The

Connecticut

Agricultural

Experiment

Station,

New Haven

a



Bulletin 1082 May 2022 One Hundred
Years of Research
and Service at the
Tobacco
Station/Valley
Laboratory

JAMES LAMONDIA, PH.D. Valley Laboratory

One Hundred Years of Research and Service at the Tobacco Station/Valley Laboratory

JAMES LAMONDIA, PH.D.

Valley Laboratory

TABLE OF CONTENTS

Bulletin 1082	3
References and Acknowledgements	
Appendix 1: Publications List.	
Appendix 2: Staff List.	
Appendix 3: 100 th Anniversary Celebration Agenda.	



The year 2021 marked the 100th anniversary of the Tobacco Station/Valley Laboratory in Windsor. The creation and evolution of this unique research station is an interesting story and the occasion of the 100th anniversary seems a good opportunity to try to tell it.

The beginning of this story must start with the surprising importance of tobacco in Connecticut history. Tobacco was an important plant in what would become Connecticut long before the presence of European colonists and the tobacco plant is a uniquely American plant and crop. There are a number of Nicotiana species present in the Americas and recent studies have shown that hunter gatherers in what is now Utah used tobacco at least 12,300 years ago. Tobacco was likely first gathered for use from wild plants and later domesticated and cultivated at least 6,000 to 8,000 years ago. Two tobacco species dominated: Nicotiana rustica in eastern North America, and N. tabacum in Central and South America. The tobacco grown and smoked by indigenous peoples in Connecticut prior to European contact was Nicotiana rustica, quite different from the N. tabacum species that we grow and recognize

today. N. rustica is a small plant with small round leaves and a high alkaloid content that made it not only chemically potent but bitter and peppery hot. It was used both as a stimulant and for medicinal and sacred purposes. Nicotiana tabacum was the species that dominated areas of the Americas controlled by the Spanish. N. tabacum was much preferred in Europe and the 'Spanish tobacco' as it was initially called was tightly controlled. John Rolfe arrived in Virginia in 1610 and is credited with first growing N. rustica and then introducing N. tabacum to the colony in 1612 with seeds obtained from an unknown source. This tobacco, which became known as Orinoco tobacco, became the economic savior of the new Virginia colony and encouraged economic success development of additional colonies.

European colonists first settled in Connecticut in what would become Windsor in the Connecticut River Valley in 1633 to farm some of the best agricultural soils in the northeast. They grew tobacco as one of their first cultivated crops, likely attempting to replicate the economic success of tobacco cultivation in Virginia. Like the Virginia experience, they initially grew the *N. rustica* cultivated by the

local indigenous peoples, from whom they undoubtedly learned cultivation techniques as they likely had no experience with growing or curing this new, to them, plant. The *N. rustica* was quickly replaced by the much more palatable *N. tabacum*, the tobacco species that we are familiar with today, apparently with seeds that were obtained from Virginia and Barbados at some time prior to 1640.

Early protectionist legislation in Connecticut enacted in 1640 suggested that tobacco was already a crop with economic importance even at that early date. Tobacco was documented as an export from Connecticut as early as 1700 and its importance grew over time in the eighteenth century as the specialization in cigars developed, distinguishing Connecticut tobacco from the Virginia tobacco type grown elsewhere. Both N. rustica and N. tabacum are natural allotetraploids that formed from the combination of two diploid species into a single plant containing two complete genomes. As such, tobacco has a wide range of variability that has resulted in the selection of many different types of plants with very different attributes. The early tobacco grown and selected over time by Connecticut farmers became a narrow-leaved type that was known as shoestring. Additional seeds from Maryland, Cuba and elsewhere were brought to Connecticut and shoestring was replaced over the 1800's with higher quality types resulting from unintended open pollinated crosses between existing Connecticut types and imported lines that eventually became different selections of 'Broadleaf' and 'Havana' tobacco land races.

Agriculture in Connecticut took a major leap forward with the establishment of The Connecticut Agricultural Experiment Station, the first agricultural experiment station in the country, in 1875. Early work at the Experiment Station focused primarily on chemical analysis of fertilizers, benefitting all farmers. The first publications from the Station regarding tobacco were from 1891 and 1892 and reported fertilizer effects on tobacco as well as investigations on pole burn, a post-harvest loss during the curing process. Perhaps because of the distance between the Station campus in New Haven and the primary tobacco production area of the Connecticut river valley from Hartford north through Massachusetts, or perhaps because of the specialized culture and labor associated with tobacco, the Station joined with growers in a rather unique collaboration. In the winter of 1891-1892, growers held a "Farmer's Institute" with CAES representatives in Windsor under the auspices of the State Board of Agriculture. The conclusion of the meeting stated that tobacco production in the valley could be improved by

"proper fertilization and by improved methods of handling the crop after cutting and that to this end carefully made experiments on the fertilization of tobacco and the methods of curing and fermenting were urgently needed." (Report of the CAES Director, 1892).

To facilitate this experimental research, tobacco growers incorporated a joint stock company that they aptly named the Connecticut Tobacco Experiment Company "For the purpose of conducting and carrying on the business of an experiment in the culture and cure of tobacco, the same to be carried on in connection with and under the supervision of the Conn. Agricultural Experiment Station. The place where said business is to be carried on is Poquonock, in the town of Windsor."

From the proceeds of stock sales, the company purchased 1.5 acres of land and requested that the Station design a curing barn. The executive committee of growers and CAES representatives agreed on a General Plan of Experiment that was published in the Report of the Director for 1892, whereby Station scientists conducted research on Company property supported by grower resources including a grower farm manager who planted, cultivated, harvested, cured and sorted the crop in cooperation with the Station. A number of experiments were conducted on fertility and production techniques over subsequent years with great success. This was the location and collaboration, eventually including a federal scientist, Marcus Floyd, who had developed shade tobacco in Florida, that resulted in the first shade tent and the successful demonstration of shade-grown cigar wrapper tobacco Connecticut.

6 N 5	9 .	, c, c	Johack com	Q	2 Shar
		afigur 3		Liepenia	
1 4 9 h	e Conn	CB :			ent Co.
8 8 a	8 3	POQU	IOŅOCĶ, COŅI	1.	9
	0	~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		-0
000.	@ L.O.	mo 4 %	1 H Ell.	with	
10hrs	Gernnes	That		4 .01	4.4
af 1	ruggor	is ent	itled to	mo I hai	share
of 3	ive Dolla	rs each,	of the bo	pital Sta	ck.
"					
			Ţobacco E		
trans	ferable or	uly on the	books of	said bomp	any, in pe
son	or by atto	rney, on s	surrender	of this be	rtificate.
	,	1 -			imold
Pagus	anack bank	dule 1 st 180	2.2	000	Presiden
ii sugar	, , , , , , , , , , , , , , , , , , ,	Huly 1 21 189		Eli.	1 Hough
@ @					Secretary and Treasure

Stock certificate, The Connecticut Tobacco Experiment Company, 1898.

Thus, was born what might have been the first Tobacco Experiment Station in the United States with the collaboration of local industry and Connecticut Agricultural Station Experiment dedicated resources exclusively to tobacco research. At least, if that collaboration had continued, that would have been the case. Instead, it seems that once shade tobacco was demonstrated as a solid success in Connecticut, the Tobacco Experiment Company ceased to exist. While some CAES scientists continued research projects with individual growers on cooperating farms, the official establishment of a Tobacco Station in Connecticut would have to wait another 29 years and then be demoted to the second tobacco research station to be established in the country. In 1912, the USDA and the North Carolina Department of Agriculture jointly established the Oxford Tobacco Research Station as the first experiment station to focus exclusively on tobacco in the United States, perhaps hoping to emulate the earlier success of the Connecticut collaboration between growers and state and federal scientists.

As noted, Connecticut Agricultural Experiment Station efforts on tobacco did not end with the dissolution of the Tobacco Experiment Company. Station scientists continued to conduct important research with the cooperation of the Windsor Tobacco Corporation or with individual interested growers. In 1914, CAES Bulletin #180 summarized Station research on tobacco from 1891 to 1914 and stated: "Wrapper tobacco leaf, the only type of

leaf raised in this state, is our largest cash crop." That ongoing research consisted of work on plant and soil fertility, curing and fermentation as well as early descriptions of insect pests and diseases and their practical controls. CAES plant breeders E. M. East, who left to continue genetics research at Harvard, H. K. Hayes, who left to become East's graduate student, and federal scientists E. G. Beinhart and A. D. Shamel conducted programs to improve quality and uniformity in Connecticut tobacco types. In 1914, Donald F. Jones joined the Station and continued this tobacco breeding work while famously experimenting with corn. His continuation of the tobacco breeding program resulted in the 1921 release of Connecticut Round Tip, a variety that was important not only on its own, but in the development of modern shade tobacco varieties.

