and final three workshops/tours.

- Designing the technical support program we will be providing to participants who commit to implementing a farm to school project in Phase II of the project. This technical support will include a mix of project planning, updates, evaluation, and training on farm to school topics.
- Strengthening our outreach about the project, including this update, which will be the first of several quarterly updates sent out through the remainder of the project

Interested in learning more or being a project participant? If, like many others, you are excited about the Farm to School concept and wondered how to bring it to, or enhance existing efforts in, your community, this project is for you. Stay tuned for announcements of the date for next workshop and tour and the release of the on-line version of the toolkit. After the workshop/tour, you may sign up for technical support in Phase II of the project. Questions should be directed to Heidi Mouillesseaux-Kunzman at hmm1@cornell.edu. Project Website: farmtoschool.cce.cornell.edu

DO YOU KNOW THE IMPORTANCE OF SPECIALTY CROPS IN YOUR COUNTY?

Jerry White, Dept. of Applied Economics and Management, Cornell University's College of Agriculture and Life Sciences, Ithaca, NY 14853

Our definition of specialty crops includes the following categories: fruit, vegetables, floriculture, nursery, turf, maple syrup, Christmas trees, aquaculture, honey, and mushrooms. These commodities generated over 1.1 billion dollars cash receipts for New York farmers, or over 30 per cent of all cash income from agriculture in New York. Specialty crops are especially important for regions in New York such as Suffolk County, the Hudson Valley, the Lake Erie and Lake Ontario Regions, and the Central Plains.

Did you know that Specialty Crops dominate agriculture in Metro counties?

In the Northeastern USA, metro counties account for 66 % of vegetable and potato sales, 69 % of fruit sales, and 86 % of Nursery/Greenhouse sales.

Which counties in NY are Metro?

Albany, Bronx, Broome, Chemung, Dutchess, Erie, Herkimer, Kings, Livingston, Madison, Monroe, Nassau, New York, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Suffolk, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester are Metro counties.

A group of Cornell Agricultural Economists have been engaged in research to collect regional (Northeast) input on how the 2002 Farm Bill could be made more relevant to specialty crop agriculture and to analyze specialty crop policy options and consequences for the 2007 Farm Bill. We wanted to share some results of this research in a timely manner.

This project is a national effort that involves agricultural economists from seven universities: Arizona State; California State, Fresno; Cornell; Florida; Michigan State; Texas A & M, and Washington State. Each university brings a unique regional perspective to agriculture and specialty crops production. The effort was organized and funded by The California Institute for the Study of Specialty Crops (CISSC) at Cal Poly State University, San Luis Obispo.

Jerry White < mailto:gbw2@cornell.edu>gbw2@cornell.edu Overall project management

Nelson Bills < mailto:nlb4@cornell.edu >nlb4@cornell.edu Listening sessions and analysis of Specialty crops production and the rural urban interface

Brent Gloy < mailto:bg49@cornell.edu>bg49@cornell.edu Counter-cyclical arm savings accounts

Wen-fei Uva < mailto:wl32@cornell.edu >wl32@cornell.edu Specialty crops production and the rural-urban interface

If you want to learn more about the project and our results and recommendations to policy makers, please see the following link: http://hortmgt.aem.cornell.edu/resources/publications.htm, and scroll down to Miscellaneous Publications. The first three items listed.

If you want a bulletin (Research Bulletin 2006-04) that describes a report of our listening sessions with Specialty Crops and agricultural interests, an analysis of Farm Savings accounts (a policy option), and a report on "Farming in the City's Shadow in the Northeast and in the United States, you may contact Jerry White for a free copy.

ANNOUNCING NASGA 2007 BERRY CONFERENCE AND 6TH NORTH AMERICAN STRAWBERRY SYMPOSIUM

Crowne Plaza Hotel, Ventura Beach, California, February 9-12, 2007

Please reserve the dates of **February 9-12, 2007** for NASGA's annual conference in Ventura Beach California. There will be two days of research, marketing and production presentations, poster sessions and special events planned over the weekend of February 10-11.

An all-day bus tour of the nearby 12,000 acre **Oxnard Strawberry District** is planned on Monday. A very special banquet on Sunday evening will honor the remarkable strawberry breeding careers of Dr. Royce Bringhurst and Dr. Gene Galletta.

