# **Titles of Vegetable Pathology Reports**

# Long Island Horticultural Research & Extension Center Annual Report

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### **2021 Annual Report**

Efficacy of biopesticides for managing powdery mildew in pumpkin Efficacy of biopesticides applied with conventional fungicides for managing powdery mildew in pumpkin

Fungicide sensitivity of the cucurbit powdery mildew pathogen on long island in 2021

Fungicide sensitivity of cucurbit powdery mildew pathogen isolates on li in 2020

Evaluation of powdery mildew resistant varieties of cantaloupe

Evaluation of downy mildew resistant varieties of cantaloupe

Evaluation of downy mildew resistant varieties of cucumber

Fungicide sensitivity of the cucurbit downy mildew pathogen on long island

Efficacy of biopesticides for managing downy mildew in cucumber

Efficacy of biopesticides applied with conventional fungicides for managing downy mildew in cucumber

Evaluation of an experimental and commercial varieties of sweet basil resistant to downy mildew

Evaluation of biopesticides for organic management of downy mildew in sweet basil

Evaluation of conventional fungicides for downy mildew in sweet basil

#### 2020 Annual Report

Evaluation of fungicides for powdery mildew on pumpkin

Fungicide sensitivity of cucurbit powdery mildew pathogen isolates on LI in 2020 Fungicide sensitivity of cucurbit powdery mildew pathogen population on LI in 2020

Evaluation of powdery mildew resistant varieties of acorn squash

Evaluation of powdery mildew resistant varieties of cantaloupe

Identification of pathotypes of the cucurbit downy mildew pathogen occurring on LI

Evaluating NY-adapted fresh-market tomato lines with combined resistances to bacterial and fungal diseases

Efficacy of biopesticides for managing bacterial speck in tomato seedlings Evaluation of commercial varieties of sweet basil resistant to downy mildew Evaluation of organic fungicides for downy mildew in field-grown sweet basil

# **2019 Annual Report**

Evaluation of fungicides for powdery mildew on pumpkin

Fungicide sensitivity of cucurbit powdery mildew pathogen isolates on LI in 2018 Fungicide sensitivity of cucurbit powdery mildew pathogen isolates on LI in 2019

Fungicide sensitivity of cucurbit powdery mildew pathogen population on LI in 2019

Effectiveness of conventional and organic fungicide programs with biopesticides that induce systemic resistance for control of powdery mildew in acorn squash

Evaluation of powdery mildew resistant varieties of acorn squash

Evaluation of powdery mildew resistant varieties of butternut squash

Evaluation of powdery mildew resistant varieties of cantaloupe

Evaluation of butternut squash experimental varieties for resistance to Phytophthora blight and downy mildew

Identification of pathotypes of the cucurbit downy mildew pathogen occurring on LI

Efficacy of fungicides for managing downy mildew in cucumber

Fungicide sensitivity of cucurbit downy mildew pathogen population on LI in 2019

Evaluation of fungicides for managing bacterial speck in tomato

Evaluating NY-adapted fresh-market tomato lines with combined resistances to bacterial and fungal diseases

Evaluation of biopesticides for managing black rot in cabbage

Evaluation of commercial varieties of sweet basil resistant to downy mildew

Evaluation of organic fungicides for downy mildew in field-grown sweet basil

### 2018 Annual Report

Evaluation of fungicides for powdery mildew on pumpkin.

Fungicide sensitivity of cucurbit powdery mildew pathogen isolates on LI in 2017.

Fungicide sensitivity of cucurbit powdery mildew pathogen population on LI in 2018.

Evaluation of management programs without chlorothalonil for powdery mildew in winter squash.

Efficacy for powdery mildew on acorn squash of conventional and organic fungicide programs with biopesticides that induce systemic resistance.

Efficacy of organic fungicides for managing powdery mildew on acorn squash.

Evaluation of lettuce varieties for susceptibility to powdery mildew.

Identification of pathotypes of the cucurbit downy mildew pathogen occurring on LI.

Efficacy of conventional and organic fungicides for managing downy mildew in cucumber.

Fungicide sensitivity of cucurbit downy mildew pathogen population on LI in 2018.

Monitoring late blight occurrence in tomatoes and potatoes on Long Island.

Evaluating NY-adapted fresh-market tomato lines with combined resistances to bacterial and fungal diseases.

Evaluation of biopesticides for managing Phytophthora blight in cucurbits.

Evaluation of biopesticides for managing Phytophthora blight in pepper.

Efficacy of biopesticides for managing black rot in cabbage.

Evaluation of commercial varieties of sweet basil resistant to downy mildew.

Comparison of winter hardy cover crops for reduced-till organic cabbage.

Investigation of ground cover tarps in organic reduced tillage beets.

Utility of tillage radish and deep zone tillage for producing peas organically with reduced tillage.

### **2017 Annual Report**

Evaluation of Biofence for managing Phytophthora blight in cucurbits.

Evaluation of biopesticides for managing Phytophthora blight in cucurbits.

Evaluation of biopesticides for managing Phytophthora blight in pepper.

Evaluation of cucumber varieties resistant to downy mildew.

Fungicide sensitivity of cucurbit downy mildew pathogen population on LI in 2017.

Fungicide sensitivity of cucurbit powdery mildew pathogen isolates on LI in 2016.

Fungicide sensitivity of cucurbit powdery mildew pathogen population on LI in 2017.

Evaluation of fungicides for powdery mildew on pumpkins.

Evaluation of Halloween pumpkin varieties resistant to powdery mildew.

Evaluation of management programs without chlorothalonil for powdery mildew in pumpkin.

Monitoring late blight occurrence in tomatoes and potatoes on Long Island.

Monitoring occurrence of basil downy mildew on Long Island.

Development of a vegetable disease identification website.

Comparison of winter hardy cover crops for reduced-till organic cabbage.

Investigation of ground cover tarps in organic reduced tillage beets.

Utility of tillage radish and deep zone tillage for producing peas organically with reduced tillage.

### **2016 Annual Report**

Evaluation of conventional fungicides for downy mildew in sweet basil.

Evaluation of biopesticides and an organic copper fungicide for downy mildew in sweet basil.

Evaluation of Procidic fungicide for downy mildew in sweet basil using plant-dip treatment procedure.

