# CORNELL COOPERATIVE EXTENSION PROGRAM / STAFF REFERENCE DIRECTORY

As of July 2020

Adapted with Permission from the Putnam County Program Staff Reference Directory

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#### DEPARTMENT OVERVIEWS

#### **CORNELL COOPERATIVE EXTENSION**

#### Direction

Profile	Name	Phone	Email	Specialty
	Christopher Watkins, Director, Cornell Cooperative Extension	(607)255- 8546	chris.watkins@cornell.edu	
	Sarah Dayton, Associate Director, Cornell Cooperative Extension	(607)351- 5899	sfd3@cornell.edu	

#### Mission

Cornell Cooperative Extension puts knowledge to work in pursuit of economic vitality, ecological sustainability and social well-being. We bring local experience and research based solutions together, helping New York State families and communities thrive in our rapidly changing world.

#### Overview

- Agriculture and Food Systems -Cornell Cooperative Extension links the research and extension efforts at Cornell
  University, the Cornell University Agricultural Experiment Station and the New York State Agricultural
  Experiment Station, providing the knowledge to maximize New York State's agricultural and natural
  resources. CCE's regional agriculture teams provide research-based information, programs, and technical
  assistance to dairy, field crops, vegetable, tree fruit and grape producers all around the state.
- <u>Community and Economic Vitality</u>- Cornell Cooperative Extension's community and economic vitality programs build the capacity of New York State communities to engage in and direct their own futures. Associations partner with campus faculty and staff, local officials, not-for-profits, colleges, planners, policymakers, and community leaders. Research-based education is aimed at empowering individuals and communities to make sound decisions.
- Environment and Natural Resources, Sustainable Energy, and Climate Change Cornell Cooperative Extension's
  environment and natural resources programs are designed to help individuals and communities engage in long
  term plans to sustain the quality and diversity of the natural assets in New York State. Research-based education
  is focused on conserving and protecting the environment, boosting sustainable energy and mitigating climate
  change.
- <u>Nutrition, Food Safety and Security, and Obesity Prevention</u>- Partnering with the College of Human Ecology
  outreach centers, institutes and departments, Cornell Cooperative Extension nutrition programs connect
  research and practice, are highly collaborative, build on community strengths, and provide knowledge for
  policymakers. Research-based education is focused on reducing childhood obesity, improving nutrition, and
  increasing food security and safety.

4-H Youth Development and Children, Youth, and Families - Cornell Cooperative Extension programs are
designed to improve the quality of life for all New York State residents. 4-H Youth Development programs align
with the national 4-H mission mandates. Family programming addresses support and care at all stages in the life
course. Research-based education is focused on improving the social and economic well-being of individuals,
families, and communities.

#### **Local Offices**

With a presence in every county and New York City, CCE puts research into practice by providing high-value educational programs and university-based resources that help solve real-life problems.

#### NATURAL RESOURCES

#### Direction



Patrick Sullivan, Natural Resources Department Chair (607)-255-8213 pjs31

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Paul D. Curtis, Natural Resource Dept. Extension Leader (DEL) (607) 227-5927

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#### Mission

The Department of Natural Resources creates knowledge and facilitates learning to improve society's stewardship of the environment and promote a conservation ethos for a sustainable planet.

#### Overview

Specific programming areas are grouped within five broad categories which address relevant issues statewide. These focus areas are:

- <u>Citizen Science & Civic Ecology</u> bringing people, nature and science together
- <u>Ecology and Management of Landscapes</u> providing information for landowners, municipalities & others on topics pertaining to forestry, maple, water resources, invasive pests
- <u>Fish and Wildlife Biology and Management</u> research on wildlife damage, information on fish and wildlife
- Human Dimensions bridging natural resources and human interactions
- Youth/4H in Natural Resources supporting youth programming in environmental education

#### People

Our students, faculty, partners and outreach program participants explore issues related to biodiversity, ecosystem integrity, climate change, and natural resources management, often in partnership with local groups, state agencies, and national and international environmental organizations. Through diverse education, experience and research opportunities, the Department of Natural Resources offers numerous ways for students, scientists, and citizens to be part of a vital and growing field focused on environmental science and sustainability.

Mailing Address Cornell Cooperative Extension

Department of Natural

Resources

214 Fernow Hall 226 Mann Drive Ithaca, NY 14853

### **SCHOOL OF INTEGRATIVE PLANT SCIENCE (SIPS)**

#### Direction

Profile	Name	Phone	Email	Specialty
Executive Committee	ee Christine Smart, SIPS Council of Extension Leaders	(315) 787-2441	cds14@cornell.edu	Fungal and bacterial plant pathogens Vegetable pathology Vegetable disease management
	Stephen Reiners, Chair Horticulture Section	(315) 787-2311	sr43@cornell.edu	Cultural methods to grow crops, i.e., fertility management, irrigation, optimizing plant populations and variety selection Nutrient recycling
Tedec	Jocelyn Rose, Chair Plant Biology Section	607-255-4781	Kv35@cornell.edu	Horticulture Plant Biology Plant Pathology and Plant- Microbe Biology
	Jeffrey Doyle, Chair Plant Breeding & Genetics Section	(607) 255-2180	Jid5@cornell.edu	Alfalfa Comparative Genomics Gene And Genome Evolution Legumes Molecular Systematics, Molecular Evolution Photosynthesis Phylogeny Polyploidy Soybean Systematics
	B. Gillian Turgeon, Chair Pathology & Plant- Microbe Biology Section	(607) 254-7458	bgt1@cornell.edu	Microbiology Plant Pathology Plant Pathology and Plant- Microbe BiologyFusarium Head Blight Integrated Pest Management Plant Disease Management Resistant Crop Varieties Soybean Rust Switchgrass Wheat



Antonio DiTommaso, Chair (607) 254-4702 Soil & Crop Sciences Section

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Agroecology

**Biological Weed Control** Critical Thinking, Respect,

Student Curiosity, Weed Biology **Integrated Weed Management** 

**Invasive Plants** Pest Management Weed Biology Weed Ecology

Weed Identification Guides

Weed Management

Pest Management Plant Physiology **Replant Problems** 

Small Fruit Culture And

Management

Sustainable Agriculture Weed Management



Marvin Pritts, Director of Undergraduate studies, **Plant Sciences** 

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#### Mission

The School of Integrative Plant Science (SIPS) was created in June 2015 by bringing together five departments within the College of Agriculture and Life Sciences under one administrative home. Its vision is "Discovery that connects: new insights for better plants, sustainably grown, serving the world." In the coming decades, the world must arrive at solutions to the major challenges of feeding a burgeoning population, mitigating and adapting to climate change, and preserving biodiversity and essential ecosystem functions. Plants underpin all agricultural and natural ecosystems and environmental impacts on plant systems will cascade at local, regional, national, and international scales. But plants will also be the basis for solutions. Innovative approaches and revolutionary breakthroughs in plant sciences will be used to meet these challenges and help secure a sustainable future for coming generations.