The Program Committee is committed to **making this a world-class research symposium for growers and scientists,** and we eagerly look forward to seeing you at this lovely seaside area of Southern California in February 2007.

More program details and opportunities for industry, organization and agency sponsorship will be announced in July 2006 on the NASGA website: http://www.nasga.org/.

For More Information Contact:

Kevin Schooley, Executive Director
North American Strawberry Growers Association
Tel 613 258-4587; mailto:kconsult@allstream.net

BEYOND GROWING - STRATEGIES AND TECHNOLOGIES THAT TRANSFORM YOUR PRODUCTS TO MEET MARKET DEMANDS

Hyde Park, New York, November 14-15th, 2006

The 2006 Cornell Strategic Marketing Conference for members of the agriculture industry will be held on November 14 and 15th, at the Henry A. Wallace Visitor and Education Center at the FDR Presidential Library and Home, Hyde Park, New York.

Determining how to transform crops in the fields to products desired by different markets is often a challenge for many local and regional agricultural producers. At this years conference buyers from retail, foodservice distribution and restaurant sectors will share their insights, and growers will discuss their experiences on what the markets want beyond quality products, including packaging, varieties, volume, delivery schedule, and methods of doing business. Dan Barber, Executive Chef/Co-owner of Blue Hill and Blue Hill at Stone Barns will present a keynote address on food and marketing trends, and how they are expected to impact farmers. Dr. Chris Watkins, a post harvesting specialist and the Associate Director of Cornell Cooperative Extension, and other experts from Cornell University will discuss practical strategies and post harvesting technologies that local and regional agricultural producers can adopt to meet those demands and be profitable.

For more information, contact:
Bob Weybright, Extension Specialist, Cornell Cooperative Extension - Dutchess County, at 845-677-8223, ext 122, e-mail: RW74@cornell.edu.

Wen-fei Uva, Senior Extension Associate, Dept. of Applied Economics and Management, Warren Hall, Cornell University, at 607-255-3688, e-mail: WL32@CORNELL.EDU.

Or see our web-site: http://hortmgt.aem.cornell.edu/

* This year's workshop is sponsored by the Agricultural Marketing and Management Program Work Team and the Horticultural Business Management and Marketing Program in the Dept. of Applied Economics and Management, Cornell University.

NASGA'S Ninth Annual Summer Tour

"NASGA Members Coast to Coast - meet with us to learn the most!"

Explore Agriculture in coastal areas of Maine

Tuesday, August 22 - Thursday August 24, 2006

For more information: http://www.nasga.org .

STRAWBERRY WEED SURVEY RESULTS DRIVE RESEARCH

Chris Benedict, Research Support Specialist, Horticulture Department, Cornell University's College of Agriculture and Life Sciences, Ithaca, NY, 14853

In a previous survey, in which 68 growers responded to a postcard survey asking about research priorities, weed management in strawberries topped the list. As a result, this past winter approximately 130 weed management surveys were sent out to growers across the state. The survey was designed to determine current issues that strawberry growers are facing, what management practices are commonly used, and what advances or areas of research they feel are most needed. We received 48 responses (37%), which believe it or not, is very good as far as surveying goes. We appreciate all of those who took the time to complete the survey (we know it was a bit lengthy), but this information will help determine our research priorities. This article outlines results from the survey and what areas we feel will be most beneficial for growers to combat their strawberry weed issues.

Results

Growers responded from **28** different counties (45% of the counties across New York) and farms ranged from **3 - 1,000 acres**, with the average at **178 acres**. Strawberry production ranged from **¼ - 35 acres**, with an average of **8 acres**. Almost all growers **(94%)** surveyed used bare-root plants. The average field length in strawberry production was **3-years**, with a maximum of **8-years**. Though many growers have mixed planting systems, the matted-row bedding system was by far the best represented. About **15%** of growers stated they are or are planning to utilize plasticulture. **Ninety-four percent** of growers stated they used some form of irrigation, with the majority using overhead systems.

Looking at markets, pick your own operations had the highest number of responses, with retail, wholesale, and farmers' markets following, respectively. Production cost/Acre ranged from **$1,000 - $6,000**, with an average at **$2,919**. Cost of herbicides/Acre ranged from **$20 - $1,500** and the average was **$251**. Potential economic losses from moderate-inadequate weed control ranged from **60-100%**.