Efficacy of organic fungicides for downy mildew in sweet basil determined using a plant-dip treatment procedure.

Evaluation of fungicides for powdery mildew on pumpkins.

Fungicide sensitivity of cucurbit powdery mildew pathogen isolates on Long Island in 2015.

Fungicide sensitivity of cucurbit powdery mildew pathogen isolates from Wisconsin in 2015.

Evaluation of biopesticides for powdery mildew on pumpkins.

Evaluation of management programs without chlorothalonil for powdery mildew in pumpkin.

Evaluation of Halloween pumpkin varieties resistant to powdery mildew.

Identification of pathotypes of the cucurbit downy mildew pathogen occurring on Long Island.

Efficacy of fungicides for managing downy mildew organically in cucumber.

Efficacy of fungicides for downy mildew in cucumber assessed with using a plantdip treatment procedure. Evaluation of disease-resistant tomatoes developed by Cornell breeder. experiment 1.

Evaluation of disease-resistant tomatoes developed by Cornell breeder. experiment 2.

Evaluation of Cornell half-heirloom disease-resistant tomatoes.

Evaluation of biopesticides for bacterial speck in tomatoes.

Monitoring late blight occurrence in tomatoes and potatoes on Long Island.

Investigation of nitrogen fertility management practices in organic reduced tillage winter squash.

Investigation of winter-hardy cover crop practices in organic reduced tillage cabbage.

Investigation of winter-kill cover crop practices and tillage radish in organic reduced tillage snap peas.

# **2015 Annual Report**

Evaluation of Cornell late blight decision support system for timing fungicide applications for foliar diseases in tomato.

Evaluation of late blight resistant tomato varieties conducted with organic practices.

Evaluation of late blight resistant tomato experimental varieties.

Evaluation of tomato experimental varieties resistant to late blight, early blight, and Septoria leaf spot.

Evaluation of biopesticides for bacterial speck in tomatoes.

Investigating occurrence and assisting growers manage late blight in organically-produced tomato and potato.

Assessment of resistance to powdery mildew race 1 and race 2 in cantaloupe.

Efficacy of fungicides for managing powdery mildew in pumpkin.

 $Fungicide\ sensitivity\ of\ cucurbit\ powdery\ mildew\ pathogen\ isolates\ on\ LI\ in\ 2014.$ 

Identification of pathotypes of the cucurbit downy mildew pathogen occurring on LI.

Validation of the CDM ipmPIPE Forecasting System.

Relating aerial transport of pathogen spores to outbreaks of cucurbit downy mildew.

Cucurbit downy mildew.

An update on population biology of the causal agent, *Pseudoperonospora cubensis*.

Evaluation of biopesticides for managing Phytophthora blight in pepper.

Evaluation of biopesticides for managing Phytophthora blight in pumpkin.

Occurrence and impact of downy mildew on sweet basil in 2015.

Downy mildew susceptibility of sweet basil varieties and experimental resistant lines.

Assessment of downy mildew resistance in experimental sweet basil lines.

Evaluation of fungicides for managing downy mildew in sweet basil.

Evaluation of organic and conventional fungicide programs for downy mildew in sweet basil.

Evaluation of biopesticides for managing downy mildew in sweet basil.

Investigation of nitrogen fertility management practices in organic reduced tillage winter squash.

#### **2014 Annual Report**

Evaluation of Cornell Late Blight Decision Support System for timing fungicide applications for foliar diseases in tomato.

Evaluation of pyriofenone for powdery mildew in tomato.

Evaluation of late blight resistant tomato varieties conducted with organic practices. Investigating occurrence and assisting growers manage late blight in organically-produced tomato and potato.

Efficacy of fungicides for managing powdery mildew in pumpkin.

Observations on powdery mildew management in cucurbits.

Fungicide sensitivity of cucurbit powdery mildew pathogen isolates on Long Island in 2013.

Evaluation of biopesticides for managing Phytophthora blight in pepper.

Evaluation of biopesticides for managing Phytophthora blight in squash.

Identification of pathotypes of the cucurbit downy mildew pathogen occurring on Long Island. Validation of the CDM ipmPIPE Forecasting System.

Relating aerial transport of pathogen spores to outbreaks of cucurbit downy mildew.

Population biology of *Pseudoperonospora cubensis*, the causal agent of cucurbit downy mildew.

Evaluation of downy mildew resistance in experimental hybrids of cucumber.

Assessment of downy mildew resistance in experimental basil hybrids.

Downy mildew susceptibility of basil varieties and experimental resistant hybrids.

Evaluation of organic and conventional fungicide programs for downy mildew in sweet basil.

Organic copper fungicides compared for efficacy, crop safety and visible residue.

### **2013 Annual Report**

Evaluation of biopesticides for foliar diseases in organically-produced tomato.

Evaluation of fungicides for controlling white mold in tomato.

Evaluation of late blight resistant tomato varieties conducted with organic practices.

Investigating occurrence and assisting growers manage late blight in organically-produced tomato and potato.

Investigating potential of tomato fruit with late blight to survive as a source of inoculum for volunteer seedlings growing out of these fruit.

Powdery mildew resistant melon variety evaluation.

Identification of races of the cucurbit powdery mildew pathogen occurring on Long Island.

Efficacy of fungicides for managing powdery mildew in pumpkin.

Fungicide sensitivity of cucurbit powdery mildew pathogen isolates on Long Island in 2012.

Investigation of cross resistance to SDHI fungicides in the cucurbit powdery mildew fungus.

Demonstration of integrated management program for Phytophthora blight in pumpkin.

Efficacy of **c**opper fungicides for managing powdery mildew in zucchini.

Organic copper fungicides compared for crop safety, residue, and mixing ability.

Identification of pathotypes of the cucurbit downy mildew pathogen occurring on Long Island.

Validation of the CDM ipmPIPE forecasting system.

Relating aerial transport of pathogen spores to outbreaks of cucurbit downy mildew.

Population biology and ecology of cucurbit downy mildew pathogen, *Pseudoperonospora cubensis*, in eastern United States.

Examination of new downy mildew resistant cucumbers.

Efficacy of fungicides for managing downy mildew in cucumber.

Evaluation of fungicides and biopesticides for managing downy mildew in basil.