$Sumatra \times Broadleaf$				
	•			
Cuban × Round Tip	Cuban × Broadleaf			
↓	\downarrow			
Backcrossed to Cuban	American Sumatra			
and selected	Tobacco			
↓	\downarrow			
$\downarrow \downarrow \downarrow$	\downarrow \downarrow \downarrow			
Modern Connecticut Shade Tobacco strains				

In 1917, a new and major crisis occurred that threatened the entire cigar wrapper industry. Tobacco wildfire emerged as a new bacterial disease that had first appeared in tobacco in North Carolina. It was described by Wolf and Foster in 1918 and was observed to be the most destructive disease of tobacco occurring at that time. It spread as quickly as its name implied. It was first seen in Connecticut in 1919 and was found on at least 20 farms in the state in 1920, threatening the future of the crop. In a quick response to this economic threat to the most important crop in the state, The Connecticut Agricultural Experiment Station and leading tobacco growers in Connecticut and Massachusetts responded in a manner reminiscent to the successful 1892 collaboration. In May 1921, the Connecticut General Assembly appropriated \$10,000 over two years to The Connecticut Agricultural Experiment Station "For research and experiment on the causes and prevention of diseases and injuries to the Connecticut tobacco crop which occur in the field or in the preparation for market, and for improving the crop by selection and breeding, and by co-operative experiments with growers."

The leading growers and packers in the organized and incorporated the Valley Valley Tobacco Improvement Connecticut (CVTIA) Association as subsidiary a organization of the existing Connecticut Leaf Tobacco Association with the object of "Carrying on any kind of work calculated to improve the quality of, or protect from disease New England tobacco and to co-operate with any individuals or organizations interested in such tobacco work". Most importantly, the CVTIA would be a source of financial support for research efforts to solve this crisis. Of course, the Station was interested. Anticipating the state appropriation, three growers had purchased two adjacent parcels that totaled 13 acres of tobacco land on Cook Hill in Windsor in March of 1921. This land was transferred to the CAES Board of Control for \$1.00 plus the \$5,000 mortgage in June of 1921. The stage was set, The Connecticut Agricultural Experiment Station now had an appropriate permanent research site and two years of state funding. The Connecticut Valley Tobacco Improvement Association hired Dr. George H. Chapman, research physiologist and botanist (plant pathologist) of the Massachusetts Agricultural Experiment Station, as Research Director. A collaborative agreement was made and reported in the Report of the Board of Control of the CAES in 1921 such that:

1) Plans for the different kinds of experimental work to be carried out at the Tobacco Station may be proposed both by the Director of the Station and the Research Director

- of the said Association, and shall be adopted by mutual agreement and consent.
- 2) The Research Director of the Association shall have general direction of the work in the field and of the curing, fermenting and further handling of the leaf and of its sale and it is understood that all income from sales shall be devoted to the furtherance the experimental work.
- 3). The Plant Breeder of the Station shall have the management of work in breeding and selection.
- 4) Both the Research Director of the Association and the staff of the station shall be fully informed of the progress and results of the work done under the supervision of either.
- 5) There shall be opportunity for work by the Station botanist on diseases on land especially set apart by mutual agreement for that purpose.
- 6) If desired, a building or buildings for the purpose of experiments may be built on the land at the expense of either party. If it should be necessary for the Station at any time to dispose of the property, the Connecticut Valley Tobacco Improvement Association shall have opportunity to buy the property at its fair valuation as determined by competent judges selected by buyer and seller; but the purchase price shall be deducted the value of any buildings by the said Association at their value as determined at the time of sale and by the said method of valuation.
- 7) It is the present understanding of Station that funds appropriated by the state may be spent in any way for the furtherance of the work, either in salaries, labor; or supplies, and probably in building, though the opinion of the Attorney General on the last item is desirable.
- 8) It seems desirable, if not necessary, that all publications appear as co-operative between the Tobacco Improvement Association and the Station.
- 9) For the publication of bulletins on the progress of results of the work of the Station will provide, subject to limitations of space imposed by State authority.
- 10). The Station laboratories and apparatus will be used in the work to the extent consistent with the other demands on it.
- 11) Any further arrangements regarding the detail of the work shall be exclusively settled by the Research Director of the Connecticut Valley Tobacco Improvement Association, the Director of the Station, and Mr. J. W, Alsop, representing both
- 12) In order that the Director may receive publications of other Station and to Facilitate the use of the franking privilege, he is made a member of the Station staff as "In charge of the Tobacco Station."



Dr. Anderson in a Havana tobacco plot, 1924.

The act creating the Tobacco Station was approved by the Connecticut Legislature on May 5, 1921. By that time Mr. Frederick Morgan had purchased 2 lots, one 7.5 acres and the other 5.5 acres suitable for tobacco research at Cook Hill in Windsor. However, there were no seed beds, tools, fertilizers, or workers. In a flurry of activity, 3.5 acres worth of the newly released Round Tip variety developed by the Station were obtained by purchase and donation as well as six selections of experimental crosses made by Dr. Jones. A farm manager was hired, also by the CVTIA, and plants were set in the first week of June 1921. A week or two later, on June 16, the land was transferred to The CAES and the research begun in earnest.

The initial work of course focused on the control of wildfire. Wildfire was again problematic in the Valley in 1921 and the disease occurred on the Tobacco Experiment Station farm, allowing experiments to be conducted by Dr. Chapman and Dr. Clinton of The CAES. Dr. Chapman had worked at the Massachusetts Agricultural College (now University of Massachusetts) Botany Department since 1907 and had researched tobacco diseases, including wildfire, with a colleague, Dr. Paul Johnson Anderson, who had been hired in Massachusetts in 1915. Dr. Anderson had earned his Ph.D. in phytopathology in 1913 at Cornell University working with chestnut blight. He filled the

vacancy left by Chapman and also collaborated on the tobacco wildfire work.

Research on wildfire continued in 1922 as well as an expansion into shade and broadleaf tobacco breeding and investigations into plant and soil fertility. By the end of the year, it was reported that practical control of wildfire had been achieved. The first Tobacco Station bulletins published reflected that as well as the collaboration of Drs. Chapman, Clinton and Anderson. In addition to research, Dr. Chapman designed buildings for the Tobacco Experiment Station, a curing barn and a laboratory/office building with a sorting shop to evaluate cured leaf quality.



Broadleaf tobacco, west of Cook Hill Road, 1925.

Dr. Chapman resigned to take a commercial position but the shed, laboratory and office building that he designed were constructed by the CVTIA during 1923 under the direction of a collaborating Federal Tobacco Scientist, Mervyn Slagg, MSc. recommendations for wildfire control were published. C. M. Slagg resigned from his USDA position suddenly on March 1, 1924. He later went on to become Chief of the Tobacco Division, Ottawa, Canada, and subsequently Director of Tobacco Investigations for Australia. The CAES hired a plant physiologist, N. T. Nelson, to work on tobacco on April 15, 1924, but while the CVTIA built a greenhouse in that year, they did not hire a scientist as Director. That did not happen until the next spring, April 1, 1925. Presumably, Dr. Paul Johnson Anderson had agreed to leave Massachusetts and move to Connecticut to become Director of the Tobacco Station. Just because there was not a Director did not mean that research was not conducted. Anderson collaborated with Nelson published Tobacco Station Bulletin #5 fertilizer experiments with tobacco in 1924 and 1925. Unlike Chapman, Anderson was hired as a CAES employee. If this move was designed to add stability to what had become an unstable situation, it was a tremendous success. Dr. P. J. Anderson would serve as Director of the Tobacco Experiment Station or Tobacco Substation until his retirement in 1953. He retired to Florida but returned to the Valley to be buried in Amherst, MA.

Tobacco variety improvement was expanded in 1926 as breeding work was conducted on broadleaf, Havana, and Cuban shade types in cooperation with Dr. Jones. Research projects on black root rot and brown root rot were added in response to grower concerns and it was noted "As usual, much time was spent in direct service to growers...". Annual reports that followed consistently stated that increased amounts of time were spent in direct contact with growers. In 1927 it was noted that soil pH tests and seed germination tests were conducted for growers and that service efforts equaled the time of one person per year. Soil testing and seed germination testing are still conducted today.

While wildfire losses were declining, 1926 and 1927 marked an unusually severe outbreak of Calico – Tobacco Mosaic Virus (TMV) and the first mention of 'white speck' - cause unknown – that might have been the first report of weather fleck due to air pollution. Drs. Clinton and McCormick of The CAES published a bulletin on TMV. The disease was first observed in Connecticut in 1898 with serious epidemics occurring in 1906 and 1927. N. T.



Tobacco Station looking north along Cook Hill Road, August 1927.

Nelson left in 1927 and Tore Robert Swanback was hired as the agronomist.