Growers were asked to indicate influence of particular weed species on their farms. Common lambsquarters (*Chenopodium album*) and Common ragweed *(Ambrosia artemisiifolia*) tied for first as the most problematic weeds. Following in importance were Yellow Nutsedge (*Cyperus esculentus*), Redroot Pigweed (*Amaranthus retroflexus*), and Mustard sp. (*Brassica* sp.).

Growers were asked if they routinely scout for weeds, and **90%** stated that they do, though the timing or the frequency was not consistent. Of those surveyed, **54%** have "skipped" or not harvested fields because of weed problems. When asked about management tactics, **83%** of growers use cultivation equipment of some form, and **85%** of growers hand-weed. Growers were asked what type of cultivators they used and answers varied greatly. **Ninety percent** of growers use herbicides for weed control, with **77%** utilizing both pre and post emergence herbicides. Of those growers who do not utilize both, the majority use only pre-emergence herbicides. **Sixty-six percent** of growers do not band herbicides, but of those that do, they usually band between rows, not in-row. Number of applications of herbicides ranged from **0-6** per year, with an average of **3** per year. A series of question focused on what attributes of herbicides are most important to growers and are compiled in the following table:

Crop Safety			Weed Spectrum Controlled		
No	Mod impt.	Very Impt	No	Mod impt.	Very Impt
0	36%	64%	0	53%	47%

Ease			Weed Seed Return		
No	Mod impt.	Very Impt	No	Mod impt.	Very Impt
18%	60%	22%	7%	64%	29%

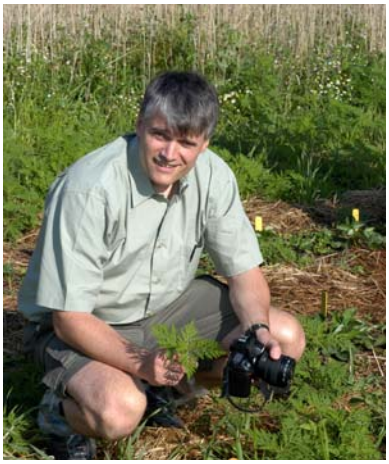
Cost			Compatibility		
No	Mod impt.	Very Impt	No	Mod impt.	Very Impt
35%	52%	13%	39%	44%	17%

Applicator Exposure			PHI		
No	Mod impt.	Very Impt	No	Mod impt.	Very Impt
18%	63%	19%	17%	50%	33%

A major goal of surveying growers was to determine what areas of weed management growers feel need the most attention. This section included some detailed questions, but also was an area where growers could state their concerns. **58%** stated they would like to see more herbicide work done for better weed management. A surprisingly common theme throughout this section was the interest in Round-up Ready strawberries. In some cases though, respondents stated that the development of such a berry would flood the market with cheap berries. Additional areas include: more available establishment year herbicides, in-row weed control with both herbicides and mechanical tools, inter-cropping for weed suppression, and organically (OMRI) approved products for weed control.

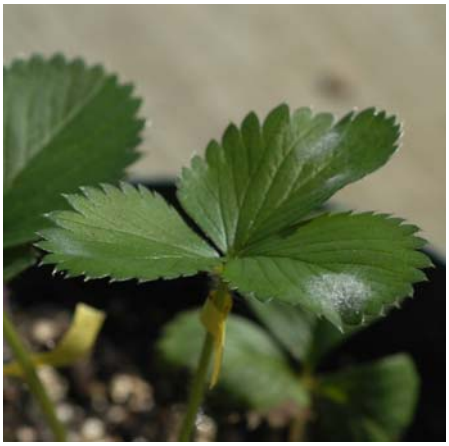
Weed control in strawberry production not only results in reduced yields because of reduced plant growth, but also can contribute to a variety of other issues (insect harboring, disease incidence increase, and issues with harvesting). Based upon results from this survey, research will be directed at testing of new herbicides, more effective use of those herbicides, and mechanical and cultural practices to prevent weed establishment. First year fieldwork is being done at the Homer C. Thompson Research Station that shows some promising results for development of new herbicide products for use in strawberry production.