#### Overview

- Horticulture-focus on generating and extending knowledge about fruits, vegetables and landscape plants, sustaining the environment, enhancing economic vitality, and improving the quality of life of individuals and their communities.
- <u>Plant Biology</u> Without plants, life on earth would cease to exist. Plants shape our environment and provide us with food, loss of biodiversity, and new and evolving diseases are threatening both the health of the planet as well as human health and well-being. Research in the plant sciences is greatly significant in addressing aspects of each of these issues.
- <u>Plant Breeding and Genetics-</u> developing novel breeding methodologies and discovering economically important genes and varieties.
- Plant Pathology and Plant-Microbe Biology-interactions between plants and microbes and developing innovative solutions with focus on the origins and consequences of plant diseases. Three areas of concentration include Plant Pathology, Fungal and O0mycette Biology, and Plant-Microbe Biology.

Soil & Crop Sciences- focuses on environmentally sustainable agricultural systems to produce food for a world
population, the impact of climate change and sustainable biofuel crops, and research on nutrient and carbon fluxes
in ecosystems which helps increase nutrient use efficiency, improve soil health and solve greenhouse-gas issues

#### NYS INTEGRATED PEST MANAGEMENT

#### Direction

Profile	Name	Phone	Email	Specialty
	Alejandro Calixto, Director of the NYS Integrated Pest Management, Sr. Extension Associate	315-787-2353	aac273@cornell.edu	

#### Mission

The New York State Integrated Pest Management Program develops sustainable ways to manage pests and helps people to use methods that minimize environmental, health, and economic risks.

#### Overview

IPM—integrated pest management—Is the solid science with sound solutions in dealing with pests. We promote safe, least-toxic solutions to both pest and pesticide problems. IPM helps you deal with pests—insects, plant diseases, weeds, and more—with methods that help keep health and environmental risks as low as possible while saving you money. IPM is integrated because it brings together, or integrates, a range of biological, organic, cultural, mechanical, and chemical options for pest problems. And it's about management because you can only manage pests—you can't eliminate them, no matter what people say. Although IPM used to focus on insect pests, the range now includes fungi, bacteria, viruses, weeds, wildlife, and more. Integrated pest management integrates tactics to prevent pests entirely or reduce them to levels you can live with. Our mantra is: Good science. Good sense. IPM.

IPM expertise is built around traditional agricultural commodities and the needs of communities and urban settings.

The areas of concentration are separated into two major teams:

- <u>AG IPM teams</u> focus on pest problems in livestock and field crops, vegetables, fruits, and ornamentals.
- <u>Community IPM team</u> focuses on pest problems in schools and buildings and their surrounding landscapes, in towns big and small.

#### Stakeholders

In addition, the IPM teams work closely with the following advisory groups:

- Commodity Working Groups set priorities for funding projects and evaluate proposals to our grants program for each of our commodities—vegetables, livestock and field crops, fruit, ornamentals, and community.
  - Members include farmers, consultants and pest management professionals, landscape or building supervisors, community leaders, Cornell University researchers and extension educators, and other stakeholders.

- **Statewide IPM Grower Advisory Committee** provides advice and direction through meetings with the dean of CALS, the commissioner of Agriculture and Markets, and the IPM Executive Committee.
  - Members include agricultural producers from across the state and Cornell Cooperative Extension educators.
- Community IPM Coordinating Council advises us on Community IPM needs and directions.
  - Members include school and housing superintendents, environmental activists, community leaders, pest management professionals, Cornell faculty, and Cornell Cooperative Extension educators.
- **IPM Operating Committee** provides the policies and directives that guide us.
  - Members include representatives from Cornell University, NYS Ag and Markets, and NYS DEC, as well as representatives from our working groups.
- **IPM Executive Committee** provides oversight and advice on funding allocations, and communicates the concerns of college or state administration to our Operating Committee.
  - Members include representatives from Cornell University, NYS Ag and Markets, and NYS DEC.
     All members also serve on the IPM Operating Committee.

#### People

Mailing Address

The main office is at the New York State Agricultural Experiment Station in Geneva, NY.

NYS Integrated Pest Management Program

630 W. North St. Geneva, NY 14456

phone: 315-787-2208

fax: 315-787-2360 email: nysipm@cornell.edu

#### **ENTOMOLOGY**

#### Director

Profile	Name	Phone	Email	Specialty
	Patrick O'Grady	(607) 255-7723	pmo43@cornell.edu	Phylogeny and taxonomy of Diptera, particularly Drosophilidae; Insect evolution.

#### Mission

The Department of Entomology's mission is threefold: To pursue studies to understand basic and applied aspects of insect biology; to provide a robust and modern curriculum as part of preeminent undergraduate and graduate programs; and to inform and educate the public about the issues related to insects and other arthropods.

#### Overview

The Entomology department is situated in to campuses – Ithaca and Geneva and additional field stations...

- Ithaca Campus includes the insectary, plant pathology greenhouses, the Entomology Library, The insect collection, and the Sarkaria Anthropod Research Laboratory.
- Geneva Campus includes a library providing reference services and access to paper texts.
- Additional field stations are established in the Hudson Valley Lab where fruit research is conducted and the Lake Erie Research & Extension Laboratory where vineyard research is conducted.

#### People

Our faculty primarily works on two campuses: Cornell's main campus in Ithaca, New York and the New York State Agricultural Station in Geneva, New York. We also work in two agricultural field stations in the state of New York.