Despite being a small Experiment Station conducting research on a single crop, over the 100-year history of the institution staff have had collaboration and impacts on science and scientific societies beyond our state, nationally and internationally. In 1926, P. J. Anderson was the first author of a publication "Check list of diseases of economic plants in the United States, USDA Bulletin 1366." This was the first publication of its kind regarding the occurrence and distribution of pathogens on economically important hosts and noted that this resource would be essential for diagnostic pathologists. This important resource evolved into the "Index of plant diseases," issued in six parts from 1950 to 1953 and the "Index of plant diseases in the United States, Agriculture Handbook No. 165," published in 1960. Dr. Anderson's affiliation was listed as both Pathologist in Charge, Connecticut Tobacco Experiment Station and temporarily Associate Pathologist, Plant-Disease Survey. Anderson also served in a leadership role for the Northeast Division of the American Phytopathological Society. Other staff have also been leaders of state, regional and national organizations.

Tobacco Bulletins were discontinued in 1928 after Tobacco bulletin #10, incorporated instead into the CAES Bulletin series, evidence of the further integration of the Tobacco Experiment Station into The CAES. In a major development that likely recognized the success of The CAES in supervising research and perhaps reflected the difficulty of grower groups to financially support the Tobacco Station indefinitely, in 1929 the Connecticut Valley Improvement Association Tobacco dissolved, ending the nearly decade-long formal collaboration with The CAES. That year also saw 80% of broadleaf and Havana crops as well as 16% of shade tobacco in the Valley lost to widespread hail that shredded the leaves.

As The CAES took sole administrative responsibility for the Tobacco Station significant changes occurred. O. E. Street was hired as the plant chemist and more collaboration with other CAES departments, and the USDA was documented. Lysimeters were installed to investigate fertilizer leaching and a 2-bay wood frame garage was built adjacent to the laboratory. Starting in 1929 a tractor was used, and a tobacco crop was grown without horses for the first time on the research farm. This was intended not just for efficiency on the farm but as a demonstration for tobacco growers in the valley.



Upper T. R. Swanback, A. J. Duffy; lower P. J. Anderson, J. G. Wolf, N. T. Nelson, 1927.



The Tobacco Experiment Station, 1928



The lysimeter, 1937.



Cultivation with a tractor in 1929.



Potato harvest, 1930.

Other research projects in addition to tobacco were added. In 1930, 7 acres adjacent to the Tobacco Station (the Mellon tract) were added to establish a new vegetable field station and the Pomeroy tract directly across the street from the Station was leased to create a forest nursery. Dr. Th. Berthold, a tobacco expert from Brandenburg Germany (today he would probably be called a visiting scientist) was hired by the Plant Breeding Department to conduct breeding work with Cuban shade. Black root rot resistance was identified in Cuban shade and Hayana lines.

In 1931 it was noted that 2,500 soil tests and 200 seed germination tests were performed, and bushels of seed cleaned. One ounce of seed is sufficient to plant over 20 acres. Some years earlier an electric powered seed cleaning machine had been designed and built by hand using sheet metal, copper tubing, a Mason jar, and a hurricane lamp glass chimney among other items to clean seed by removing deleterious light seed and debris. While we do not know who designed or built this machine, it is still in use today and continues to work very well. Agronomic research concluded that the growing period from mid to the end of July was critical to the growth and success of the crop.



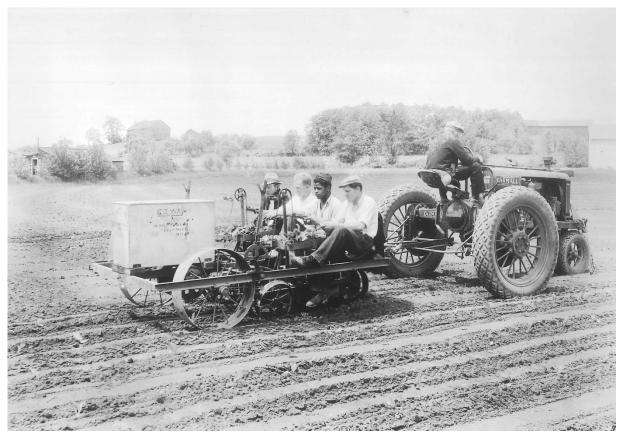
Vegetable plots, east side of Cook Hill Road, 1930.

Tobacco budworm, a perennial problem on tobacco in recent years, first appeared as a pest in the valley in 1932 and Pythium root rot was described as a major problem on seedlings in 1933. The Tobacco Substation conducted research on other crops and served growers beyond the traditional tobacco clientele although it should be recognized that many growers grew diversified crops then and still do now. Large scale potato experiments were conducted in 1933 and 1934 and it was noted that service to nontobacco growers constituted one-third to one-half of the total service efforts.



Tobacco genetics plot, 1931.

In the mid-1930's wildfire had been nearly eliminated in the Valley, black root rot was controlled by adjusting soil acidity, plant resistance was identified in Havana type tobacco, a new shade line was being developed and irrigation improved crop consistency in very dry years. In 1935 it was reported that seed germination and viability was associated with seed age. 1936 the USDA assigned entomologist A. W. Morrill to Windsor to conduct research on wireworms. Experiments on other crops were going well and sweet potato crops were so successful that an electrically heated sweet potato storage house was added that later became the Farm Manager's workshop.



Setting tobacco on the Station farm, 1935.

The Station and Tobacco Station were also involved in other projects. The Report of the CAES Director for 1935 included a paragraph that commented on 'Supervision of relief projects' noting that the Station had been called on to supervise "Relief" projects for the control of mosquitos, gypsy moth, pine shoot moth, pine blister rust and elm disease. The projects referred to were part of the Civilian Corps, Works Conservation **Progress** Administration. A part of the New Deal, this was a Federal Emergency Relief Administration program that employed young men to work on environmental and civil projects. As many as 1,500 men were employed at certain seasons. One of the Civilian Conservation Corps (CCC)'s camps (Company #1193) was based on CAES property at Camp Britton in Windsor from September 1935 to May 1937. Dr. Britton was the CAES State Entomologist in 1935 in charge of regulatory programs and the CCC programs would likely have fallen under his jurisdiction. The Director commented that this both added greatly to the work of the staff and hampered existing programs as well as depleted funds as administrative costs (the sponsors contribution) was not reimbursed. The camp still exists and hosts programs by the Windsor Historical Society. As a side note, a few years ago I found a hand-made tool on the Windsor

farm that I did not recognize. Nobody else including tobacco growers, did either. After a little research I determined that it is a Ribes hook



Sewing shade tobacco by hand, 1937.



Mixing fertilizer in the shed, 1937.

that was used to pull out currents to prevent white pine blister rust. It was well described in a 1919 publication (Bulletin #2 Report on White pine blister rust control, American Plant Pest Committee, Boston MA).

The year 1937 marked the first blue mold epidemic observed in Connecticut, not surprisingly during an unusually wet year. This downy mildew disease would re-occur periodically over decades and periodically cause tremendous losses, especially in shade tobacco. The breeding program successfully developed a Havana type variety called Havana Seed 211, which was resistant to black root rot.

The year 1938 was the most disastrous tobacco year in generations of growers. Wet years are always difficult years to grow tobacco. Wildfire reminded everyone that pathogens may be controlled but they do not completely go away as the disease returned with excessive rains in June and July. Those rains resulted in very significant flooding of the Connecticut River and other state waterways followed by the Great New England Hurricane on September 21, 1938. Growers had worked hard to harvest what they could through a difficult wet season. The hurricane capped off the season by destroying many tobacco curing sheds and the partially cured tobacco hanging in them.

The worst year in a generation or two was followed by the best year for tobacco

growers in a decade, helping to keep growers 'afloat' after the floods. Dr. Street left the Station for a position with the USDA in Lancaster PA, and Dr. Stuart LeCompte was appointed. Experiments continued on fertilizer placement, wireworms, blue mold, and black root rot. Sweet potatoes were shown to be a consistently good vegetable crop in the Valley. A new laboratory and office building was designed and under construction to replace the old wood-frame structure built by the CVTIA. The new building was constructed by the State and by the Works Progress Administration. Construction continued through 1940 and staff moved in on February 1, 1941.

The year 1941 also brought war and a wartime economy with labor shortages. A three-car brick garage was constructed and finished in 1942. During 1941-1942 a stronger effort was made to breed improved tobacco varieties, especially for disease resistance. Breeding for TMV resistance in broadleaf and shade tobacco improvement was done in collaboration with a committee of growers with lines tested on commercial farms. The breeding program still uses volunteer growers to test small lots of promising germplasm and supply feedback on quality. In addition to ongoing projects, work was conducted to look for alternatives to rubber as a part of the war effort.



Hurricane-damaged tobacco, October 1944.

Fusarium wilt was described by Dr. Anderson as a new disease of tobacco in Connecticut in 1943. It was found causing tobacco wilt disease on land previously planted to sweet potatoes. It was not thought to be a significant pathogen at the time but by the late 1980's it caused a loss of 20% of the entire broadleaf crop in the state. In 1990 we demonstrated that the Fusarium pathogen race was the same one that infects sweet potato. Unfortunately, rotating tobacco with sweet potatoes had introduced a new pathogen that once again threatened tobacco production. The development of wilt-resistant varieties in 1991 and 1992, notably C9, again saved the future of tobacco in Connecticut and Massachusetts.