STRAWBERRY POWDERY MILDEW RESEARCH UPDATES FROM HOME AND ABROAD



Mary Jean Welser, Research Support Specialist, Department of Plant Pathology, Cornell University's New York State Agricultural Experiment Station, Geneva, NY 14456

Strawberry is a major fruit crop both in Norway and in the USA. During the past week the department of Plant Pathology at the NYSAES has had the privilege of the hosting Arne Stensvand and his family from the Department of Plant Pathology, Plant Protection Centre, The Norwegian Crop Research Institute. Arne together with David Gadoury, Bob Seem, Cathy Heidenreich, and I, have been addressing the gaps in the knowledge of strawberry powdery mildew caused by the fungus *Sphaerotheca macularis.* The available information on *S. macularis* ecology and epidemiology of is limited due to the lack of research done on this pathogen over the last 40 years, adding little to the advancement in our knowledge of strawberry powdery mildew biology and ecology.



Our goal in this project is to answer some of the basic questions pertaining to the ecology, epidemiology, and control of *Spaherotheca macularis*. With this in mind we have focused first on documenting how the pathogen over winters. It is argued in the scientific literature on the subject that the pathogen only over winters as mycelium in the crowns of the strawberry plants. Another possibility is that the disease may also over winter as cleistothecia, the common over wintering structures of other forms of powdery mildews. Cleistothecia are commonly found on the leaves of the strawberry plant in late fall. Last fall and early this spring we collected cleistothecia - infected leaves from fields known to have had powdery mildew the previous growing season. In the lab, we tested for viability of the ascospores released from these cleistothecia both by staining techniques and by germination of the spores. By positioning the cleistothecia over susceptible leaf tissues and providing the right environment for infection, we were able to grow viable powdery mildew colonies from the ascospores shot out of the cleistothecia. This demonstrates it's possible for the pathogen to over winter in the cleistothecial stage. Potted strawberry plants infected with the mildew from those colonies were then transferred to newly planted, mildew-free field plots. Each of the 4 isolated plots got a different number of infected plants, allowing us to study disease spread under a number of different disease pressures (0, 1x, 10x, 100x). We are currently documenting the spread of the disease in these isolation plots under field conditions. We are also monitoring temperature, relative humidity and rainfall in all plots to determine conditions best for mildew development in the field.

Similar studies are underway in Norway, where strawberry powdery mildew is one of the main diseases of concern for strawberry production.

RENOVATION: THOUGHT, TIMING, PROTOCOLS, AND WATER

Eric Hanson and Kevin Iungerman

Deciding whether to renovate or remove a strawberry bed differs with each grower's circumstances, such as market demand, land availability and production costs. As strawberry fields age, yields and berry size decline while weeds and some diseases increase, as do spray bills. Growers with high market demand but limited available acreage may need to retain beds longer. Only a thorough knowledge of your production costs and your net returns over the preceding seasons can produce the educated decision that is needed. If you are familiar with the operational spreadsheet software that accompanied the NRAES Strawberry Production Manual, or you use a similar cost-benefit analysis tool, your decision will be much easier. Now is the time for renovation if that is your decision. Begin as below right after harvest.

- **Utilize Herbicides in Preparation for Renovation**. Renovation is a time to treat beds with amine forms of 2,4-D (Amine, Formula 40) for broadleaf weed control. Strawberry plants tolerate 2,4-D after harvest because they are not actively growing. If broadleaf weeds are a problem, apply 2,4-D a few days before mowing. This herbicide must be absorbed by the weed leaves to be effective so don't mow off the weeds before applying 2,4-D.

  Sinbar can also be applied at renovation for preemergent weed control. Apply 3-6 oz of Sinbar 80W per acre, using the lowest rates on sandy ground or weaker plant stands. In contrast to not mowing with 2,4_d use, with Sinbar, plants must first be mowed so Sinbar can be applied uniformly to the soil. Irrigate to rinse the herbicide into the soil.

- **Mow Off the Leaves Just Above Crown Height if the Plants are Healthy**. If the plants are drought stresses or they appear so due to root diseases, do not mow the leaves; weak plants have difficulty developing new ones. Also do not mow the leaves if renovation is delayed for more than a few weeks after the end of harvest. The earliest runner plants develop, the higher the yield the following year, so delaying renovation diminishes yield.

- **Narrow the Rows to 8-10 Inches by Cultivating with a Rototiller or Disk**. Rototillers with tines removed above the row work very well because they toss some soil on top of the remaining plants. As new crowns form above the old, the soil promotes new crown rooting, and a receptive bed for new runner rooting. But don't overdo it. An inch or less is good; more can smother the existing plants.