#### Mailing Address

Ithaca Campus	Geneva Campus
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Email: <u>lew1@cornell.edu</u>	Email: hak3@cornell.edu
Ithaca Mailing Address	Geneva Mailing Address
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2130 Comstock Hall	630 West North Street
Ithaca, NY 14853	Barton Lab
1111404, 141 14055	Geneva, NY 14456

### Cornell Staffing Resources

### Department of Natural Resources

Profile	Name	Phone	Email	Specialty
<b>Ecology and</b>	Managemei	nt of Lands	capes	
Forest Resource	Peter Smallidge, Sr. Extension Associate, Extension Forester, Master Forest Owners Volunteer Program	(607) 592-3640	Pjs23@cornell.edu	Forest and woodlot mgmt. Sugarbush mgmt. Organic and environmental integrated vegetation mgmt. Invasive plant mgmt. Forest health, low impact logging and silvopasture
THE PARTY OF THE P	Shorna Broussard Allred	(607) 255-2149	SRB237@cornell.edu	Human dimensions of natural resource management with emphasis on forest and water resources and conservation related attitudes and behavior
Forest Health &	Invasive Non-Na	ative Forest Pe	ests	
	Mark Whitmore, Sr. Extension Associate	(607) 280-4064	mcw42@cornell.edu	Pests Forest Ecology Forest Entomology Non-Native Invasive Forest Pests
Cornell Maple P	Program Steve Childs, NYS Maple Specialist, Extension Associate	(607) 255-1658	Slc18@cornell.edu	Sustainable forest Sugar bush management Sap collection and processing technology Product quality improvement and grading
	Joe Orefice, Northern NYS Specialist	(518) 523-9337	Jno37@cornell.edu	Agroforestry

### Master Naturalists Volunteer Program



Kristi Sullivan, Extension Associate (607) 255-5508

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Practical approaches to conserving wildlife and biodiversity for future generations

Wildlife conservation and habitat enhancement Restoration habitat complexity Sustain and conserve native wildlife

Human Dimensions Research Unit

### Agroforestry / Ecoagriculture



Louise Buck, Sr. Extension Associate (607) 255-5994

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Integrated landscape management

### **Biological Control of Non-Indigenous Plants**



Bernd Blossey

(607) 227-1572

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Impact of invasive plants on native species and food webs Biological control of nonindigenous plants Conservation biology Plant-insect interactions Invasion biology



Carrie Brown-Lima, Director NY Invasive Species Research Institute (607) 255-2824

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Integrate invasive species science and management Invasive species prevention and management

Invasive species control

### Sustainable Water Resource Management



Rebecca Schneider

(607) 255-2110

RLS11@cornell.edu

Sustainable management of water resources, wetland ecology and hydrology, plants and groundwater

### Fish and Wildlife Biology Management

Fish and aquatic ecosystems management



Clifford E. Kraft (607) 255-2775

55-2775 Cek7@cornell.edu

Management of fishery and

aquatic resources

Pond, lake, stream fishery

habitats

Fishery water control

#### Nuisance wildlife management, wildlife conservation & habitat enhancement



Paul D. Curtis

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Population biology of birds and

mammal

Public policy education

Management of human-wildlife

conflicts

**Human Dimensions Research** 

Unit

### **Citizen Science & Civic Ecology**

### Behavioral ecology, birds, insects, citizen science, conservation biology



Janis Dickinson, Cornell Lab of Ornithology (607) 254-2194

JLD84@cornell.edu

Behavioral ecology and conservation biology of birds

### Civic Ecology Lab



Marianne Krasny, Director (607) 255-2822

MEK2@cornell.edu

Environmental education
Urban youth and community
environmental program
Civic ecology education

### **Human Dimensions**

### **Human Dimensions Research Unit**

### **Ecological Dimensions of Human Security**



Keith Tidball, Sr. Extension Associate, Assistant Director Cornell Cooperative Extension

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Application of environmental science to post-conflict and post-disaster social-ecological

systems

### School of Integrative Plant Science

### Horticulture

Profile	Name	Phone	Email	Specialty
	Nina Bassuk Professor	(607) 255-4586	nlb2@cornell.edu	Urban horticulture Woody landscape plants Landscape mgmt. Plant propagation Cornell Structural Soil
	Terence Bates Sr. Research Associate	(716) 792-2800	trb7@cornell.edu	Viticulture Concord grape production
	Taryn Bauerle Associate Professor	(607) 254-4867	tlb33@cornell.edu	Root biology Woody plant physiological ecology Water stress Root herbivory
	Thomas Bjorkman, Professor	(315) 787-2218	tnb1@cornell.edu	Vegetable crop physiology Cover crops Establish year-round Eastern broccoli industry
	Susan Brown, Herman M. Cohn Professor of Agriculture and Life Science	(315) 787-2224	skb3@cornell.edu	Plant breeding (apples) Marker-assisted breeding
	Lailiang Cheng Professor	(607) 255-1779	lc89@cornell.edu	Fruit crop nutrition physiology Carbon and nitrogen metabolism
	Christopher Dunn  Adjunct Assoc Prof and E. N. Wilds  Director of Cornell  Botanic Gardens	607-255-6139	cpd55@cornell.edu	Botanic Gardens Ramin Admin Ctr



Laurie Drinkwater, Professor

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Agroecology

Soil quality and nutrient cycling



Marcia Eames-Sheavly, Sr. Extension Associate

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Garden-based learning

Children and youth development

Art of horticulture



Ashley Helmholdt Extension Associate

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Garden-Based Learning

Seed to Supper

Vegetable Varieties for Gardeners

**Permaculture Courses** 

Master Gardener Volunteer Program



Phillip Griffiths

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Vegetable breeding International agriculture



Yu Jiang Assistant Research Professor

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Agricultural robotics,

Artificial intelligence in agriculture

Image processing

High throughput plant phenotyping



Jenny Kao-Kniffin Associate Professor

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**Invasive Plants** 

Rhizosphere Microbiology

Weed Ecology



Timothy Martinson, Sr. Extension Associate

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Cold Climate Grapes Cold Hardy Grapes