Assessment of downy mildew susceptibility in basil cultivars, breeding lines, and crosses in New York, 2013.

Evaluation of downy mildew-resistant basil varieties in New York, 2013.

Monitoring program for downy mildew occurrence in basil in the USA.

Unusual disease occurrence associated with atypically dry fall weather.

### 2012 Annual Report

Evaluation of reduced tillage production system for green beans.

Evaluation of reduced tillage production system for pumpkin.

Evaluation of biopesticides for foliar diseases in organically-produced tomato.

Evaluation of fungicides for powdery mildew in tomato.

Evaluation of fungicides for controlling white mold in tomato.

Evaluation of late blight resistant tomato varieties conducted with organic practices.

Investigating occurrence and assisting growers manage late blight in tomato and potato.

Powdery mildew resistant melon variety evaluation.

Identification of races of the cucurbit powdery mildew pathogen occurring on Long Island.

Efficacy of fungicides for managing powdery mildew in pumpkin.

Fungicide sensitivity of cucurbit powdery mildew pathogen isolates on Long Island in 2011.

Fungicide sensitivity of cucurbit powdery mildew pathogen populations on Long Island in 2012.

Demonstration of integrated management program for Phytophthora blight in pumpkin.

Phytophthora blight resistant pepper variety evaluation.

Evaluation of biopesticides for managing Phytophthora blight in pepper.

Evaluation of biopesticides for managing Phytophthora blight in cucurbits.

Identification of pathotypes of the cucurbit downy mildew pathogen occurring on Long Island.

Efficacy of fungicides for managing downy mildew in cucumber.

Evaluation of downy mildew resistance in experimental hybrids of cucumber.

Evaluation of fungicides and biopesticides for managing downy mildew in basil.

Monitoring program for downy mildew occurrence in basil in the USA.

Ozone concentration in Riverhead in 2012.

Assessment of ambient ozone impact on plant productivity using a snap bean bioindicator system.

# **2011 Annual Report**

Evaluation of reduced tillage production system for pumpkin.

Evaluation of reduced tillage production system for butternut squash.

Evaluation of biopesticides for foliar diseases in organically-produced tomato.

Evaluation of fungicides for powdery mildew in tomato.

Evaluation of late blight resistant tomato varieties and experimental hybrids.

*Phytophthora infestans* transmitted to seedlings growing from tomato fruit rotted by late blight.

Investigation of the ability of *Phytophthora infestans* to survive on tomato seed and infect seedlings.

Powdery mildew resistant muskmelon variety evaluation.

Identification of races of the cucurbit powdery mildew pathogen occurring on LI.

Powdery mildew resistant yellow summer squash variety evaluation.

Powdery mildew resistant zucchini squash variety evaluation.

Powdery mildew-resistant acorn-type winter squash variety evaluation.

Powdery mildew-resistant butternut-type winter squash variety evaluation.

Powdery mildew resistant pumpkin variety evaluation.

Efficacy of Vivando for managing powdery mildew in cucurbit crops.

Efficacy of fungicides for managing cucurbit powdery mildew.

Fungicide sensitivity of cucurbit powdery mildew pathogen isolates on LI in 2010.

Fungicide sensitivity of cucurbit powdery mildew pathogen populations on LI in 2011.

Identification of pathotypes of the cucurbit downy mildew pathogen occurring on LI.

Efficacy of fungicides for managing downy mildew in cucumber. Evaluation of biopesticides for managing downy mildew in basil.

Monitoring program for downy mildew occurrence in basil in the USA.

Biofumigant mustard cover crop and mustard meal product examined for managing Phytophthora blight.

Serenade soil evaluated for managing Phytophthora blight.

Efficacy of biological products for Fusarium crown rot of pumpkin.

Ozone concentration in Riverhead in 2011.

Assessment of ambient ozone impact on plant productivity using a snap bean bioindicator system.

# **2010 Annual Report**

Evaluation of reduced tillage production system for pumpkin.

Evaluation of reduced tillage production system for fall brassicas.

Organic heirloom tomato variety evaluation.

Late blight resistant tomato variety evaluation.

Identification of races of the cucurbit powdery mildew pathogen occurring on Long Island.

Evaluation of powdery mildew resistant cantaloupe varieties.

Evaluation of powdery mildew resistant melon varieties with personal-sized fruit.

Powdery mildew resistant yellow summer squash variety evaluation.

Powdery mildew resistant zucchini squash variety evaluation.

Powdery mildew-resistant acorn-type winter squash variety evaluation.

Powdery mildew-resistant butternut-type winter squash variety evaluation.

Powdery mildew resistant pumpkin variety evaluation.

Fungicides for managing cucurbit powdery mildew evaluated in pumpkin.

Fungicide sensitivity of cucurbit powdery mildew pathogen populations on Long Island in 2010.

Fungicide sensitivity of cucurbit powdery mildew pathogen isolates on Long Island in 2010.

Efficacy of a new experimental fungicide developed by BASF Corporation for managing powdery mildew in cantaloupe.

Evaluation of fungicides for Phytophthora blight in snap beans.

Efficacy of biopesticides for managing downy mildew in organically produced cucumber.

Evaluation of biopesticides for managing downy mildew in basil.

Evaluation of BASF experimental fungicides for powdery mildew in tomato.

Ozone concentrations in Riverhead in 2010.

Assessment of ambient ozone impact on plant productivity using a snap bean bioindicator system.

### **2009 Annual Report**

Sensitivity to fungicides of the cucurbit powdery mildew fungus on Long Island in 2009.

Evaluation of fungicides for managing powdery mildew on pumpkin and treatment impact on pathogen sensitivity to fungicides.

Evaluation of powdery mildew resistant melon varieties with personal-sized fruit.

Evaluation of powdery mildew resistant melon varieties.

Powdery mildew resistant zucchini variety evaluation.

Powdery mildew resistant yellow summer squash variety evaluation.

Powdery mildew resistant acorn squash variety evaluation.

Evaluation of powdery mildew resistant butternut squash varieties.

Evaluation of powdery mildew resistant pumpkin varieties.

Evaluation of integrated management programs with biopesticides and a resistant variety for powdery mildew in pumpkin.

Evaluation of integrated management programs with biopesticides and a resistant variety for powdery mildew in melon.