The Great Atlantic Hurricane of 1944 resulted in about 7 inches of rain in Hartford and caused about \$2 million in losses to tobacco and fruit crops.

A new cottage for the Foreman (Farm Manager) was built in 1945 using materials from the old laboratory building that had been torn down. Wildfire reappeared in seed beds after an absence of 7 years, wireworms were found to be controlled by use of a rye winter cover crop, a soil conservation technique still in use, and new shade tobacco lines CT-15 and G4 were developed and released by Dr. Anderson with increased yields and black root rot resistance.

In 1946 and 1947 plant parasitic nematodes were found to be responsible for crop

yield loss and root disease for the first time in Connecticut. Root lesions nematodes Pratylenchus sp. were associated with brown root rot of tobacco. Root knot nematodes causing serious stunting of shade tobacco in Windsor were identified as root-knot Heterodera marioni by Dr. Steiner of the USDA and could either have been Meloidogyne hapla or more likely could have been tobacco cyst nematodes, undescribed at the time. Dr. B. F. Lownsbery of The CAES eventually described Heterodera tabacum as a new species pathogenic to shade tobacco in 1954. Dr. B. G. Peters, Head of the Nematology Department of the Rothamsted Experimental Station in England, visited Connecticut for 3 months in 1953, working with CAES nematologist Lownsbery on control of the tobacco cyst nematode, which was rapidly becoming a major pest, especially in shade tobacco.

The late 1940's and early 1950s marked advances in disease control, the development of soil fumigation, primarily for nematode control, more efficient fertilizer use, and a better understanding of the curing process.

Boyd Pack resigned in 1947. He was rehired in 1949 and he received his PhD degree from the University of North Carolina on June 11, 1950. His thesis work in North Carolina was on curing flue cured tobacco. In Connecticut he adapted that research to investigate air curing cigar wrapper leaf.



The back of the Farm Managers house, 1950.



Curing shed heated by gas burners, August 1951.

CT-49 shade tobacco was released by Dr. Anderson and became the base of all current shade tobacco lines. Breeding for resistance to wildfire and TMV using Nicotiana glutinosa sources of resistance was initiated. Swanback retired in 1952 and went to work for a shade tobacco company. P. J. Anderson retired on March 31, 1953, and published Bulletin 564, "Growing Tobacco in Connecticut" in that year, capping his long and productive career with a summary publication still requested by growers around the world today. On the negative side, 1953 was also the start of widespread use of homogenized leaf wrappers that resulted in the decline of more expensive natural wrapper leaf sales.

Dr. Anderson was replaced Department Head by plant pathologist Dr. Gordon S. Taylor who continued disease management research, breeding for resistance to pathogens and service to growers and the community. Dr. Taylor was a Connecticut native son born in Danbury who had served as a pilot in World War II and was decorated with the Distinguished Flying Cross with an oak leaf cluster. After the war he earned a B.S. in horticulture from the University of Connecticut in 1947 before working as a summer research assistant in the CAES Department of Plant Pathology. After earning his graduate degrees at Iowa State University, he returned to the New Haven CAES as Assistant Scientist in 1952, moving to Windsor the next year to direct the Tobacco Station. Dr. Taylor conducted research on a wide variety of tobacco diseases and continued the breeding program.

Through the late 1950s and into the 1960s Dr. Henry DeRoo, hired in 1953, conducted studies on fertility and tobacco plant growth, especially increasing our understanding of root growth. In 1957, Dr. David E. Hill joined the Department of Soils and Climatology on June 28, working on soil classification and surveys, based in Windsor, and Dr. John Ahrens was hired as a tobacco physiologist. John also conducted research on weed control in tobacco and was able to expand that to other crops, particularly nursery crops and turf and later Christmas trees. A tobacco field day held August 7, 1957, allowed tobacco growers an opportunity to see the research underway at the Tobacco Laboratory in Windsor, featuring 22 field exhibits of tobacco experiments.

The 1960s saw a new threat to the Connecticut wrapper crop, weather fleck, consisting of small white bleached spots that were often colonized by an Alternaria fungus that further ruined leaves. Dr. Taylor was instrumental in identifying environmental pollution, especially ozone, as the cause of fleck

and worked to prevent it by treating shade cloth with antioxidants. The eventual identification of ozone-tolerant plants and the incorporation of that multigenic tolerance into the breeding program again controlled the problem and saved the natural wrapper industry in the Valley.

Agriculture in the Connecticut River Valley was changing and becoming more diverse over time as tobacco acreage decreased. While other crops had been experimented with for years, the first publication from the Tobacco Laboratory that did not at least include tobacco was published by J. F. Ahrens in 1961, the same year that a nursery and turf field day was arranged by Drs. Taylor and Ahrens. This field day continued as an annual meeting at the Windsor Farm for decades. John Ahrens had initiated a research program on weed control in nursery and turf which was critical to the success of that expanding industry and received the Connecticut Nurserymen's Association Man of the Year Award in 1962. Robert E. B. Moore was hired in 1961. He researched insect management and was responsible for the Valley Lab Inquiry Office from the late 1980s until his retirement in 1992.

In February 1964 the Station Board of Control voted to change the name of the Tobacco Laboratory to the Valley Laboratory to reflect the changes in research and service being conducted there. Tobacco acreage was continuing to decline, and other types of agriculture were increasing in importance. However, the tobacco crop was still an economically important component of Connecticut agriculture. Research and the distribution of knowledge gained by that research was necessary to support growers. In the early years tobacco grower meetings tended to be field days. In March 1965 a Tobacco Research Meeting for growers and workers was held at the Valley Laboratory. The winter meeting format was held annually for the next 56 years in February or March until the 100th anniversary in 2021 when a field day meeting and celebration was held outside in September to showcase field plots and to allow meeting in person during the COVID pandemic.



Dr. Taylor and the new Valley Laboratory sign, 1965.

In 1969 John Ahrens was elected and served as President of the Northeast Weed Science Society. He continued to impact weed science and received the Distinguished Member Award from that Society in 1979. Also in 1969, Gordon S. Taylor received the distinguished service award presented annually by the Cigar Manufacturers Association of America and the Cigar Institute of America. He was the fourth member of the staff to receive the award: P. J. Anderson, T. R. Swanback, and H. B. Vickery were the previous recipients.

The Valley Laboratory celebrated its 50th anniversary on November 30, 1971, with a celebration of scientific impacts. A meeting with scientific presentations included discussions of past and present research, along with examples of current research. The day was followed by an evening banquet with 170 attendees, and guest speakers including prominent figures from the USDA.

In 1973, a disease new to Connecticut, black shank, was found for the first time. Black shank was and continues to be the most

significant disease in southern tobacco production. Dr. Taylor demonstrated that the pathogen had not been introduced from the south but instead was a new race not found elsewhere. He screened plants and identified a source of resistance in a line of shade tobacco. This disease continues to occur periodically when conditions are unusually warm and wet and breeding for resistance is ongoing in broadleaf tobacco. He investigated also and published overwintering, control, and pathogenicity studies on the bacterial soft rot tobacco hollow stalk pathogen, Erwinia carotovora var. carotovora.

In the mid-1970s John Ahrens participated in a National IR-4 Committee Workshop to develop priorities and research objectives in securing herbicide registrations for ornamental crops. He continued this important IR-4 research to support minor crops for the rest of his career. He was also a member of a U.S. Environmental Protection Agency Committee that drafted a national pesticide Operator's manual for ornamentals and turf. Dr. DeRoo conducted measurements of NO₃-N

concentrations in and the elevation of groundwater in monitoring wells at Windsor to better understand the extent and conditions under which agricultural and non-agricultural uses of fertilizer contribute to the NO₃-N pollution of the groundwater in the Connecticut Valley.

In 1979 the tobacco blue mold disease returned to the Valley with a vengeance after an absence of 15 years. The pathogen had changed during that time and was more tolerant of warm conditions, resulting in severe losses in the field throughout the season. Results of a survey initiated by Dr. Taylor suggested that the epidemic started in Cuba with spores blowing to Florida then up into the mid-Atlantic states and ultimately, Connecticut. A systemic fungicide, metalaxyl, was shown to completely control the disease but Drs. Taylor and Aylor added tremendously to knowledge on the epidemiology of the disease.