**Drought Stress And Wine Quality** 

Enology

**Entomology Extension** 

Grapevine Viral Disease Management

Horticulture

Insect Management

Soil Health

Specialty Crops Research Sustainable Production Sustainable Viticulture

Viticulture

Winery Wastewater Regulation

Neil Mattson Associate Professor	(607) 255-0621	Nsm47@cornell.edu	Floriculture industry and production techniques Greenhouse horticulture
Bill Miller Professor	(607) 255-1799	wbm8@cornell.edu	Floriculture Greenhouse and nursery crop Physiology Post-harvest management Flower bulbs
Gregory Peck Assistant Professor	(607) 255-7122	gmp32@cornell.edu	Sustainable fruit systems
Donald Rakow Associate Professor	(607) 255-1045	dr14@cornell.edu	Conservation Horticulture Natural Areas Sustainability
Anu Rangarajan Sr. Extension Associate	(607) 255-1780	ar47@cornell.edu	Nutritional Quality of Vegetables Organic Reduced Tillage Small Farms Soil Fertility Specialty Crop Production & Marketing Sustainable & Organic Vegetable Production Vegetables
Terence Robinson Professor	(315) 787-2227	tlr1@cornell.edu	Orchard production systems and management Fruit tree physiology
Frank S. Rossi , Extension Turfgrass Specialist	( 607) 227-5873	fsr3@cornell.edu	Turfgrass science
Sonja Skelly Adjunct Associate Professor and Director of Education, Cornell Botanic Gardens	(607) 255-2406	sms92@cornell.edu	Plants and human well being Public Garden Management



Lynn Sosnoskie, Assistant Professor

lms438@cornell.edu

Sustainable weed management in vegetable and fruit crops



Alan Taylor Professor

(315) 787-2243

N/A

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Seed science and technology



Justine Vanden Heuvel Associate Professor

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Viticulture
Wine grape production systems



Thomas Whitlow Associate Professor

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Sustainability

Urban ecology and best management

practices



David Wolfe Professor

N/A <u>dww5@cornell.edu</u>

Climate Change Adaptation & Mitigation

Soil Health

Sustainable Agriculture Water Management



Kenong Xu Associate Professor

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Plant genome

Fruit production and mgmt.

### **Plant Biology**



William Crepet Professor

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Angiosperms
Biomedicinals
Floral Evolution

Integration, Synthesis, Conceptual,

**Evolution, Phylogenetics** 

Phylogenetics Plant Evolution Plant Systematics Pollination

Timing



Susheng Gan Professor

(607) 255-6088

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Advanced Postharvest Physiology

Apple
Arabidopsis
Bioenergy
Biofuel
Biofuels
Genomics
Kidney Bean
Maize

Mitotic Senescence Molecular Genetics Plant Biotechnology Plant Development Plant Hormones

Plant Molecular Biology Plant Senescence

**Poplus** 

Post-Mitotic Senescence Postharvest Biology

Rice Soybean Tobacco



Maria A. Gandolfo Associate Professor

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Paleobotany

diversification and evolution of

angiosperms plant anatomy



Kevin Nixon Professor

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Online Identification Herbarium

Origin & Diversification Of Angiosperms

Phylogenetics Plant Systematics Plant Taxonomy

Quercus

Systematics Phylogenetics Plant Diversity Theory Analysis Tropical Families Taxonomy of Quercus



Adrienne Roeder Associate Professor

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Plant Cell Biology Plant Development



Michael Scanlon Professor

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Developmental Biology

Evolution Genetics

Plant Developmental Genetics Weed to Wonder; Public Outreach

### **Plant Breeding and Genetics**



Walter De Jong Associate Professor

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Breeding

**Molecular Genetics** 

**Potato** 

**Potato Breeding** 

Virology



Peter Gregory Adjunct Professor

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International Programs Agricultural Biotechnology International Development

GM crops



Julie Hansen Sr. Research Associate

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Alfalfa Snout Beetle Resistance in Alfalfa

Bioenergy Feedstock Birdsfoot Trefoil Breeding

Brown Root Rot Resistance in Alfalfa

Forage Breeding Methods

Forage Quality Forage Research

Forage Variety Evaluation

Industrial Hemp Variety Evaluation Perennial Grass for Bioenergy Feedstock Plant Breeding and Variety Development Potato Leafhopper Resistance in Alfalfa

Variety Trial Yield Results



Michael R Mazourek Associate Professor

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u

**Biochemical Genetics** 

Cucumber
Melon
Peas
Pepper
Plant Breeding
Plant Genetics
Squash



Susan McCouch Professor

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Biology Curriculum

Watermelon

**Database Development and Design** 

Gene Discovery Global Food Production Molecular Breeding

Molecular Genetics Technology

**Rice Molecular Genetics** 



Martha Mutschler-Chu Professor

(607) 255-1660 <u>ma</u>

mam13@cornell.ed <u>u</u> Breeding Methodology
Disease Resistance
Doubled Haploid Onions
Insect Resistance

**Integrated Pest Management** 

**Onion Breeding** 

Onion Disease Resistance

Onion Genetics Onion Mildness Onion Quality

**Plant Insect Interactions** 

**Tomato Breeding** 

Tomato Disease & Insect Resistance

**Tomato Genetics** 



Kandukuri Raman Adjunct Professor & Associate Director (Special Projects

(607) 327-3336

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Global Issues in Plant and Animal Sciences; Value Addition and Marketing;

Rural Infrastructure

lard

International Agriculture & Rural

Development

Agricultural Biotechnology, Integrated Pest Management



Bruce Reisch Professor

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**Breeding** 

Disease Resistance Genetic Mapping

Genetics

Genomics

Grape Breeding
Grapevine Biology
Linkage Mapping

Marker Assisted Selection Marker-Assisted Selection

Molecular Mapping Molecular Markers Plant Biotechnology Plant Breeding Plant Genetics

Viticulture Vitis Wine



Kelly Robbins Assistant Professor

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Bayesian Statistics International Agriculture Mixed Models

Quantitative Genetics



Frank Shotkoski Adjunct Professor

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Agricultural Biotechnology



Lawrence Smart Professor

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Willow bioenergy crops

Breeding Genomics



Margaret Smith Professor

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**Abiotic Stress Tolerance** 

Corn Breeding

Corn Breeding for Insect and Disease

Resistance

Corn Breeding for Organic and

Sustainable Agriculture

Genetically Engineered Crop Plants Genetically Engineered Crops

Host Plant Resistance Maize Breeding & Genetics

Plant Breeding Seed Certification

Variety Evaluation & Variety Selection



Mark E. Sorrells, M.E. Sorrells Fellow

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Ancient Grains
Breeding Methods

Heritage Wheat Varieties Inbreeding Methods Malting Barley Varieties Molecular Breeding