- **Apply Your Fertilizer**. The last step in renovation is to fertilize. On heavier loam soils, apply enough fertilizer to supply 50 in N per acre. On sandy soils, apply 30 to 40 lb N at renovation and again in early August. Do not neglect irrigation on renovated beds.

There you have it. If you have already carried out your renovation- well done. Keep in mind that your renovated beds will need abundant water this month and next, particularly in the face of any more of the kind of unrelenting heat we have been experiencing this past week. Also, as David Handley of Maine reminds us, Potato leaf hoppers can become a big problem in strawberries, much as it can on other fruit crops, especially new plantings.

Potato leaf hoppers do not over winter in NY, but ride the thermals every year from southern states. Generally they are a more serious problem in the Hudson Valley than in Champlain or western NY, though good populations are being seen this year around the state. The insects are small and bullet-shaped, and feed on plant sap from the undersides of leaves. Leaves can become curled, stunted and yellow-streaked. Symptoms are often first noticed in new strawberry plantings. To scout for leaf hoppers, brush the leaves of the plants with your hand. The small, whitish adults can be seen flying off the plant. Examine the underside on injured leaves, looking for small, light green leaf hopper nymphs. They are controlled with malathion, carbaryl or Provado. See the Cornell Pest Management Guidelines for Berry Crops for details.

(Sources: Adaptation and editing of the original "Tips on Renovating Strawberries", Eric Hanson, MSU Fruit Crop Advisory Team Alert Newsletter Vol. 21, No. 11, June 20, 2006. Kevin Iungerman, CCE NENYF. July 14, 2006. David Handley, University of Maine Strawberry IPM newsletter, No. 5, June 22, 2006.)

WEATHER NOTES

First Half of 2006 Warmest on Record

The average temperature for the continental United States from January through June 2006 was the warmest first half of any year since records began in 1895, according to scientists at NOAA's National Climatic Data Center in Asheville, N.C. The average January-June temperature for the contiguous United States (based on preliminary data) was 51.8F (11.0C), or 3.4F (1.8C) above the 20th century (1901-2000) average, according to the Center's monthly report on 2006 climate in historical perspective.

NEW YORK CROP WEATHER SERVICE NOTES

Week of June 26th- Strawberry producers struggled with wet weather also. In Ontario County, strawberries were in full harvest and look good.
Week of July 3rd- The quality and quantity of the strawberry crop has been on a continual decline, due to the abundant rains.
Week of July 10th- In Madison County, strawberries were a total loss, due to recent flooding.
Week of July 17th-In the Lake Ontario fruit region, time has arrived for renovation of strawberries to disrupt diseases and insects in the plantings. The weather has been conducive for gray mold on raspberries. So far this year, disease pressure has been higher than insect pressure. However, Japanese beetles have been more of a concern than usual.

Check out the NYSAES Tree Fruit and Berry Pathology web site at:
www.nysaes.cornell.edu/pp/extension/tfabp

Questions or Comments about the New York Berry News?

Send inquiries to:
Ms. Cathy Heidenreich
New York Berry News, Interim Editor
Department of Plant Pathology
New York State Agricultural Experiment Station
690 W. North Street
Geneva, NY 14456
OR *Email*: mcm4@cornell.edu

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WEATHER REPORTS OF TEMPERATURES AND PRECIPITATION THROUGHOUT NEW YORK STATE FOR WEEK ENDING SUNDAY 8:00am, June 26th, 2006