Throughout the 1980s Dr. Taylor continued the breeding program and research on tobacco diseases such as black shank, Fusarium wilt and cyst nematodes and conducted experiments to demonstrate weed hosts of insectvectored virus diseases of tobacco. Thomas Rathier was hired at the Station in New Haven in 1976 and transferred to the Valley Lab in 1979 with the retirement of Dr. DeRoo that year to investigate soil fertility and management of nutrient losses to soil and ground water in nursery and tobacco crops. Bob Moore conducted research on insect management on tobacco and other crops from the late 1970s to the late-1980s when he focused on establishing the Valley Laboratory Inquiry Office. Tom Rathier took over the responsibilities for that office when Bob Moore retired. Tom was recognized for service to several grower groups including The Connecticut Tree Protective Association, the Connecticut Nursery and Landscape Association and served as President of the Connecticut Christmas Tree Growers Association.

Dr. Taylor retired on March 31, 1987, after 35 years of service to growers and citizens of the state of Connecticut. His exit left a huge vacuum that took two scientists to fill, Dr. Mark McClure, who moved from New Haven to become Chief Scientist and Dr. James LaMondia, who took over as the plant pathologist at the Valley Laboratory.

Dr. Mark McClure conducted research on forest insects including the red pine scale and the hemlock wooly adelgid. As a forest entomologist he worked closely with the Connecticut Tree Protective Association and served in many roles as a leader of that organization. As a result, he has been honored by the CTPA with a scholarship in his name. He

oversaw a renovation of the laboratories in the building and the addition of a conference room that was named the Gordon S. Taylor Conference Room and dedicated in 1993. Unfortunately, Dr. Taylor had died six months previously in 1992. Dr. Carole Cheah worked with McClure as a Postdoctoral Scientist from 1994 until 2003 when she was hired as an Assistant Scientist and took over the hemlock wooly adelgid research program after Mark McClure's retirement in that year. Carole works closely with arborists and foresters as well as land trusts, conservation groups and other associations to release and Sasajiscymnus tsugae as a tool to mitigate hemlock wooly adelgid damage in hemlock forests.

Dr. LaMondia moved to Windsor in 1987 after one year in New Haven as a plant pathologist and nematologist to carry on the work conducted by Dr. Taylor. He also took over responsibility for the conventional tobacco breeding program to continue the goal of incorporating resistance to multiple plant pathogens into adapted varieties. In 1991, C8 and C9 were released as the first inbred broadleaf wrapper varieties resistant to both Fusarium wilt and TMV, effectively controlling a disease which caused up to \$5 million in losses per year. Over time C9 became the most widely grown standard broadleaf in the Valley as well as around the world. The incorporation of resistance to other pathogens was facilitated by the use of male sterile lines and hybrid varieties, allowing resistance genes from two parents to be combined in a stable, vigorous hybrid variety. Legislation passed in 2011 allowed the Station to license hybrid tobacco varieties to seed producers and collect royalties to help support research efforts. The variety B2, released in 2011, was resistant to Fusarium wilt, TMV, tobacco cyst nematodes, black root rot and partially resistant to blue mold. This variety reduced cyst nematode populations in soil and allowed production without soil fumigation in heavily infested fields. D1 and D2 are hybrid varieties with resistance to Fusarium wilt, TMV, and black root rot that are darker in color and ripen more slowly, allowing greater flexibility in the harvest season. Research is continuing to incorporate additional resistance to black shank, target spot, brown spot, and additional sources of tobacco cyst nematode genes into new hybrid varieties. In addition, all new hybrid lines developed in Connecticut are certified as Low Converter (LC) varieties. Tobacco specific nitrosamines are secondary compounds produced from nicotine, usually during the curing process. The most important secondary compound is nornicotine, which produces poor smoke flavor and is a concern as a carcinogen. The breeding lines, parents and Connecticut varieties designated as LC are selected for lower nicotine and low conversion of nicotine to nornicotine using a procedure developed by the University of Kentucky and testing by the University of Kentucky Tobacco Research and Development Center.

Dr. LaMondia became the Chief Scientist at the Valley Lab in 2003 until his retirement on March 31, 2022. Tobacco research was a major part of his research program, which also included ornamental crops such as boxwood, small fruit, vegetables, and hops. Like his predecessors, LaMondia conducted practical research and diagnostics for growers. He served as The CAES's ex-officio plant pathologist on the CT Tree Protection Examining Board, taught the tree disease section of CTPA's Arboriculture 101, and served on the Connecticut Agricultural Information Council. Nationally, he served the Society of Nematologists as a Senior Editor and on the Executive Board, becoming President of the Society. He also served on the Executive Board of the Northeastern Division of the American Phytopathological Society, President and Northeastern Division Forum Representative and American Phytopathological Society Forum Chair, as well as numerous committees within those Societies. Within Connecticut, he worked with grower groups, served on the CT Vegetable and Small Fruit Growers' Conference Steering Committee, and organized the Tobacco Research Meeting for 35 years. He was appointed Adjunct Senior Research Scientist in the Dept. of Plant Science and Landscape Architecture, College of Agriculture, Health and Natural Resources at the University of Connecticut and Nematology lectures and laboratories as a component of the UConn Plant Pathology course over two decades for three professors. He is continuing the tobacco breeding program and plant disease management research as an Emeritus Scientist.

Dr. John Ahrens retired in 1992 but remained active at the Valley Lab as a very productive Emeritus Scientist, conducting weed management research and publishing until his death in 2012 after 55 years of research and service. John also had two Christmas tree farms and was a leader in the Christmas tree industry. Valley Lab staff celebrated 50 years of his service in 2007 with a party in his honor. John was so well known in the state that he once received mail that had been addressed only to "Dr. Arens (spelled incorrectly) Winsor" (also spelled incorrectly, with no other address). Dr. Todd Mervosh was hired as the Weed Scientist in 1994 and worked with John. Todd also

conducted weed management research and retired from State service in 2014. Dr. Jatinder Aulakh was hired as the Weed Scientist in 2015 and established a research program that included ornamentals, invasive weeds and weed management in Christmas trees and other crops. Jatinder investigates biological, chemical, and cultural control methods based on weed biology and ecology for the management of non-native invasive plants and weeds in ornamental nurseries and Christmas tree plantations. Other areas of weed research include pastures and hayfields, organic production systems, cover crops and crop rotations, evaluating new products for ornamental plant safety and weed control efficacy.

Dr. Richard Cowles was hired as the Research Entomologist at the Valley Lab in He established a broad-based insect management research program on ornamentals, turf, Christmas trees and a wide range of other topics. His research found practical methods to manage two-spotted spider mites, white grubs, and root weevils in nursery crops, all major mite and insect pests of Christmas trees, annual bluegrass weevils on golf courses, hemlock wooly adelgid in urban and natural forests, and spotted winged drosophila in small fruit crops. Rich actively participated in the CT Society, Entomological CTBeekeepers' Association, the CT Christmas Tree Growers' Association, and the CT Urban Forest Council. His efforts on behalf of their members led to him being presented Awards of Merit by the Connecticut Tree Protective Association, the CT Pomological Society, and the CT Christmas Tree Growers' Association.

Tim Abbey worked at the Valley Lab as an IPM specialist for nursery and ornamentals from 1998 to 2006. He was succeeded by Dr. Hugh Smith, who worked with growers in the same capacity from 2008 until 2011 when he left for a position at the University of Florida.

Dr. DeWei Li joined the Valley Laboratory in 2004 as a research mycologist to investigate indoor molds, aerobiology and fungal taxonomy. He has authored or coauthored 40 new fungal taxa and six new fungal genera from Connecticut as well as around the world from natural habitats or indoors. Among these new fungi, some are plant pathogens causing newly emerging diseases. He has served as President of the Pan American Aerobiology Association, 2015-2017, associate editor of Aerobiologia 2015–present, and editor of "Biology of Microfungi" (book) published by Springer in 2016. DeWei became the Chief Scientist in April 2022.



John Ahrens on the occasion of his 50-year anniversary at the Station, 2007.

The research conducted by all these scientists was and is far too wide ranging to be adequately described in just a few paragraphs. It can best be understood by examining the publications resulting from the work. publications can be accessed in Appendix 1. Most of the research conducted at the Valley Lab is the type of grower-oriented problem-solving approach envisioned by the collaborators who organized and set up this institution, whether the research involved tobacco or other crops or forests in Connecticut. The cumulative contributions to growers and agriculture in the Valley are extensive, as are the contributions to science. In the first 50 years the scientific staff published 191 articles, all related to tobacco. In the second half of the century of work, there were well over 1,000 publications, with only 120 related to tobacco. The research has tended to mirror the agriculture in the Valley and the concerns of growers. In addition, the interdisciplinary structure of the Valley Laboratory has led to myriad collaborations between scientists at the Valley Lab and with other departments at The CAES or other institutions across the country in grant proposals, research projects and publications.