Naked Barley Oat Varieties

Organic Grain Breeding Plant Breeding Methods

Population & Selection

Small Grains Specialty Grains Testing Strategies Wheat Varieties



Donald Viands Professor

(607) 255-3081 drv3@co

drv3@cornell.edu Alfalfa

Biofuel Birdsfoot Trefoil

Breeding Methodology

Disease and Insect Resistance

Forage Cultivars
Forage Quality

Forage Yield Evaluation

**Forages** 

Perennial Biofuel Feedstocks

Pest Resistance Plant Breeding Quantitative Genetics

Yield



Courtney Weber Associate Professor

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caw34@cornell.edu

Fruit Breeding, Plant Breeding

Genetic Mapping Molecular Markers Phytophthora

Small Fruits-Strawberry, Raspberry

### **Plant Pathology & Plant Microbe Biology**



**Gary Bergstrom** 

(607) 255-7849

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Biology

Epidemiology

Integrated management of diseases of wheat, corn, soybean, forage legumes



Kerik Cox Associate Professor (315) 787-2401

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Apples

Berry Crops
Disease Diagnosis

Disease Management

Education

Extension Pathology Fruit Pathology Fungicide Resistance

Mycology Orchard Ecology

Pesticide Small Fruit Tree Fruit



Marc Fuchs
Associate Professor

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Biotechnology Epidemiology

**Etiology Management** 

**Plant Virology** 

Virus, Vegetables, Fruit Crops, Indexing, Informed Decision, Management



David Gadoury Sr. Research Associate (315) 787-2614

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Apple Diseases
Epidemiology
Fruit Diseases
Crane Diseases

Grape Diseases Mycology

Pathogen Biology Pathogen Ecology Plant Pathology Vegetable Diseases



Stewart Gray Courtesy Professor smg3@cornell.edu

Plant Pathology and Plant-Microbe

Biology



Katie Gold

\*(315)787-2447

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GrapeSPEC - Sensing, Pathology, and

Extension at Cornell AgriTech



Kathie Hodge Associate Professor

(607) 255-5356 k

kh11@cornell.edu

Clavicipitaceae Entomophthorales

Evolution Food Fungi

**Insect Pathogens** 

Lab
Molds
Mushrooms
Plant Diseases
Spoilage
Systematics
Taxonomy



Awais Khan Associate Professor

(315) 787-2446

mak427@cornell.ed u Bioinformatics
Disease Resistance

Genomics

Marker Assisted Selection

Plant Breeding Plant Pathology Quantitative Genetics Rosaceous Fruit Crops



Magdalen Lindeberg Sr. Research Associate

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Annotation Bioinformatics Community Outreach

Database Genomics Internet

Molecular Mechanisms

Pathogenicity
Plant Pathogenesis
Plant-Microbe Interactions
Pseudomonas Syringae
Science Education



Rebecca Nelson Professor

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Agricultural Development Exserohilum Turcicum

Food and Nutritional Security

Food Security Molecular Genetics

Multiple Disease Resistance

Plant Defense Poverty, Qtl

Quantitative Resistance Rural Livelihoods Sustainable Agriculture

World Hunger



Keith Perry Associate Professor

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Disease

Grape

Plant Pathology

Potato Vector Virus



Sarah Pethybridge Assistant Professor

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Disease Management

**Plant Pathology** 

**Potatoes** 

**Processing Vegetables** 

Quantitative Disease Epidemiology

**Vegetable Production** 



Karen Snover-Clift Sr. Extension Associate

(607) 255-7860

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Agricultural Biosecurity Plant Disease Diagnostics Plant Disease Outreach

### **Soil & Crop Sciences**



Jean Bonhotal Sr. Extension Associate

(607) 255-1187

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Avian Influenza Compost Plan Characterizing Organic Residuals to Find Beneficial Uses Compost Quality, Compost Use Farm Waste Management, Manure As Dairy Bedding; Manure Management Mass Casualty Disposal Response in

Livestock Disasters

Mortality Disposal, Mortality and Roadkill

Composting, Natural Rendering Soil Quality and Testing, Health And

Safety, Urban Gardens

Waste Management Education



Daniel Buckley Professor

(607) 255-1716

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Genomics Microbiology

Soil and Crop Sciences



Jerome Cherney Professor

(607) 255-0945

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Forage Crops

Forage Management Forage Quality Grass Biofuel

**Pastures and Grazing** 



Antonio DiTommaso Professor

(607) 254-4702

ad97@cornell.edu

Agroecology

**Biological Weed Control** 

Critical Thinking, Respect, Student

Curiosity, Weed Biology

**Integrated Weed Management** 

Invasive Plants Pest Management Weed Biology Weed Ecology

Weed Identification Guides

Weed Management



Deborah Grantham Sr. Extension Associate

(607) 255-8229

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Environment

Hyperspectral Reflectance

Natural Resources Remote Sensing

Soils



Peter Hobbs Adjunct Professor; Associate Director IP-CALS academic program (607) 255-1904

ph14@cornell.edu

Agroforestry Agronomy

Conservation Agriculture

Cropping Systems
Forest Farming

Gmo's

International & Tropical Agriculture

Soil Health

Traditional Agriculture Tropical Cropping Systems

Weed Science



Susan Hoskins Sr. Extension Associate (607) 255-4864

sbh1@cornell.edu

4-H Geospatial Sciences Airphoto Interpretation

Drones Gis Gps

Land Use/Land Cover Mapping

Remote Sensing Resource Inventory Spatial Data Development

**Spatial Thinking** 

**Unmanned Aerial Vehicles** 

Wetlands Mapping Youth Development



Julie Lauren Instructor (607) 255-1727

jgl5@cornell.edu

Agricultrual Extension

Arsenic

**Conservation Agriculture** 

Field Crops, Tropical Cropping Systems,

Soil Science Food Security Grain Legumes Green Manures

Greenhouse Gas Emissions Increasing Livelihoods International Agriculture

Methane

Micronutrient Soil Fertility Nutrient Management Permanent Raised Beds Poor Smallholder Farmers Rice-Wheat Cropping Systems Soil Carbon Sequestration

Soil Health

Soil Management Technologies Soil Nitrogen Dynamics/Nitrogen

Isotopes
Soil Quality

**Technology Adoption** 



Murray McBride Professor

(607) 255-1728

mbm7@cornell.edu

Biosphere

Chemistry of Trace & Toxic Metals in

Soils

**Environmental Chemistry** 

Heavy Metals Hydrosphere Lead (Pb) Lithosphere Organic Residuals

Pollution

Soil Chemistry, Health, Tests Surface Chemistry of Minerals

**Urban Gardening** 



Andrew McDonald

ajm9@cornell.edu

Cropping systems ecology

Agricultural sustainability and food

security

International agriculture, policy, applied social sciences, water resources, and

climate



Jeffrey Melkonian Sr.Research Associate

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Climate
Crop Growth Modeling