	Temperature				Growing Degree Days (*Base 50*)			Precipitation (*inches*)			
	High	***Low***	***Avg***	***DFN[1]***	***Week***	***YTD[2]***	***DFN***	***Week***	***DFN***	***YTD***	***DFN***
Hudson Valley											
Albany	91	55	75	7	175	822	135	0.46	-0.38	14.69	5.25
Glens Falls	89	51	71	6	151	650	75	0.19	-0.51	12.27	3.01
Poughkeepsie	94	55	74	6	172	847	109	0.93	0.09	15.14	4.15
Mohawk Valley											
Utica	90	52	72	6	155	697	91	0.12	-0.86	-9.18	1.48
Champlain Valley											
Plattsburgh	93	48	70	4	141	696	106	0.72	0.02	10.50	2.25
St. Lawrence Valley											
Canton	87	46	68	4	127	636	130	0.48	-0.29	9.57	1.01
Massena	89	47	68	3	127	670	123	0.52	-0.25	9.71	1.92
Great Lakes											
Buffalo	92	53	72	5	154	882	239	0.76	-0.08	-5.61	3.4
Colden	88	49	69	5	134	611	111	0.72	-0.26	-7.03	3.82
Niagara Falls	90	49	71	4	150	775	115	0.31	-0.47	-4.70	4.27
Rochester	93	51	73	7	164	842	198	0.70	0.00	-6.26	1.57
Watertown	90	46	70	6	139	658	158	0.49	-0.11	8.73	1.22
Central Lakes											
Dansville	90	52	71	5	148	708	71	0.68	-0.23	-7.01	1.91
Geneva	91	53	71	4	146	676	61	0.82	-0.04	-7.19	1.81
Honeoye	91	47	70	3	139	689	52	0.84	-0.03	-5.49	3.42
Ithaca	90	48	70	6	144	596	44	0.91	0.00	-8.76	0.63
Penn Yan	91	52	72	6	157	741	126	0.62	-0.24	-6.21	2.79
Syracuse	91	57	73	7	164	786	134	0.25	-0.66	-8.62	1.13
Warsaw	85	47	67	4	117	545	87	0.89	-0.09	-8.64	1.82
Western Plateau											
Alfred	86	46	66	4	115	494	47	0.80	-0.32	-6.88	2.75
Elmira	91	48	70	4	142	607	17	1.42	0.51	-8.41	0.64
Franklinville	89	46	67	5	121	500	104	0.59	-0.40	-6.97	3.41
Sinclairville	88	48	67	4	123	596	132	1.01	-0.05	-7.08	4.37
Eastern Plateau											
Binghamton	86	55	71	6	147	641	72	0.92	0.08	-8.93	0.56
Cobleskill	90	51	71	7	150	572	50	0.34	-0.64	15.71	5.27
Morrisville	85	50	69	5	131	536	47	0.74	-0.21	13.00	2.78
Norwich	89	48	70	6	143	582	60	0.35	-0.59	10.26	-0.28
Oneonta	90	50	72	9	153	688	213	0.70	-0.28	11.88	0.59
Coastal											
Bridgehampton	84	58	71	5	151	748	149	6.56	5.73	20.02	9.19
New York	93	70	81	9	215	124	275	1.02	0.18	16.44	5.86

1. *D*eparture *from N*ormal
2. *Y*ear *to D*ate: Season accumulations are for April 1st to date

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WEATHER REPORTS OF TEMPERATURES AND PRECIPITATION THROUGHOUT NEW YORK STATE FOR WEEK ENDING SUNDAY 8:00am, July 3rd, 2006

	Temperature				Growing Degree Days (*Base 50*)			Precipitation (*inches*)			
	High	***Low***	***Avg***	***DFN[1]***	***Week***	***YTD[2]***	***DFN***	***Week***	***DFN***	***YTD***	***DFN***
Hudson Valley											
Albany	85	54	73	3	161	983	155	4.09	3.29	18.78	8.54
Glens Falls	84	48	71	4	148	798	98	4.09	3.39	16.36	6.40
Poughkeepsie	87	59	74	5	173	1020	140	3.11	2.22	18.25	6.37
Mohawk Valley											
Utica	82	55	70	3	143	840	108	6.03	5.10	15.21	3.62
Champlain Valley											
Plattsburgh	85	52	71	3	147	843	124	2.05	1.35	12.55	3.60
St. Lawrence Valley											
Canton	82	56	70	5	143	779	159	1.38	0.61	10.95	1.62
Massena	84	55	71	4	149	819	153	2.37	1.63	12.08	3.55
Great Lakes											
Buffalo	83	58	71	3	151	1033	255	1.82	1.06	7.43	-2.34
Colden	79	54	66	1	116	727	118	1.98	1.06	9.01	-2.76
Niagara Falls	84	56	73	4	160	935	142	0.74	0.02	5.44	-4.25
Rochester	84	59	73	6	165	1007	236	1.51	0.83	7.77	-0.74
Watertown	84	54	71	5	147	805	192	1.03	0.51	9.76	1.73
Central Lakes											
Dansville	83	55	70	2	140	848	82	1.44	0.60	8.45	-1.31
Geneva	86	59	71	3	149	825	81	2.31	1.51	9.50	-0.30
Honeoye	82	54	70	2	144	833	62	1.92	1.13	7.41	-2.29
Ithaca	83	55	70	4	141	737	68	3.17	2.33	11.93	1.70
Penn Yan	83	60	72	4	154	895	151	1.50	0.70	7.71	-2.09
Syracuse	84	61	73	6	165	951	171	2.68	1.77	11.30	0.64
Warsaw	78	54	67	2	117	662	101	2.37	1.44	11.01	-0.38
Western Plateau											
Alfred	79	49	66	2	111	605	57	2.12	1.08	9.00	-1.67
Elmira	83	49	70	3	141	748	34	3.08	2.24	11.49	1.60
Franklinville	79	48	65	3	110	610	119	1.70	0.76	8.67	-2.65
Sinclairville	82	50	66	2	115	711	143	1.20	0.18	8.28	-1.19
Eastern Plateau											
Binghamton	80	53	69	3	136	777	87	7.45	6.61	16.38	6.05
Cobleskill	81	56	70	5	141	713	77	3.01	2.07	18.72	7.34
Morrisville	81	52	67	2	121	657	60	6.63	5.72	19.63	8.50
Norwich	84	52	69	3	134	716	82	6.83	5.93	17.09	5.65
Oneonta	86	56	72	8	153	841	261	8.62	7.66	20.50	8.25
Coastal											
Bridgehampton	80	62	72	3	152	900	167	0.22	-0.54	20.24	8.65
New York	88	67	78	4	194	1434	298	1.46	0.60	17.90	6.46