Evaluation of integrated management programs with biopesticides and a resistant variety for powdery mildew in butternut squash.

Monitoring cucurbit downy mildew on Long Island.

Susceptibility to downy mildew of pickling-type cucumber varieties.

Susceptibility to downy mildew of slicer-type cucumber varieties.

Efficacy of fungicides for managing downy mildew in organically-produced cucumber.

Efficacy of biopesticides for managing foliar diseases in organically-produced tomato.

Evaluation of fungicides for downy mildew in basil.

Susceptibility of basil varieties to downy mildew.

Assessment of ambient ozone impact on plant productivity using a snap bean bioindicator system.

# **2008 Annual Report**

Sensitivity to fungicides of the cucurbit powdery mildew fungus on Long Island in 2008.

Sensitivity to new and currently-registered fungicides of the cucurbit powdery mildew fungus.

Evaluation of fungicides for managing powdery mildew on pumpkin and treatment impact on pathogen sensitivity to fungicides.

Evaluation of a biopesticide and the fungicide Rally for managing powdery mildew on pumpkin.

Identification of races of the cucurbit powdery mildew pathogen occurring on Long Island.

Evaluation of powdery mildew resistant melon varieties.

Evaluation of powdery mildew resistant pumpkin varieties.

Powdery mildew resistant zucchini and yellow summer squash variety evaluation.

Powdery mildew resistant acorn squash variety evaluation.

Evaluation of powdery mildew resistant butternut squash varieties.

Hard-rind pumpkin variety evaluation for Phytophthora fruit rot.

Evaluation of Phytophthora-resistant bell pepper varieties with and without a fungicide program.

Observational study of a biofumigant mustard cover crop for managing Phytophthora blight in cucurbits.

Investigation of the Phytophthora pathogen causing pod rot in snap bean.

Investigation of populations of *Phytophthora capsici* occurring on Long Island farms.

Monitoring cucurbit downy mildew on Long Island.

Susceptibility to downy mildew of slicer and pickling-type cucumber varieties.

Efficacy of fungicides for managing downy mildew in organically-produced cucumber.

Efficacy of biopesticides for managing foliar diseases in organically-produced tomato.

Ozone concentrations in Riverhead in 2008.

Assessment of ozone concentrations in Riverhead using a clover bioindicator system.

Assessment of ambient ozone impact on plant productivity using a snap bean bioindicator system.

Evaluation of reduced tillage production system with conventional and controlled release fertilizer for pumpkin.

### **2007 Annual Report**

Sensitivity to fungicides of the powdery mildew fungus on Long Island in 2007.

Evaluation of fungicides for managing powdery mildew on pumpkin.

Evaluation of powdery mildew resistant pumpkin varieties.

Evaluation of powdery mildew resistant pumpkin experimentals.

Evaluation of powdery mildew resistant zucchini squash varieties.

Evaluation of powdery mildew resistant straightneck yellow summer squash varieties.

Evaluation of powdery mildew resistant acorn squash varieties.

Evaluation of powdery mildew resistant muskmelon and specialty type varieties.

Evaluation of an integrated program for managing powdery mildew with resistant squash variety and reduced fungicide program.

Evaluation of integrated programs with biopesticides and a resistant variety for powdery mildew in pumpkin, butternut squash, and cantaloupe.

Evaluation of fungicide programs for managing Phytophthora blight in cucurbits.

Foliar and drip applications of biopesticides evaluated for managing Phytophthora blight in cucurbits.

Hard-rinded pumpkin variety evaluation for Phytophthora fruit rot.

On-farm evaluation of clover-planted sprayer driveways to avoid conditions favorable for Phytophthora blight.

Occurrence of fungicide resistance and impact on managing downy mildew in cucumber.

Evaluation of fungicide programs for managing downy mildew in butternut squash. Ozone concentrations in Riverhead in 2007.

Assessment of ambient ozone impact on plant productivity using a clover bioindicator system.

Assessment of ambient ozone impact on plant productivity using a snap bean bioindicator system.

### 2006 Annual Report

Powdery mildew of pumpkin: Evaluation of powdery mildew resistant varieties. Powdery mildew of winter squash.

Evaluation of powdery mildew resistant acorn-type squash varieties.

Powdery mildew of yellow summer squash: Evaluation of powdery mildew resistant varieties.

Powdery mildew of zucchini squash: Evaluation of powdery mildew resistant varieties.

Powdery mildew of pumpkin: Efficacy and application timing of Oxidate.

Powdery mildew of pumpkin: Greenhouse evaluation of the efficacy of Serenade Max used alone or combined with a QoI Fungicide.

Powdery mildew of pumpkin: Efficacy of various rates of Nova for DMI Fungicide sensitive and moderately resistant powdery mildew isolates.

Powdery mildew of cucurbits: Baseline sensitivity of *Podosphaera xanthii* to Boscalid.

Powdery mildew of cucurbits: Fungicide sensitivity of *Podosphaera xanthii* on Long Island in 2006.

Powdery mildew of pumpkin: Efficacy of fungicide programs.

Powdery mildew of pumpkin: Evaluation of biopesticides and biocompatible fungicides.

Powdery and downy mildews of butternut squash: Evaluation of fungicides programs.

Downy mildew of butternut squash: Evaluation of fungicides programs.

Bacterial wilt of cucumber: Evaluation of cucumber varieties.

Phytophthora blight of pepper: Evaluation of fungicides on Phytophthora crown rot tolerant and susceptible varieties.

Phytophthora blight of pumpkin: Evaluation of biopesticides.

Phytophthora blight of pumpkin: Evaluation of hard-rinded varieties.

Organically-produced tomato: Evaluation of a health-promoting product and a copper fungicide for foliar disease management.

Tomato: Evaluation of a commercial media containing mycorrhizal fungi.

Ozone concentrations in Riverhead in 2006.

Assessment of ozone concentrations in Riverhead using a clover bioindicator system.

Assessment of ambient ozone impact on plant productivity using a snap bean bioindicator system.

Reduced-till pumpkin production in rye straw mulch plus clover living mulch.

# **2005 Annual Report**

Powdery mildew of cucurbits: Baseline sensitivity of *Podosphaera xanthii* to quinoxyfen.

Powdery mildew of cucurbits: Efficacy investigation for Pristine and its component fungicides using QoI-resistant and QoI-sensitive isolates.