Crop Physiology

Crop Water Use Modeling

Cropping Systems Environment

Maize Models Nitrogen

Nitrogen Fertilizer Recommendation

Soil Nitrogen Modeling

Water



David G. Rossiter Adjunct Professor

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Soil survey Geostatistics

spatial modeling of the environment



Jonathan Russell-Anelli Senior Lecturer

Michael Rutzke

Sr. Research

Associate

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Contaminates Contamination Pollution

Soil

Soil Health

Urban Agriculture

Atomic Spectroscopy,

Icp-Aes,

Mineral Nutrition

Corpoica,

International Agriculture



Matthew Ryan **Assistant Professor** 

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u

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Soil and Crop Sciences

sustainable cropping systems



Hannah Shayler **Extension Associate** 

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Cornell Waste Management Institute

**Healthy Soils, Healthy Communities** 



Stephen Smith Sr. Extension **Associate** 

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4-H Geospatial Leadership Team

4-H Youth Development

**Geographic Information Systems** 

Geospatial

Gis

**Global Positioning System** 

Land Use Mapping

Off-Campus

**Professional Education Professional Support Remote Sensing** Web-Based Support

Workshops

Nitrogen Management Precision & Computational Agriculture

Soil & Water Management

Soil Health

**Space-Time Statistics** 



Harold van Es Professor

(607) 255-5629

hmv1@cornell.edu



Peter Woodbury Sr. Research Associate (607) 255-1448 pbw

pbw1@cornell.edu

Sustainability of agricultural and forest ecosystems



**Dominic Woolf** 

dw433@cornell.edu

Soil carbon sequestration, restoration of degraded land, sustainable landscape management, climate-smart agriculture, agroforestry, soil and water conservation, reforestation, biochar, and bioenergy with carbon capture and storage.

### Department of Earth & Atmospheric Sciences

Profile	Name	Phone	Email	Specialty
	Susan J. Riha Professor	(607) 255-1729	sjr4@cornell.edu	interaction of plants with their physical environment

#### Department of Food Science

Profile	Name	Phone	Email	Specialty
	Elizabeth Bihn Sr. Extension Associate	(315) 787-2625	eab38@cornell.edu	Educational Material Design Educational Materials Food Safety Fresh Fruits & Vegetables Good Agricultural Practices Microbiology Online Produce Safety Course

### Long Island Horticultural Research and Extension Center-Riverhead, NY

Profile	Name	Phone	Email	Specialty
	Mark Bridgen Professor Director, Long Island Horticultural Research and Extension Center	(631) 727-3595	mpb27@cornell.edu	Bulbs Chickens Chile Chrysanthemum Chrysanthemums Cut Flowers Embryo Culture Floriculture Geophytes Greenhouse Horticulture

**Greenhouse Production** 

**Herbaceous Ornamental Plants** 

**High Tunnels** 

**New Plant Development** 

**Plant Biodiversity** 

**Plant Breeding** 

Plant Exploration & Collection

Plant Micropropagation

**Plant Propagation** 

Plant Tissue Culture

Poinsettias

Season Extension

**Somaclonal Variation** 

**Ultraviolet-C Radiation** 



Margery Daughtry Sr. Extension Associate

Long Island

Long Island

mld9@cornell.edu

Disease Management

Diseases of Ornamentals- Downy

Mildew, Phytophthora, Powdery

Mildew, Pythium



Margaret McGrath Associate Professor

Horticultural Research

**Extension Center** 

Horticultural Research Extension Center

(631) 727-3595

(631) 727-3595

mtm3@cornell.edu

**Epidemiology** 

Fungicide Resistance

Impact of Ambient Ozone on Plant

Productivity

**Integrated Pest Management** 

Organic Crop Production

Organic Disease Management

Sustainable Agricultural Practices

**Vegetable Crop Diseases** 

Vegetable Diseases

Managing vegetable diseases

### Department of Entomology

Profile	Name	Phone	Email	Specialty
Ithaca Campi	us			
	Laura Harrington	(607) 255-4475	lch27@cornell.edu	Mosquitoes and vector borne diseases Identification of insects
	John Sanderson	(607) 255-5419	jps3@cornell.edu	Pest Management of greenhouse arthropod pests Alternative solutions to pesticides Biological controls Arthropod predators and parasitoids, Fungal pathogens of insects
	Jason Dombroskie, Sr. Extension Associate	(607) 255-6530	jjd278@cornell.edu	Cornell University Insect Collection Insect Diagnostic Lab
	Mary Centrella, PMEP Director and Educator	(607) 255-1866	mlc344@cornell.edu	Program direction, collaborations, and funding Environmental risk assessments Pollinator protection Pesticide mode of action and active ingredients General pesticide safety and use
	Michael Helms, Extension Support Specialist	(607) 255-1866	mjh14@cornell.edu	Pesticide registration PMEP Distance Learning Center (online recertification courses) Cornell Crop and Pest Management Guidelines Pesticide application technology General pesticide safety and use
	Dan Wixted	(607) 255-1866	djw47@cornell.edu	Pesticide applicator training manuals Ordering applicator training manuals and Cornell Crop and Pest Management Guidelines Health and environmental effects of glyphosate (e.g., Roundup) General pesticide safety and use (e.g., regulations, reading a label, exposure concerns)

### **Hudson Valley Field Laboratory**



Peter Jentsch, Sr. Extension Associate (845) 691-6516 pjj5@cornell.edu

Apple, Pear, Grape, Vegetable Arthropod, Insect, Mite biological controls Integrated Pest Management

Organic IPM
Tree Fruit IPM

### **Geneva Campus**



**Gregory Loeb** 

(315) 787-2345

gme1@cornell.edu

Insect and mite pest

management for small fruit and

grape

Pest management guidelines



Jan Nyrop

(315) 787-2355

jpn2@cornell.edu

Biology and ecology of invasions

Invasive management

### NYS Integrated Pest Management Staff

NTS Integrated rest Management Stan						
Profile	Name	Phone	Email	Specialty		
AG IPM TEAM						
3	Bryan Brown	(315) 787-2432	bryan.brown@cornell.edu	Integrated Weed Management Specialist		
	Juliet Carroll	(315) 787-2430	jec3@cornell.edu	Fruit IPM Coordinator		
	Amara Dunn	(315) 787-2430	arc55@cornell.edu	Biocontrol Specialist		