One hundred years after founding the Tobacco Experiment Station, tobacco is still an important crop in the Valley, currently ranked second in economic value for Connecticut. New emerging diseases and changing weather conditions still threaten production. Notable problems with tobacco included the reemergence of blue mold in 1996 through 2017, this time with complete pathogen resistance to the fungicide previously used to control the disease. A series of problems associated with the changing and warming climate have occurred over the last 10 to 12 years. In 2009, Potato Virus Y was moved from infected potato crops to tobacco by aphid vectors, resulting in over \$10,000,000 in losses in a single year and continuing to some degree each year since. The virus became prevalent in potato seed tubers as virus-vector aphids became more problematic in seed tuber production areas due to warmer temperatures. The likelihood of volunteer tubers surviving winters as a source of the virus also increased with warmer winters. New pathogens continue to be introduced. Target spot, a serious leaf spot disease prevalent in southern tobacco production areas occurred in Massachusetts and Connecticut in 2010 and 2011, respectively.

Warmer and wetter fall conditions have resulted in extended periods of high humidity that were favorable for storage molds ruining cured crops in the sheds and in post-harvest storage in 2013, 2018 and 2021.

Scientific support of the tobacco crop as well as other important components of Connecticut agriculture such as nursery and ornamentals, Christmas trees, small fruit, and vegetables is still necessary to help maintain the economic viability of agriculture in the Connecticut Valley and indirectly, farms and open space. The scientific research and service to growers and citizens provided at the Valley Laboratory has been and will continue to be the product of collaborative work conducted not just by scientists but by dedicated staff consisting of technicians, farm managers, secretaries, and maintenance staff. The staff is listed in Appendix 2. The Valley Laboratory's 100th Anniversary Celebration Agenda is in Appendix 3.

ACKNOWLEDGEMENTS:

The author thanks Jane Canepa-Morrison for scanning historical photographs, Michelle Salvas and Kelly Fairbrother for assembling historical information and Dr. Carole Cheah for putting together photographs for the 100th anniversary agenda.

NON-STATION REFERENCES:

- Anderson, P. J., Haskell, R. J., Muenscher, W. C., Weld, C. J., Wood, J. I., and Martin, G. H. 1926. Check list of diseases of economic plants in the United States. USDA Department Bulletin 1366.
- Thompson, T. 2021. Burnt seeds show people used tobacco 12,000 years ago. Nature 598:397-398.
- Tushingham, S., Snyder, C. M., Brownstein, K. J., Damitio, W. J., and Gang, D. R. 2018. Biomolecular archaeology reveals ancient origins of indigenous tobacco smoking in North American Plateau PNAS 115:11742-11747.

APPENDIX 1: TOBACCO STATION/VALLEY LABORATORY PUBLICATIONS LIST

1920s

- Jenkins, E. H. and G. H. Chapman. 1922. Condensed Recommendations for the Control of Wildfire. CAES Tobacco Report 1.
- Chapman, G. H. and P. J. Anderson. 1923. Wildfire of Tobacco in 1922. CAES Tobacco Report 2.
- Chapman, G. H. 1923. Experiments in the Curing and Fermentation of Connecticut Shade Tobacco. CAES Tobacco Report 3.
- Anonymous. 1924. Recommendations for the Control of Wildfire (revised). CAES Tobacco Report 4.
- Nelson, N. T. and P. J. Anderson. 1925. Fertilizer Experiments with Tobacco. CAES Tobacco Report 5.
- Anderson, P. J. 1926. Report of the Tobacco Substation at Windsor, 1925. CAES Tobacco Report 6.
- Anderson, P. J., R. J. Haskell, W. C. Muenscher, C. J. Weld, J. L. Wood and G. H. Martin. 1926. Check list of diseases of economic plants in the United States. USDA Bulletin 1366.
- Anderson, P. J., M. F. Morgan and N. T. Nelson. 1927. The Phosphorous Requirement of Old Tobacco Soils. CAES Tobacco Report 7.
- Anderson, P. J. and N. T. Nelson. 1927. Report of the Tobacco Substation at Windsor, 1926. CAES Tobacco Report 8.
- Hicock, H. W. and P. J. Anderson. 1927. Prolonging the Life of Tobacco Shade Tent Poles. CAES Tobacco Report 9.
- Anderson, P. J., N. T. Nelson and T. R. Swanback. 1928. Report of the Tobacco Substation at Windsor, 1927. CAES Tobacco Report 10.
- Nelson, N. T. 1928. Topping and Suckering Practices as Related to the Yield and Quality of Havana Seed Tobacco. CAES Bulletin 297.
- Anderson, P. J. 1929. Report of the Tobacco Substation at Windsor from 1928. CAES Bulletin 299.

Morgan, M. F., P. J. Anderson and H. Dorsey. 1929. Soil Reaction and Liming As Factors in Tobacco Production in Connecticut. CAES Bulletin 306.

1930s

- Anderson, P. J. and T. R. Swanback. 1930. Tobacco Substation at Windsor. Report for 1929, CAES Bulletin 311.
- Vickery, H. B. and G. W. Pucher. 1931. Chemical Investigations of the Tobacco Plant: I. A Preliminary Study of the non-Volatile Organic Acids of Tobacco Leaves. CAES Bulletin 323.
- Vickery, H. B. and G. W. Pucher. 1931. Chemical Investigations of the Tobacco Plant: II. The Chemical Changes that Occur During the Curing of Connecticut Shade-Grown Tobacco. CAES Bulletin 324.
- Anderson, P. J., T. R. Swanback and O. E. Street. 1931 Tobacco Substation at Windsor. Report for 1930. CAES Bulletin 326.
- Anderson, P. J., T. R. Swanback and O. E. Street. 1932. Potash Requirements of the Tobacco Crop. CAES Bulletin 334.
- Anderson, P. J., T. R. Swanback and O. E. Street. 1932. Tobacco Substation at Windsor. Report for 1931. CAES Bulletin 335.
- Mendel, L. B., H. B. Vickery, A. J. Wakeman, C. S. Leavenworth and F. A. McCormick. 1932. Chemical Investigations of the Tobacco Plant. III. Tobacco Seed. CAES Bulletin 339.
- Swanback, T. R., O. E. Street and P. J. Anderson. 1933. Tobacco Substation at Windsor. Report for 1932. CAES Bulletin 350.
- Vickery, H. B. and G. W. Pucher. 1933. Chemical Investigations of the Tobacco Plant. IV. The Effect of the Curling Process on the Organic Acids of Tobacco Leaves. CAES Bulletin 352.
- Anderson, P. J., T. R. Swanback and O. E. Street. 1934. Tobacco Substation at Windsor. Report for 1933. CAES Bulletin 359.
- Anderson, P. J. 1934. Tobacco Culture in Connecticut. CAES Bulletin 364.

Anderson, P. J., T. R. Swanback and O. E. Street. 1935. Tobacco Substation at Windsor. Report for 1934. CAES Bulletin 367.

Vickery, H. B., G. W. Pucher, C. S. Leavenworth and A. J. Wakeman. 1935. Chemical Investigations of the Tobacco Plant. V. Chemical Changes that occur During Growth. CAES Bulletin 374.

LaCroix, D. S. 1935. Insect Pests of Growing Tobacco in Connecticut. CAES Bulletin 379.

Anderson, P. J., T. R. Swanback and O. E. Street. 1936. Tobacco Substation at Windsor. Report for 1935. CAES Bulletin 386.

Anderson, P. J., T. R. Swanback and O. E. Street. 1936. Tobacco Substation at Windsor. Report for 1936. CAES Bulletin 391.

Vickery, H. B., G. W. Pucher, A. J. Wakeman and C. S. Leavenworth. 1937. Chemical Investigations of the Tobacco Plant. VI. Chemical Changes that Occur in leaves During Culture in Light and Darkness. CAES Bulletin 399.

Anderson, P. J. 1937. Downy Mildew of Tobacco. CAES Bulletin 405.

Vickery, H. B. and G. W. Pucher. 1938. Chemical Investigations of the Tobacco Plant. VII. Chemical Changes that Occur in Stalks During Culture in Light and Darkness. CAES Bulletin 407.

Anderson, P. J., T. R. Swanback and O. E. Street. 1938. Tobacco Substation at Windsor. Report for 1937. CAES Bulletin 410.

Anderson, P. J., T. R. Swanback and O. E. Street. 1939. Tobacco Substation at Windsor. Report for 1938. CAES Bulletin 422.

Anderson, P. J. 1939. Control of Tobacco Mildew (Blue Mold) in Seed Beds. CAES Circular 128.

Anderson, P. J. 1940. Diseases and Decays of Connecticut Tobacco. CAES Bulletin 432.

Anderson, P. J., T. R. Swanback and O. E. Street. 1940. Tobacco Substation at Windsor. Report for 1939. CAES Bulletin 433.

Vickery, H. B., G. W. Pucher, A. J. Wakeman and C. S. Leavenworth. 1940. Chemical Investigations of the Tobacco Plant. VIII. The Effect Upon the Composition of the Tobacco Plant of the Form Which Nitrogen is Supplied. CAES Bulletin 442.

Anderson, P. J., T. R. Swanback and S. B. LeCompte, Jr. 1941. Tobacco Substation at Windsor. Report for 1940. CAES Bulletin 444.