Powdery mildew of pumpkin: Evaluation of fungicide programs.

Powdery mildew of butternut squash: Evaluation of experimental fungicides compared to registered fungicides.

Powdery mildew of pumpkin: Evaluation of biopesticides and biocompatible fungicide.

Powdery mildew of pumpkin: Evaluation of copper fungicides.

Powdery mildew of muskmelon: Comparison of resistant varieties under a reduced-fungicide program.

Powdery mildew of cucurbits: Determination of pathogen race.

Powdery mildew of pumpkin: Evaluation of powdery mildew resistant varieties.

Powdery mildew of squash: Evaluation of powdery mildew resistant winter squash varieties.

Phytophthora blight of pepper: Efficacy of Terraclean (a hydrogen dioxide product from Biosafe Systems).

Phytophthora blight of squash: Efficacy of currently registered fungicides.

Phytophthora blight of pepper: Evaluation of Dupont Fungicides.

Phytophthora blight of squash: Evaluation of Dupont Fungicides.

Phytophthora blight of pumpkin: Efficacy of alternative products.

Organically-produced tomato: Evaluation of hairy vetch plus rye mulch and a health-promoting product for foliar disease management.

Organically-produced tomato: Efficacy of organic products for foliar disease management.

Snap bean: Evaluation of compost as a fertilizer source and investigation of crop susceptibility to Phytophthora blight.

Tomato: Evaluation of compost as a fertilizer source and of a commercial preparation containing mycorrhizal fungi.

Ozone concentrations in Riverhead in 2005.

Assessment of ozone concentrations in Riverhead using a clover bioindicator system.

Assessment of ambient ozone impact on plant productivity using a snap bean bioindicator system.

Development of butterfly bush varieties grown under naturally high ozone on Long Island.

Reduced-till pumpkin production in rye straw mulch plus clover living mulch.

# 2004 Annual Report

Powdery mildew of cucurbits: Occurrence of fungicide resistance on long island.

Powdery mildew of pumpkin: Evaluation of currently registered fungicides and new fungicides.

Powdery mildew of butternut squash: Evaluation of experimental fungicides compared to programs with new and registered products.

Powdery mildew of pumpkin: Evaluation of biopesticides.

Powdery mildew of pumpkin: Evaluation of compost tea and biofungicides.

Powdery mildew of cucurbits: Determination of pathogen race.

Powdery mildew of cucurbits: Evaluation of powdery mildew resistant pumpkin and winter squash varieties.

Evaluation of compost as a fertilizer source and for managing Phytophthora blight in pumpkin.

Phytophthora blight of squash: Evaluation of currently registered fungicides and new fungicides.

Phytophthora blight of pepper: Evaluation of currently registered and new fungicides on susceptible and Phytophthora-resistant varieties.

Organically-produced tomato: Nitrogen fertility and foliar disease management. Ozone concentrations in Riverhead in 2004.

Assessment of ambient ozone impact on plant productivity using a snap bean bioindicator system.

Development of butterfly bush varieties grown under naturally high ozone on Long Island.

Reduced-till pumpkin production in rye straw mulch plus clover living mulch.

Comparison of no-till organically-produced pumpkins grown from seed or transplants.

#### **2003 Annual Report**

Powdery mildew of cucurbits: Occurrence of fungicide resistance on Long Island.

Powdery mildew of pumpkin: Evaluation of currently registered fungicides and new fungicides.

Powdery mildew of acorn squash: Efficacy of genetic control, used alone and combined with fungicides.

Powdery mildew of butternut squash: Efficacy of genetic control, used alone and combined with fungicides.

Powdery mildew of cucurbits: Determination of pathogen race.

Powdery mildew of muskmelon: Evaluation of new nozzles and an air assist sprayer for improving spray coverage and disease control on undersides of leaves.

Powdery mildew of pumpkin: Evaluation of new nozzles and an air assist sprayer for improving spray coverage and disease control on undersides of leaves.

No-till pumpkin production in rye straw mulch plus clover living mulch.

Powdery mildew of pumpkin: Evaluation of compost tea and biofungicides.

Bacterial wilt of cucurbits: Susceptibility of pumpkin varieties.

Phytophthora blight of squash: Evaluation of currently registered fungicides and new fungicides.

Organically-produced tomato: Nitrogen fertility and foliar disease management. Evaluation of compost as a fertilizer source and for managing Phytophthora blight. Ozone concentrations in Riverhead in 2003.

Assessment of ambient ozone impact on plant productivity using a clover bioindicator system.

Assessment of ambient ozone impact on plant productivity using a snap bean bioindicator system.

# **2002 Annual Report**

Powdery mildew of pumpkin: Evaluation of currently registered fungicides and new fungicides.

Powdery mildew of pumpkin: Evaluation of protectant fungicides.

Powdery mildew of acorn squash: Efficacy of genetic control, used alone and combined with fungicides.

Powdery mildew of butternut squash: Efficacy of genetic control, used alone and combined with fungicides.

*In vitro* tests to determine sensitivity of cucurbit powdery mildew to Flint fungicide in 2000 and 2002.

Phytophthora blight of cucurbits: Implementing a management program.

Ozone concentrations in Riverhead in 2002.

Development and ozone sensitivity of butterfly bush varieties grown under naturally high ozone on LI.

Organic vegetable management.

Using cover crops for weed control in herb plantings.

# 2001 Annual Report

Epidemiology of the cucurbit powdery mildew.

Additions to the host range and early spring occurrence of powdery mildew on greenhouse-grown verbena.

Powdery mildew of pumpkin: Evaluation of currently registered fungicides and new fungicides.

Powdery mildew of muskmelon: Evaluation of new nozzles and an air assist sprayer for improving spray coverage and disease control on undersides of leaves.

Powdery mildew of pumpkin: Evaluation of new nozzles and an air assist sprayer for improving spray coverage and disease control on undersides of leaves.

Powdery mildew of cucurbits: Determination of pathogen race.

Powdery mildew of muskmelon: Alternative fungicides to Bravo evaluated on varieties differing in susceptibility to powdery mildew.

Powdery mildew of pumpkin: Alternative fungicides to Bravo evaluated on varieties differing in susceptibility to powdery mildew.