	Brian Eshenaur	(585) 753 2561	bce1@cornell.edu	Ornamentals IPM Extension Area Educator
	Elizabeth Lamb	(607) 254-8800	eml38@cornell.edu	Ornamentals IPM Coordinator and Greenhouse Vegetable IPM Specialist
	Dan Olmstead	(315) 787-2334	d <u>lo6@cornell.edu</u>	Coordinator, Network for Environment and Weather Applications
Res .	Abby Seaman	(315) 787-2334	ajs32@cornell.edu	Vegetable IPM Coordinator
	Kenneth Wise	(845) 677-8223 x149	klw24@cornell.edu	Livestock & Field Crops IPM Extension Area Educator
	Marion Zuefle	(315) 787-2379	mez4@cornell.edu	Vegetable IPM Extension Area Educator
COMMUNITY				
IPM TEAMS				
	Matt Frye	(914) 285-4633	mjf267@cornell.edu	Community IPM Extension Area Educator
	Jody Gangloff- Kaufmann	(631) 539-8680	jlg23@cornell.edu	Community IPM Coordinator
	Joellen Lampman	(518) 441-1303	jkz6@cornell.edu	School and Turfgrass IPM Extension Support Specialist

Lynn Br



Debra Marvin

(315) 787-2624

dem35@cornell.edu

Community IPM Program Assistant for Schools, Daycare and Horticulture

### **Appendices**

#### **Titles:**

Sr. Extension Associate Extension Associate

Senior extension associates provide leadership in planning, developing, coordinating, implementing, and evaluating complex, state-of-the-art educational extension and outreach programs. Senior extension associates independently carry out innovative applied research programs, supervise professional and administrative staff, and work with faculty and clientele. They possess in-depth knowledge of relevant state or national extension systems, and they are recognized experts in their fields as demonstrated by extensive professional publications and contacts. Senior extension associates also apply advanced problem-solving and administrative skills that contribute to the financial and organizational aspects of program management. Although precise duties and responsibilities vary from position to position, senior extension associates are expected to work effectively with faculty, governmental officials, colleagues, and volunteers, and, in some instances, to serve as senior administrators.

Extension associates are responsible, under the general supervision of faculty or senior extension associates, for planning and implementing educational extension programs. They collaborate with representatives from communities and with researchers in the college or school to plan, conduct, maintain, and/or evaluate innovative educational programs that address specific local, multi-county, or statewide needs. Although precise duties and responsibilities will vary from position to position, all extension associates are expected to conduct applied research, work effectively with colleagues or volunteers, act as community educators, and serve as liaisons – as project and/or area program team leaders – between the university and the public. An extension associate does not normally have responsibilities for graduate students.

### **CCE NY Extension Disaster Education Network (NY Eden)**

http://eden.cce.cornell.edu/disasters/pages/drought.aspx

The New York Extension Disaster Education Network (NY EDEN) is a collaborative educational network based at Cornell University, dedicated to educating New York residents about preventing, preparing for and recovering from emergencies and disasters that could affect their families and communities. NY EDEN is affiliated with both the national USDA Extension Disaster Education Network (EDEN) and with Cornell University Cooperative Extension.

NY EDEN works to link the emergency preparedness resources of New York agencies and organizations with the community networking and outreach capabilities of Cornell Cooperative Extension Education Centers throughout the state.

#### The goals of NY EDEN are to:

Disseminate educational materials relating to emergency preparedness and recovery in order to reduce the impact of disasters on individuals and communities.

Provide emergency preparedness training and resources for Cooperative Extension Staff, businesses and community residents.

Assist CCE Associations in establishing partnerships and plans to assist their communities, through education, in emergency/disaster preparations and recovery.

Distribute credible resource materials before, during, and after a disaster.

### **Weblinks**

### **Reference Information**

Cornell Cooperative Extension: <a href="http://cce.cornell.edu/">http://cce.cornell.edu/</a>

http://cce.cornell.edu/info/about

School of Integrative Plant Science: <a href="https://sips.cals.cornell.edu/about">https://sips.cals.cornell.edu/about</a>

SIPS School Sections: <a href="https://sips.cals.cornell.edu/about/school-sections">https://sips.cals.cornell.edu/about/school-sections</a>

Department of Natural Resources: <a href="http://www.dnr.cornell.edu">http://www.dnr.cornell.edu</a>

Department of Horticulture: http://hort.cals.cornell.edu

Department of Entomology: <a href="https://entomology.cals.cornell.edu/">https://entomology.cals.cornell.edu/</a>

#### **Extension Resources in SIPS:**

COVID 19 Resources

SIPS-wide COVID-19 resources for growers, gardeners, green industry professionals and educators

- Gardening for Spring 2020
  - A blog series specifically for supporting new gardeners during the pandemic.
- The Art of SIPS
- SIPS Education Resources

Cornell Garden-Based Learning, Horticulture Distance Learning, Cornell Botanic Gardens and Farms

- Food Production Resources
  - Field Crops, Fruit, Vegetables, Mushrooms and Gardening Resources
- Vegetable MD Online

Vegetable MD Online helps ordinary people and farmers identify and manage plant diseases. Users can browse many color photos sorted by crop and disease as well as consult vegetable disease fact sheets for recommendations.

- Glossary of Technical Terms in Plant Pathology
  - Definitions and pronunciation guide of important terms in plant disease management.
- Northeast Plant Diagnostic Network

The Northeast Plant Diagnostic Network (NEPDN) is a coordination center for monitoring invasive plant diseases and insects.

• Sustainable Landscapes Resources

Urban Horticulture, Bioenergy and Turfgrass Resources

### **Diagnostic Labs**

Plant Diagnostics Lab

Plant Diagnostic Clinic: <a href="http://plantclinic.cornell.edu">http://plantclinic.cornell.edu</a>

The Plant Disease Diagnostic Clinic is a facility of the <u>Section of Plant Pathology and Plant-Microbe Biology within the School of Integrative Plant Science</u> at Cornell University. The Clinic provides fast and accurate plant disease diagnosis and up-to-date pest control recommendations for anyone from home owners to commercial growers. Services include analysis of plant material and soil for bacterial, fungal, viral, and nematode pathogen.