Anderson, P. J. and T. R. Swanback. 1942. Tobacco Substation at Windsor. Report for 1941. CAES Bulletin 457.

Morgan, M. F., H. G. M. Jacobson and S. B. LeCompte, Jr. 1942. Drainage Water Losses from a Sany Soil as Affected by Cropping and Cover Crops. Windsor Lysimeter Series C. CAES Bulletin 466.

Anderson, P. J., T. R. Swanback and S. B. LeCompte, Jr. 1943. Tobacco Substation at Windsor. Report for 1942. CAES Bulletin 469.

Anderson, P. J., T. R. Swanback and S. B. LeCompte, Jr. 1944. Tobacco Substation at Windsor. Report for 1943. CAES Bulletin 478.

1940s

Anderson, P. J. and T. R. Swanback. 1945. Tobacco Substation at Windsor. Report for 1944. CAES Bulletin 487.

Anderson, P. J. and T. R. Swanback. 1946. Tobacco Substation, Windsor. Report for 1945. CAES Bulletin 493.

Swanback, T. R. 1946. Possible role of boron in tobacco fertilization. Soil Science, 62:137-149.

Anderson, P. J. 1948. Change, improvement of leaf types, beneficial to smokers, hard to make. Tobacco. 126(26).

Anderson, P. J. 1948. Pole Rot of Tobacco. CAES Bulletin 517.

Anderson, P. J. 1949. Controlling Diseases of Tobacco. CAES Bulletin 527.

Anderson, P. J. 1949. Story of shade tobacco over many years. Tobacco 127:11-12, 18-19.

1950

Anderson, P. J. 1950. Science plays a role in the Valley's leaf industry. U.S. Tobacco J. 154(9):8 and 36.

Anderson, P. J. 1950. Taking the hazards out of tobacco growing. Tobacco. 130.

Anderson, P. J. and T. R. Swanback. 1950. Tobacco Seedbeds. CAES Circular 175.

Swanback, T. R. 1950. Copper in Tobacco Production. CAES Bulletin 535.

Swanback, T. R. 1950. Granite Stone Meal as a Source of Potash for Tobacco. CAES Bulletin 536.

1951

Anderson, P. J. 1951. Changing Technique in Tobacco Valley. Tobacco. 132.

Anderson, P. J. 1951. Improvement now in Connecticut Fields Guarantees Good Cigar Leaf in Factories. Tobacco. Vol. CXXXII(2):10.

Anderson, P. J. and T. R. Swanback. 1951. Fumigation of Tobacco Soils in the Seedbed and in the Field. CAES Bulletin 542.

Swanback, T. R. 1951. Ammonium Nitrate and Poultry Mixture in Fertilization of Tobacco. CAES Bulletin 546.

1952

Anderson, P. J. 1952. A Half Century of Tobacco Research, Part I. Cigar Valley News 2(1):4.

Anderson, P. J. 1952. A Half Century of Tobacco Research, Part II. Cigar Valley News 2(2):4, 7.

Anderson, P. J. 1952. A Half Century of Tobacco Research, Part III. Cigar Valley News 2(3):4, 9.

Anderson, P. J. 1952. A Half Century of Tobacco Research, Part IV. Cigar Valley News 2(4):4.

Anderson, P. J. 1952. Combating Blue Mold of Tobacco. CAES Circular 181.

Anderson, P. J. 1952. Continuous Experimentation in Research Stations Assures a Quality Cigar Leaf. Tobacco. CXXXIV(26):10, 11, 33.

Anderson, P. J. 1952. The Truth About Blue Mold. Cigar Valley News 2(3):6, 7.

Anderson, P. J. 1952. Increasing Yield by Soil Fumigation. Cigar Valley News 2(4):5.

Anderson, P. J. 1952. Growers can fight back root rot. Cigar Valley News 2:4, 7.

Pack, A. B. 1952. Some principles of good tobacco curing. The Valley Grower, pp. 4-6.

Pack, A. B. 1952. Weather forecasting aids tobacco curing. Cigar Valley News 2(6):5.

Pack, A. B. 1952. Weather forecasting aids tobacco curing. Cigar Valley News 2(7):5.

Pack, A. B. 1952. Merits of firing tobacco with gas. Cigar Valley News 2(8):3.

Pack, A. B. 1952. Some Principles of Good Tobacco Curing. The Valley Grower.

Pack, A. B. and W. A. Junilla. 1952. Principles of Curing Broadleaf and Havana Seed Tobaccos. CAES Circular 183.

Petersen, E. L. 1952. Controlling tobacco sucker growth with maleic hydrazide. Agronomy Journal 44(6):332-334.

Petersen, E. L. and P. J. Anderson. 1952. Fungicides tested against field blue mold. Cigar Valley News 2(4):9.

Swanback, T. R. 1952. The Nitrogen Fertilization of Connecticut Tobacco. CAES Bulletin 559.

Swanback, T. R. and P. J. Anderson. 1952. Fertilizer Placement for Connecticut Tobacco. CAES Bulletin 561.

1953

Anderson, P. J. 1953. Growing Tobacco in Connecticut. CAES Bulletin 564.

Anderson, P. J. 1953. Are tobacco strains running out? Cigar Valley News 3:4.

Junilla, W. A., A. B. Pack, M. S. Klinick and A. B. Barton. Firing 1953. The firing of shade-grown tobacco with L-P gas. Storrs Agricultural Experiment Station Bulletin.

Pack, A. B. 1953. Curing of valley cigar tobaccos. Tobacco 136:16-18.

Taylor, G. S. 1953. Control of tobacco blue mold by root application of zineb and ferbam (Abstract). Phytopathology 43:486.

Pack, A. B. 1954. Problems and paths of current curing research for Connecticut Valley tobacco. Tobacco 138(25):8-11.

Taylor, G. S. 1954. Tobacco Diseases. Tobacco 138(25):12, 13, 18.

1955

DeRoo, H. C. 1955. Let's look at the roots. Frontiers of Plant Science. 8(1):4-5.

DeRoo, H. C. 1955. The root is half the plant. The Rural New Yorker.

Waggoner, P. E. and G. S. Taylor. 1955. Tobacco blue mold epephytotics in the field. Plant Disease Reporter 39:79-85.

1956

DeRoo, H. C. 1956. Subsoiling, plowing, and deep placement of lime or fertilizer in one operation. Agronomy Journal 48:476-477.

Pack, A. B. 1956. Drying Rate and Quality of Tobacco. CAES Bulletin 599.

1957

DeRoo, H. C. 1957. Fertilizing Connecticut Tobacco. CAES Bulletin 613.

DeRoo, H. C. 1957. Root Growth in Connecticut Tobacco Soils. CAES Bulletin 608.

Boyd, A. 1957. Influence of Wet-Bulb Temperature During Curing on Properties of Shade-Grown Tobacco. CAES Bulletin 612.

Rich, S. and G. S. Taylor. 1957. Cotton seed oil formulations of organic fungicides for tobacco. Pl. Dis. Reptr. 41:465-467.

Waggoner, P. E. and G. S. 1957. Taylor. Disperal of Peronospora tabacina from tobacco blue mold lesions. (Abstr). Phytopathology 47:36.

1958

DeRoo, H. C. 1958. Living quarters for plant roots. Amer. Agric. Reports.

DeRoo, H. C. 1958. Nitrogen Sources for Connecticut Tobacco. CAES Bulletin 623.

DeRoo, H. C. 1958. Soil testing and fertilizing for tobacco. New England Homestead 131:18.

Miller, P. M. and G. S. Taylor. 1958. Superior control of tobacco stunt nematodes with a nematicide mixture. Pythopath. 48:264.

1960

Rich, S. and G. S. Taylor. 1960. Antiozonants to protect plants from ozone damage. Science 132:150-151.

Sand, S. A. 1960. The Pedigree of Connecticut 49 Shade Tobacco. CAES Bulletin 630.

Taylor, G. S., H. C. DeRoo and P. E. Waggoner. 1960. Moisture and fleck of tobacco. Tobacco Science 4:62-68.

1961

Ahrens, J. F. 1961. Connecticut holds nursery and turf weed day. Amer. Nurserymen 114: 60-61

DeRoo, H. C. 1961. Deep Tillage and Root Growth. CAES Bulletin 644.

DeRoo, H. C. 1961. Root development in coarse textured soils as related to tillage practices and soil compaction. Transactions of the VII International Soil Science Congress 1: 622-628.

Hill, D. E. 1961. Criteria for classifying Charlton and Gloucester soils (Abstract) Northeast Section of the American Society of Agronomy. Montreal.

Sand, S. A. and G. S. Taylor. 1961. C2, a New Mosaic Resistant Connecticut Broadleaf Tobacco. CAES Bulletin 636.

Taylor, G. S. and S. Rich. 1961. Tobacco fleck controlled with antiozonants. Phytopathology 51: 579.