Powdery mildew of acorn squash: Efficacy of resistant varieties.

Phytophthora blight of pumpkin: Evaluation of brewery-waste compost.

Epidemiology of *Phytophthora capsici* in cucurbits: Spread by wind-borne debris.

Epidemiology of *Phytophthora capsici* in cucurbits: Formation of oospores in fruit and seeds.

Comparison of cucurbit crop types for their attractiveness to cucumber beetles and susceptibility to bacterial wilt.

Bacterial wilt of cucumber: Evaluation of resistant slicer varieties.

Evaluation of insecticides for managing cucumber beetles and bacterial wilt.

Evaluation of fungicides for powdery mildew of tomato.

Ozone concentrations in Riverhead in 2001.

Assessment of ozone concentrations in Riverhead using a clover bioindicator system.

Investigation of pesticide impacts on ozone response for a snap bean bioindicator system.

Summary of vegetable disease diagnoses.

### **2000 Annual Report**

Powdery mildew of pumpkin: Evaluation of currently registered fungicides and new fungicides.

Efficacy of Nova when challenged by powdery mildew isolates with moderate sensitivity.

*In vitro* tests to determine baseline sensitivity of *Sphaerotheca fusca* on squash to Flint fungicide.

*In vitro* tests to determine baseline sensitivity of *Sphaerotheca fusca* on squash to the fungicides BAS 490 02F and BAS 500 F.

Powdery mildew of cucurbits: Determination of pathogen race.

Powdery mildew of pumpkin: Alternative fungicides to Bravo evaluated on varieties differing in susceptibility to powdery mildew.

Powdery mildew of muskmelon: Alternative fungicides to Bravo evaluated on varieties differing in susceptibility to powdery mildew.

Susceptibility of watermelon to races of cucurbit powdery mildew.

Evaluation of new nozzles and an air assist sprayer for improving spray coverage on under surfaces of cucurbit leaves.

Powdery mildew and Phytophthora fruit rot of pumpkin: Evaluation of plant growth enhancers plus a fungicide.

Phytophthora fruit rot of pumpkin: Evaluation of Acrobat MZ fungicide.

Evaluation of Messenger for the control of cucumber beetles and bacterial wilt of pumpkin.

Comparison of cucurbit crops and varieties for their attractiveness to cucumber beetles and susceptibility to bacterial wilt.

Evaluation of Admire for managing cucumber beetles and bacterial wilt.

Evaluation of fungicides for powdery mildew of tomato.

Bacterial canker of tomato: Investigation of its occurrence and management on Long Island farms.

First occurrence of powdery mildew (*Leveillula taurica*) on peppers on Long Island. Ozone concentrations in Riverhead in 2000.

Assessment of ozone concentrations in Riverhead using a clover bioindicator system.

Summary of vegetable disease diagnoses.

### 1999 Annual Report

Powdery mildew of pumpkin: Evaluation of currently registered fungicides and new fungicides.

Powdery mildew of muskmelon: Evaluation of fungicides and resistance management programs.

Powdery mildew of pumpkin: Impact of fungicide use on sensitivity of the pathogen to DMI fungicides.

*In vitro* tests to determine baseline sensitivity of *Sphaerotheca fusca* on squash to the fungicides BAS 490 02F and BWC 011 01F.

Powdery mildew of Cucurbits: determination of pathogen race.

Powdery mildew of pumpkin: Disease reaction of resistant varieties and experimentals.

Powdery mildew of muskmelon: Disease reaction of resistant varieties and experimentals.

Phylogenetic position of the cucurbit powdery mildew fungus confirmed by analysis of its DNA sequence.

New name for the cucurbit powdery mildew fungus Phytophthora fruit rot and powdery mildew of pumpkin.

Evaluation of plant growth enhancers plus a fungicide.

Phytophthora fruit rot of pumpkin: Evaluation of Acrobat MZ fungicide.

Phytophthora fruit rot of pumpkin: Evaluation of post-harvest treatments.

Evaluation of fungicides for Phytophthora fruit rot and tip blight of summer squash. Host range of *Phytophthora capsici*.

Chemotaxis of zoospores of *Phytophthora capsici* to various plant extracts and growth of the fungus on extract media.

Evaluation of Messenger for the control of cucumber beetles and bacterial wilt of pumpkin.

Comparison of cucurbit crops and varieties for their attractiveness to cucumber beetles and susceptibility to bacterial wilt.

Evaluation of plastic mulch and staking for managing fruit rots in fresh-market tomatoes.

Ozone concentrations in Riverhead in 1999. Assessment of ozone concentrations in Riverhead using a clover bioindicator system.

Impact of ambient ozone on yield of snap bean.

Summary of vegetable disease diagnoses.

### 1998 Annual Report

Powdery mildew of pumpkin: Evaluation of currently registered fungicides and new fungicides.

Powdery mildew of cucurbits: Occurrence of resistance to Bayleton and Benlate at the LIHRL in 1998.

Powdery mildew of cucurbits: Pathogen sensitivity to Nova in research and commercial pumpkin fields.

*In vitro* tests to determine baseline sensitivity of *Sphaerotheca fusca* on squash to the Fungicides BAS 490 02F and BWC 011 01F.

Powdery mildew of cucurbits: Determination of pathogen race.

Powdery mildew of pumpkin: Disease reaction of resistant experimental varieties.

Effect of temperature on *in vitro* cleistothecium formation of the cucurbit powdery mildew.

Host range of the cucurbit powdery mildew fungus.

Identity of the cucurbit powdery mildew.

Phytophthora fruit rot of pumpkin: Evaluation on Acrobat MZ fungicide.

Evaluation of fungicides for Phytophthora fruit rot and tip blight of summer squash.

Effect of organic and plastic mulches on incidence of post-harvest pumpkin fruit rot caused by *Phytophthora capsici*.

Host range of *Phytophthora capsici*.

Phytophthora fruit rot of pumpkin: Susceptibility of hard-rinded and conventional pumpkins.

Phytophthora fruit rot of pumpkin: Evaluation of straw mulches and ryegrass living mulch.

Phytophthora blight: Comparison of susceptibility of summer squash, eggplant, pepper, and tomato.

Phytophthora blight of pepper: Evaluation of a resistant variety.