Plant Diagnostic Clinic factsheets: http://plantclinic.cornell.edu/factsheets.html

**Leaf Doctor** - iPhone, android ap that lets you diagnose how damaged a plant is

http://news.cornell.edu/stories/2015/06/free-app-helps-diagnose-leaf-or-death-situations

Cornell Insect Diagnostic Lab (IDL)

Sample Submission Directions <a href="http://idl.entomology.cornell.edu/sample-directions">http://idl.entomology.cornell.edu/sample-directions</a>

This site will tell you what to do to send something to the lab for identification

Notify the lab that a sample is coming: IDLDiagnosticLab@cornell.edu

Forms to be used:

**For Cornell Cooperative Extension agents** - use the following form:

https://blogs.cornell.edu/insectid/files/2013/11/IDL-CCE-Info-Sheet-19hca51.pdf

**For the general public** – use the following form:

https://blogs.cornell.edu/insectid/files/2013/11/IDL-Submission-Form-for-samples-ra8whh.pdf

Digital Photographs: IDLDiagnosticLab@cornell.edu

Clear close-up photos of an insect or related organism can be sent to the lab.

**Fees** 

There is a \$25 fee associated with sending in a sample or a photo for identification.

Make check out to Cornell University.

For TICK evaluations: <a href="https://ahdc.vet.cornell.edu/programs/tick/">https://ahdc.vet.cornell.edu/programs/tick/</a>

Additional information on Ticks - http://www.cdc.gov/ticks/index.html

Insect Diagnostic Lab Factsheets –

http://idl.entomology.cornell.edu/factsheets/

Pdf files are available for your use. These files are updated regularly and cover many areas of insect identification. Factsheets are grouped by category and can easily be downloaded to your computer. They are grouped into similar categories for ease of access.

They include: Household / indoor pests, Biting/stinging, Wood/lumber, Trees/shrubs, Vegetable / garden, Houseplants, Outdoor / miscellaneous.

SHIPPING ADDRESS: INSECT DIAGNOSTIC LAB

**CORNELL UNIVERSITY** 

2144 COMSTOCK HALL, ENTOMOLOGY

ITHACA NY 14853-2601

Cornell Nutrient Analysis Laboratory (CNAL) <a href="https://cnal.cals.cornell.edu/analyses/">https://cnal.cals.cornell.edu/analyses/</a>

This web site will tell you which form to use for the specific analysis to be performed.

The types of analysis performed includes the following:

Soil analysis for commercial field crops, vegetables, fruits, home gardens, and research

• Soil Analysis Form: <a href="http://css.cornell.edu/cnal-forms/CNAL\_Form\_S.pdf">http://css.cornell.edu/cnal-forms/CNAL\_Form\_S.pdf</a>

• Soil Analysis Instructions: <a href="http://css.cornell.edu/cnal-forms/CNAL-Soil-Sampling-">http://css.cornell.edu/cnal-forms/CNAL-Soil-Sampling-</a>

Instructions.pdf

Plant tissue analysis for grape petiole, small fruit, tree fruit, corn stalk nitrate, and research

Water analysis including solutions and extracts for research

Compost analysis

Environmental analysis

Greenhouse potting soil and root media

The appropriate sample id forms are included in <a href="https://cnal.cals.cornell.edu/analyses/">https://cnal.cals.cornell.edu/analyses/</a>

Mail samples to: Cornell Nutrient Analysis Laboratory

G01 Bradfield Hall 306 Tower Rd. Cornell University Ithaca, NY 14853 USA

#### **External Analysis Resources**

Fertilization Recommendations: <a href="http://dairyone.com/analytical-services/agronomy-services/soil-testing/">http://dairyone.com/analytical-services/agronomy-services/soil-testing/</a>

CNAL does not provide fertilizer recommendations. Clients who want fertilizer recommendations based on Cornell University research should contact <u>AgroOne</u>.

An agronomic soil test extracts a portion of the plant available nutrients contained in a soil sample and results are then classified as low, medium, high or very high based on expected crop response to added crop nutrients, crops grown on soils that test high to very high for a specific nutrient are not likely to respond with a yield increase if that nutrient is applied to the soil. However, soils testing low or medium for that nutrient are likely to show improved yield and quality if that nutrient is applied (provided other nutrients are present in adequate amounts).

Soil testing is a required component of nutrient management plans for many commercial farming operations as well as for purchase of phosphorous containing fertilizers for use on established lawns in some Northeast states.

Forms required by AgroOne: <a href="http://dairyone.com/general-resources/forms/">http://dairyone.com/general-resources/forms/</a>

#### **Master Gardener Volunteers**

**Relevant Resources** 

Diagnosing Plant Problems Website: <a href="http://plantclinic.cornell.edu/mastergardner.html">http://plantclinic.cornell.edu/mastergardner.html</a>

**Cooperative Extenison Master Gardener Volunteer Program (Overview):** 

https://gardening.cals.cornell.edu/cornell-cooperative-extension-master-gardener-volunteer-program/

All County Based CCE Extension Contacts at: <a href="https://gardening.cals.cornell.edu/garden-guidance/ny-local-resources/">https://gardening.cals.cornell.edu/garden-guidance/ny-local-resources/</a>

#### **Related Cornell Garden-Based Learning Statewide Program Resources:**

- New York State Seed to Supper: <a href="https://gardening.cals.cornell.edu/for-cce-staff/new-york-state-seed-to-supper/">https://gardening.cals.cornell.edu/for-cce-staff/new-york-state-seed-to-supper/</a>
- Vegetable Varieties for Gardeners and Trial Gardens: <a href="https://gardening.cals.cornell.edu/citizen-science/">https://gardening.cals.cornell.edu/citizen-science/</a>
- Gardening in a Warming World: <a href="https://gardening.cals.cornell.edu/garden-guidance/gww/">https://gardening.cals.cornell.edu/garden-guidance/gww/</a>

#### For CCE Community Horticulture Educators and Master Gardener Volunteer Coordinators:

All Core Preparation for Master Gardener Volunteers is housed on the Moodle Course titled:

The Cornell-Garden Based Learning Library - found at: https://moodle.cce.cornell.edu/course/view.php?id=168

- 1. Set up a Moodle Account.
- 2. Ashley Helmholdt will enroll you in the course.
- 3. Search, download and print all updated Garden Based Learning Library materials for your MGV training.