1. *D*eparture *from N*ormal
2. *Y*ear *to D*ate: Season accumulations are for April 1st to date

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WEATHER REPORTS OF TEMPERATURES AND PRECIPITATION THROUGHOUT NEW YORK STATE FOR WEEK ENDING SUNDAY 8:00am, July 10th, 2006

	Temperature				Growing Degree Days (*Base 50*)			Precipitation (*inches*)			
	High	***Low***	***Avg***	***DFN[1]***	***Week***	***YTD[2]***	***DFN***	***Week***	***DFN***	***YTD***	***DFN***
Hudson Valley											
Albany	90	58	73	2	162	1145	168	0.04	-0.70	18.82	7.84
Glens Falls	86	51	69	0	136	934	99	0.05	-0.58	16.41	5.82
Poughkeepsie	89	54	73	3	165	1185	156	0.09	-0.82	18.34	5.55
Mohawk Valley											
Utica	85	53	68	-2	131	971	104	0.13	-0.78	15.34	2.84
Champlain Valley											
Plattsburgh	88	53	70	1	140	983	127	0.56	-0.08	13.11	3.52
St. Lawrence Valley											
Canton	83	53	69	2	136	915	173	0.05	-0.68	11.00	0.94
Massena	84	53	69	1	133	952	157	0.00	-0.70	12.08	2.85
Great Lakes											
Buffalo	80	56	69	-2	135	1168	247	0.03	-0.67	7.46	-3.01
Colden	80	50	66	-2	111	838	111	0.21	-0.64	9.22	-3.40
Niagara Falls	87	52	70	0	142	1077	142	0.22	-0.42	5.66	-4.67
Rochester	86	54	71	2	150	1157	250	0.48	-0.15	8.25	-0.89
Watertown	83	49	68	0	127	932	195	0.00	-0.43	9.76	1.30
Central Lakes											
Dansville	85	50	68	-2	129	977	74	0.68	-0.07	9.13	-1.38
Geneva	85	55	70	1	141	966	85	0.16	-0.56	9.66	-0.86
Honeoye	84	49	68	-3	125	958	44	0.21	-0.47	7.62	-2.76
Ithaca	83	49	67	-1	122	859	65	1.09	0.29	13.02	1.99
Penn Yan	84	53	70	1	140	1035	154	0.15	-0.57	7.86	-2.66
Syracuse	84	61	73	6	165	951	171	2.68	1.77	11.30	0.64
Warsaw	78	50	65	-1	108	770	98	0.27	-0.55	11.28	-0.93
Western Plateau											
Alfred	80	46	64	-2	101	706	50	0.87	-0.05	9.87	-1.72
Elmira	84	48	67	-2	121	869	22	0.35	-0.47	11.84	1.13
Franklinville	81	46	65	1	107	717	124	0.54	-0.33	9.21	-2.98
Sinclairville	82	48	66	0	114	825	145	0.84	-0.10	9.12	-4.29
Eastern Plateau											
Binghamton	81	54	68	-1	126	903	84	0.47	-0.37	16.85	5.68
Cobleskill	84	52	68	2	130	843	86	0.20	-0.64	18.92	6.70
Morrisville	84	50	66	-1	115	772	60	0.42	-0.42	20.05	8.08
Norwich	85	49	68	1	125	841	86	0.17	-0.67	17.26	4.98
Oneonta	88	52	70	5	140	981	287	0.42	-0.49	20.92	7.76
Coastal											
Bridgehampton	86	60	73	3	160	1060	184	2.33	1.63	22.57	10.28
New York	92	64	79	4	205	1639	324	1.40	0.49	19.30	6.95