Bacterial leaf spot of pepper: Evaluation of bactericide programs initiated after disease detection.

Bacterial leaf spot of pepper: Comparison of resistant varieties and chemical control.

Foliar disease control in tomato with TOM-CAST, a weather-based disease forecasting system.

Evaluation of plastic mulch and staking for managing fruit rots In fresh-market tomatoes.

White rust of spinach: Comparison of fungicides and resistant varieties for control of white rust on spinach.

Assessment of ozone concentrations in Riverhead using a clover bioindicator system.

#### **1997 Annual Report**

Powdery mildew of pumpkin: Evaluation of Currently Registered Fungicides and New Fungicides.

Powdery mildew of cucurbits: Occurrence of Resistance to Bayleton and Benlate at the LIHRL in 1997.

In vitro Tests to Determine Base-line Sensitivity of Cucurbit Powdery Mildew to the Fungicide Azoxystrobin.

In vitro Tests to Determine Sensitivity of Cucurbit Powdery Mildews from Treated and Untreated Field Plots to the Fungicide Azoxystrobin.

Powdery mildew of cucurbits: Determination of Pathogen Race.

Powdery mildew of pumpkin: Disease Reaction of Resistant Experimental Varieties.

Cleistothecium formation in cucurbit powdery mildew under natural conditions.

Host range of the cucurbit powdery mildew fungus.

Identity of the cucurbit powdery mildew.

Phytophthora fruit rot of pumpkin: Susceptibility of Hard-rinded and Conventional Pumpkins.

Evaluation of fungicides for Phytophthora fruit rot and tip blight of summer squash.

Phytophthora fruit rot of pumpkin: Evaluation of Oat Straw Mulch and Ryegrass Living Mulch.

Effect of Organic and Plastic Mulches on Incidence of Pumpkin Fruit Rot Caused by Phytophthora capsici.

Bacterial leaf spot of Pepper: Evaluation of Bactericide Programs Initiated After Disease Detection.

Bacterial leaf spot of Pepper: Comparison of Resistant Varieties and Chemical Control.

Races of *Xanthomonas campestris* pv. *vesicaria* on peppers from three northeastern states.

Foliar Disease Control In tomato with TOM-CAST, a weather-based disease forecasting system.

Evaluation of plastic mulch and staking for managing fruit rots in fresh-market tomatoes.

White Rust of Spinach: Comparison of Fungicides and Resistant Varieties for Control of White Rust on Spinach.

White Rust of Spinach: Comparison of Fungicides for Control of White Rust on Spinach.

White Rust of Spinach: Variety Evaluation.

Impact of ambient ozone on sensitive and tolerant Snap Bean varieties.

Summary of vegetable disease diagnoses.

### 1996 Annual Report

Powdery mildew of pumpkin: Evaluation of Currently Registered Fungicides and New Fungicides.

Powdery mildew: An In-Field Seedling Assay for Fungicide Sensitivity.

In vitro Tests to Determine Base-line Resistance of Cucumber Powdery Mildew to the Fungicide Procure 50W (triflumizole).

Powdery mildew of melon: Evaluation of Biocompatible Fungicides.

Powdery mildew of pumpkin: Evaluation of Biocompatible Fungicides.

In Vitro control of cucurbit powdery mildew on squash leaves using JMS Stylet-Oil® sprayed at different pressures.

Powdery mildew of summer squash: Management with Fungicides and/or Host Resistance (PSR 47592).

Powdery mildew of summer squash: Management with Fungicides and/or Host Resistance (PSR 50592).

Powdery mildew of pumpkin: Disease Reaction of Resistant Experimental Varieties. Epidemiology of cucurbit powdery mildew.

Mating Compatibility of Race 1 and Race 2 Isolates.

Phytophthora fruit rot of pumpkin: Fungicide evaluation.

Phytophthora fruit rot of pumpkin: Evaluation of Solarization with Cruciferous Debris, Sorghum Sudan Grass, and Composted Turkey Litter.

Effect of Organic and Plastic Mulches on Incidence of Pumpkin Fruit Rot Caused by Phytophthora capsici.

Phytophthora fruit rot of pumpkin: Evaluation of Subsoiling and a Straw Mulch.

Phytophthora Crown and fruit rot of Cucurbits: Search for a Source of Genetic Resistance.

Phytophthora fruit rot of pumpkin: Evaluation of HMX4696.

Disease Control and Economics of fungicides and resistant varieties for managing white Rust of Spinach.

Ambient ozone levels in Riverhead and Impact on sensitive and tolerant Snap Bean varieties.

Assessment of ozone concentrations in riverhead using a clover bioindicator system.

Summary of vegetable disease diagnoses.

Summary of vegetable IPM Programs.

### **1995 Annual Report**

Powdery mildew of pumpkin: Evaluation of reduced-sprays IPM programs.

Powdery mildew of summer squash: Management with fungicides and/or host resistance (Park's Crookneck PMR).

Powdery mildew of summer squash: Management with fungicides and/or host resistance (PSR 47592).

Powdery mildew of summer squash: Management with fungicides and/or host resistance (PSR 50592).

Powdery mildew of melon: Management with fungicides and/or host resistance.

In vitro control of cucurbit powdery mildew on squash leaves using JMS Stylet-Oil® or Tween 20 detergent.

In vitro control of cucurbit powdery mildew on squash leaves using AQ-10® with the fungicides myclobutanil and triadimefon.

In vitro control of cucurbit powdery mildew on squash leaves using AQ-10® with or without the spray adjuvant Add-Q®.

Powdery mildew of squash: Evaluation of JMS Stylet-Oil, a biocompatible fungicide.

Powdery mildew of melon: Evaluation of biocompatible fungicides.

Mating compatibility of French isolates with American isolates of the cucurbit powdery mildew fungus.

Phytophthora fruit rot of pumpkin: Three-year rotation used alone or combined with a fungicide program.

Phytophthora crown and fruit rot of cucurbits: Evaluation of yard-waste compost under controlled conditions.

Phytophthora fruit rot.

Effect of compost amendment of soil in a greenhouse assay for fruit rot of pepper. Phytophthora fruit rot of pumpkin.

Evaluation of yard-waste compost used alone or with fungicides.

Detection of *Phytophthora capsici* in pumpkin plots amended with different amounts of yard-waste compost.

Phytophthora fruit rot of pumpkin: Evaluation of solarization with cruciferous debris and sorghum sudan grass.

Phytophthora crown and fruit rot of cucurbits: Search for a source of genetic resistance.

Ambient ozone levels in Riverhead, New York, and occurrence of ozone injury on pumpkin.

Sensitivity of pumpkin to ambient ozone evaluated by clean air releases.

Summary of vegetable disease diagnoses.

Spinach variety x disease observation.

Sensitivity of the new potato variety Andover to ozone.

### **1994 Annual Report**

Powdery mildew of summer squash: Successful management with host resistance and/or fungicides.

Powdery mildew of summer squash: Examination of integrating genetic and chemical controls for managing fungicide resistance.

Powdery mildew of pumpkin: Evaluation of reduced-sprays IPM programs.

Powdery mildew of winter squash: Evaluation of biocompatible products.

Powdery mildew of cucurbits: Fungicide sensitivity of the pathogen in the United States.

Powdery mildew of cucurbits: Competitive ability of fungicide-resistant isolates.

Powdery mildew of pumpkin: Effect of planting time on disease onset and development.

Investigation of factors influencing sexual reproduction in the cucurbit powdery mildew fungus.

Cleistothecial production under field conditions.

Investigation of factors influencing sexual reproduction in the cucurbit powdery mildew fungus.

Distribution of mating types in the U.S.

Phytophthora fruit rot of pumpkin: Fungicide evaluation.

Phytophthora fruit rot of pumpkin: Evaluation of yard-waste compost used alone or with fungicides.

Phytophthora fruit rot of cucurbits: Evaluation of fungicides based on challenge inoculation.

Phytophthora crown and fruit rot of cucurbits: Evaluation of Dinitroaniline herbicides.

Phytophthora fruit rot of cucurbits: Evaluation of an antagonistic fungus.

Phytophthora crown and fruit rot of cucurbits: Search for a source of genetic resistance.

Ambient ozone levels in Riverhead and occurrence of ozone injury on pumpkin. Impact of ambient ozone on yield of pumpkin.

Summary of vegetable disease diagnosis.

### 1993 Annual Report

Powdery mildew of summer squash: Successful management with host resistance and/or fungicides.

Powdery mildew of pumpkin: Successful management with fungicides applied after disease detection.

Powdery mildew of pumpkin: How sprayer choice affects fungicide effectiveness.

Powdery mildew of cucurbits: Fungicide sensitivity of the pathogen in the United States.

Powdery mildew of cucurbits: Competitive ability of fungicide-resistant isolates.

Powdery mildew of pumpkin: Effect of planting time on disease onset and development.

Cleistothecial production under field conditions.

Distribution of mating types in the U.S..

Investigation of factors influencing sexual reproduction in the cucurbit powdery mildew fungus: Effect of temperature.

Phytophthora fruit rot of pumpkin: Fungicide evaluation.

Phytophthora fruit rot of pumpkin: Soil fumigant evaluation.

Phytophthora fruit rot of pumpkin: Evaluation of Ridomil 2E applied through drip irrigation.

Phytophthora crown and fruit rot of cucurbits: Search for a source of genetic resistance.

Ambient ozone levels in Riverhead and occurrence of ozone injury on pumpkin.

Impact of ambient ozone on yield of pumpkin.

Summary of vegetable disease diagnosis.

### 1992 Annual Report

Black rot of crucifers: Importance of crop rotation as a management practice.

Occurrence of black rot in cruciferous weeds.

Black rot of crucifers: Efficacy of host resistance and copper bactericide applications.

Powdery mildew of cucurbits on Long Island: Its first appearance and identity.

Occurrence of cucurbit powdery mildew races on Long Island.

Powdery mildew of summer squash: Effect of flower and fruit removal.

Powdery mildew of summer squash: Successful management with host resistance and/or fungicides.

Impact of powdery mildew management practices on yield of summer squash.

Powdery mildew of pumpkin: Successful management with fungicides applied after disease detection.

Powdery mildew of pumpkin: Impact of fungicide usage on sensitivity of the pathogen to Bayleton and Benlate.

Powdery mildew of pumpkin: Impact of fungicide usage on sensitivity of the pathogen to Bayleton and Benlate.

Relationship between ozone injury and powdery mildew in pumpkin.

Investigation of factors influencing sexual reproduction in the cucurbit powdery mildew fungus.

Phytophthora fruit rot of pumpkin: Fungicide evaluation.

Phytophthora fruit rot of pumpkin: Evaluation of treatments applied to fruit.

Summary of vegetable disease diagnosis.

# **1991 Annual Report**

Black rot of crucifers: Importance of crop rotation as a management practice.

Black rot of crucifers: Seed treatment evaluation.

Black rot of crucifers: Efficacy of host resistance and copper bactericide applications.

Powdery mildew of summer squash: Successful management with host resistance and/or fungicides.

Powdery mildew of pumpkin: Successful management with fungicides applied after disease detection.

Powdery mildew of pumpkin: Impact of fungicide usage on sensitivity of the pathogen to Bayleton and Benomyl.

Summary of vegetable disease diagnosis.

### 1990 Annual Report

Evaluation of crop rotation as a management practice for black rot of crucifers.

Evaluation of a seed treatment for controlling black rot of crucifers.

Black rot of crucifers: Efficacy of seedbed applications of copper bactericides.

Black rot of crucifers: Evaluation of copper bactericides and application timing.

Evaluation of Aliette, Kocide and other bactericides for control of black rot of crucifers.

Management of powdery mildew of cucurbits: Development of a disease forecasting system.

Management of powdery mildew of cucurbits: Fungicide evaluation and effect of application timing.

Development of the sexual stage of the cucurbit powdery mildew fungus.

Disease diagnosis summary of vegetables, 1990.

# 1989 Annual Report

Development of IPM sampling procedures for black rot of crucifer: Comparison of black rot development and yield in direct-seeded and transplanted cauliflower.

Management of black rot of cauliflower: Action threshold determination for fixed copper and evaluation of Bravo C/M.

Evaluation of fixed copper applications to cauliflower seedbeds for managing black rot.

Determination of action threshold for managing powdery mildew with Bayleton. Disease diagnosis summary for vegetables, 1989.