1. *D*eparture *from N*ormal
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WEATHER REPORTS OF TEMPERATURES AND PRECIPITATION THROUGHOUT NEW YORK STATE FOR WEEK ENDING SUNDAY 8:00am, July 17th, 2006

	Temperature				Growing Degree Days (*Base 50*)			Precipitation (*inches*)			
	High	***Low***	***Avg***	***DFN[1]***	***Week***	***YTD[2]***	***DFN***	***Week***	***DFN***	***YTD***	***DFN***
Hudson Valley											
Albany	90	64	75	4	177	1322	191	1.15	0.45	19.97	8.29
Glens Falls	87	56	72	3	158	1,092	117	2.64	2.01	19.05	7.83
Poughkeepsie	88	64	75	4	178	1363	180	0.62	-0.29	18.96	5.26
Mohawk Valley											
Utica	87	61	72	3	159	1,130	123	2.97	2.12	18.31	4.96
Champlain Valley											
Plattsburgh	92	58	74	4	169	1152	156	1.48	0.85	14.59	4.37
St. Lawrence Valley											
Canton	86	60	72	5	158	1073	204	0.36	-0.37	11.36	0.57
Massena	87	59	72	4	159	1111	182	0.34	-0.36	12.42	2.49
Great Lakes											
Buffalo	88	63	74	4	172	1340	272	2.14	1.51	9.6	-1.5
Colden	85	57	70	3	140	978	128	2.96	2.17	12.18	-1.23
Niagara Falls	88	60	74	4	171	1248	166	2.28	1.66	7.94	-3.01
Rochester	89	63	75	6	179	1336	288	4.72	4.16	12.97	3.27
Watertown	85	60	72	4	157	1089	221	0.9	0.5	10.66	1.8
Central Lakes											
Dansville	89	58	73	3	161	1,138	95	2.4	1.7	11.53	0.32
Geneva	86	60	73	3	165	1,131	108	3.04	2.38	12.7	1.52
Honeoye	85	58	73	2	164	1,123	61	2.19	1.56	9.81	-1.2
Ithaca	87	58	72	4	155	1014	89	2.54	1.77	15.56	3.76
Penn Yan	87	63	74	5	172	1207	184	1.04	0.38	8.9	-2.28
Syracuse	88	62	74	4	170	1,270	211	5.72	4.86	18.5	6.07
Warsaw	84	59	70	4	142	912	124	3.1	2.33	14.38	1.4
Western Plateau											
Alfred	85	55	68	2	130	836	68	1.89	1.07	11.76	-0.65
Elmira	87	55	73	3	160	1,029	43	1.99	1.22	13.83	2.35
Franklinville	86	56	70	5	139	856	158	2.93	2.11	12.14	-0.87
Sinclairville	87	55	71	5	147	972	174	2.19	1.28	11.31	-3.01
Eastern Plateau											
Binghamton	84	60	72	3	155	1058	106	2.64	1.87	19.49	7.55
Cobleskill	87	61	72	5	156	999	116	0.82	0.04	19.74	6.74
Morrisville	84	57	69	3	137	909	77	3.98	3.17	24.03	11.25
Norwich	86	53	71	3	147	988	107	1.82	1.05	19.08	6.03
Oneonta	89	60	74	8	170	1151	338	1.32	0.41	22.24	8.17
Coastal											
Bridgehampton	83	60	74	3	171	1231	204	0.47	-0.2	23.04	10.08
New York	93	71	80	5	214	1853	354	1.85	0.93	21.15	7.88

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