1962

Ahrens, J. F. 1962. Chemical control of quackgrass and nutgrass in nursery liners. Proc. N. E. Weed Control Conf. 16:226-231.

- Ahrens, J. F. 1962. Controlling chickweed and quackgrass in nursery plantings. Bulletin Connecticut Nurserymen's Assn.
- Ahrens, J. F. and E. M. Stoddard. 1962. Eradication of Poison Ivy and Poison Sumac. CAES Circular 222.
- Ahrens, J. F., D. V. Sweet and J. R. Havis. 1962. Effects of soil fertility on simazine injury to nursery plants: preliminary results. Proc. N.E. Weed Control Conf. 16:198-201.
- Ahrens, J. F., R. J. Lukens, and A. R. Olson. 1962. Control of Crabgrass and Other Weeds in Turf. CAES Bulletin 649.
- Ahrens, J. F., R. J. Lukens, and A. R. Olson. 1962. Preemergence control of crabgrass in turf with fall and spring treatments. Proc. N.E. Weed Control Conf. 16:511-518.
- Miller, P. M. and G. S. Taylor. 1962. Some effects of transient vs. residual nematocides on nematode populations and the Connecticut tobacco crop. Tobacco 154:20-22.
- Miller, P. M., G. S. Taylor and E. M. Stoddard. 1962. Effect of fungicides on the larval emergence of the tobacco cyst nematode. Phytopathology 51:577.
- Taylor, G. S. and S. Rich. 1962. Antiozonant treated cloth protects tobacco from fleck. Science 135:928.

- Ahrens, J. F. 1963 Trials with herbicides in nursery plantings. Proc. NEWCC 18: 220-224. 1964.
- Ahrens, J. F. and W. E. Loomis. 1963. Floral induction and development in winter wheat. Crop Science 3:463-466.
- Hill, D. E. and W. N. Gonick. 1963. The Paxton Soils. CAES Bulletin 662.
- Ahrens, J. F. 1964. Evaluation of herbicides for grass control in newly planted Christmas trees. Proc. NEWCC 18:557-562.
- Ahrens, J. F. and P. M. Miller. 1964. Effects of simazine and mulches on weed control and growth in newly planted apple trees. Proc. NEWCC 18:99-104.

1964

- Ahrens, J. F. 1964. Detoxification of simazine treated soil with activated charcoal. Weed Soc. of America. Abstracts p. 9-10.
- DeRoo, H. C. 1964. The liming and fertilization of artificial root media. Special Bulletin, Soils XIX.
- Hill, D. E. 1964. Progress report of standard soil surveys in Connecticut. Special Bulletin, Soils XVIII.
- Miller, P. M. and J. F. Ahrens. 1964. Effect of an herbicide, a nematocide, and a fungicide on Rhizoctonia infestation of Taxus. Phytopathology 54:901.
- Miller, P. M., E. M. Stoddard, and J. F. Ahrens. 1964. Stimulation of crabgrass seed germination by di-bromochloropropane and ethylene dibromide. Weeds III; 13-14.
- Whitaker, J. H., R. G. Light and G. S. Taylor. 1964. A leaf harvester for a systems approach to field tobacco production. Univ. of Conn. College Agr. Exp. Sta. Bul. 386.

1965

- Ahrens, J. F. 1965. Present and future uses of herbicides in ornamentals. Weeds and Turf 4:12-14, 29-36.
- Ahrens, J. F. 1965. "Detoxification of simazineand atrazine- treated soil with activated carbon. Proc. NEWCC 19:364-365.
- Ahrens, J. F. 1965. Improving herbicide selectivity in horticultural crops with activated carbon. Proc. NEWCC 19:366-367.
- Ahrens, J. F. 1965. New herbicides for preemergence control of crabgrass in turf. Proc. NEWCC 19:473-477.

- Ahrens, J. F. 1966. Effects of mulches on the persistence of simazine in the soil. Proc. N.E. Weed Control Conf. 20:89.
- Ahrens, J. F. 1966. Further studies with activated carbon for herbicide detoxification in soils. Abstracts of Weed Society of America, p. 71.

- Ahrens, J. F. 1966. Trials with dichlorobenil and diphenamid for controlling weeds in container-grown nursery stock. Proc. N.E. Weed Control Conf. 20:232-236.
- Ahrens, J. F. 1966. Chemical control of weeds in deciduous shrubs. Proc. N.E. Weed Control Conf. 20:209-214.
- Ahrens, J. F. 1966. Herbicides around nut trees. 57th Annual Report of the Northern Nut Growers Association. 57:58-61.
- Ahrens, J. F. 1966.Persistence of dichlobenil and EPTC applied for quackgrass control in ornamentals. Proc. N.E. Weed Control Conf. 20:630-631.
- Ahrens, J. F. and R. J. Lukens. 1966. Studies on the chemical control of Poa annua in C1-C19 putting green turf. Proc. N.E. Weed Control Conf. 20:547-551.
- DeRoo, H. C. 1966. Root training by plastic tubes. II. Geotropic reaction of the roots of several species. Agron. J. 58:359-361.
- DeRoo, H. C. 1966. Root training by plastic tubes. III. Soil aeration appraised by tube-grown plants. Agron. J. 58:483-486.
- DeRoo, H. C. 1966. Survival of tobacco seedlings, as affected by decenylsuccinic acid and transplant size. Tobacco Sci. 10:154-156.

- Ahrens, J. F. 1967. Investigations conducted in 1966 on the control of aquatic weeds. Report to Connecticut State Water Resources Commission. 16 pp.
- Ahrens, J. F. 1967. Problems in chemical weed control in vegetable crops. Proc. 53rd Annual Meeting of Connecticut Vegetable Growers Association.
- Ahrens, J. F. 1967. The persistence of simazine in soil. Abstract. 1967 Meeting, Weed Society of America. 75-76.
- Ahrens, J. F. 1967. Long term effects of herbicides in nursery plantings. Proc. Northeastern Weed Control Conference 21:200.
- Ahrens, J. F. 1967. Improving herbicide selectivity in transplanted crops with root dips of activated carbon. Proc. Northeastern Weed Control Conference 21:64-70.

- DeRoo, H. C. 1967. Artificial root media and fertilizations for container-grown woody ornamental plants. Conn. Agr. Exp. Sta. Spec. Soil. Bull. 26:12.
- DeRoo. H. C. 1967. Water stress gradients in plants and soil-root systems. Agron. Abstr. P. 125.
- Miller, P. M. and G. S. Taylor. 1967. Effects of fungicides on hatching survival and nematicidal killing of eggs on *Heterodera tabacum* in the field. Plant Disease Reporter 51:609-613.
- Whitaker, J. H. and J. F. Ahrens. 1967. Bulk curing studies of cigar tobacco. J. Amer. Soc. Agr. Engineering 49:25.

- Ahrens, J. F. 1968. Chemical Control of Weeds in Connecticut Tobacco. CAES Bulletin 697.
- Ahrens, J. F. 1968. Chemical control of weeds in rhubarb (*Rheum rhaponticum*) Proc. Northeastern Weed Control Conference (Supplement) 22:15.
- Ahrens, J. F. 1968. Chemical weed control in strawberries with and without carbon root dips. Proc. Northeastern Weed Control Conf. (Supplement) 22:21.
- Ahrens, J. F. 1968. Control of weeds in container-grown nursery stock. Proc. Northeastern Weed Control Conf. (Supplement) 22:22.
- Ahrens, J. F. 1968. Control of weeds in bedding plants and ground covers. Proc. Northeastern Weed Control Conf. (Supplement) 22:23.
- Ahrens, J. F. 1968. Effects of soil incorporation on the persistence and phytotoxicity of dichlobenil. Proc. Northeastern Weed Control Conf. (Supplement) 22:209.
- Ahrens, J. F. 1968. Persistence of picloram and dicamba in nurseries' sandy loam. Proc. Northeastern Weed Control Conf. (Supplement) 22:46.
- Ahrens, J. F. 1968. Preplanting treatments for weed control in Connecticut shadegrown tobacco. Proc. Northeastern Weed Control Conf. (Supplement) 22:41.
- Ahrens, J. F. 1968. Winning the War with Weeds. Indiana Nursery News 29:3-7.

- Ahrens, J. F. and W. L. George. 1968. Vine killing in gourds. Proc. Northeastern Weed Control Conf. (Supplement) 22:10.
- Ahrens, J. F. and J. B. Kring. 1968. Reduction of residues of heptachlor and chlordane in carrots with soil applications of activated carbon. Jour. Econ. Ent. 61:1540-1543.
- DeRoo, H. C. 1968. Summary of comments. pg. 54. Informal root symposium. Harvard Forest, Petersham, Mass.
- DeRoo, H. C. 1968. Tillage and root growth, p. 339-358. In W. J. Whittington (Ed.) Root growth. Butterworths, London. 450 p.
- Miller, P. M., G. S. Taylor, and S. E. Wihrheim. 1968. Effects of cellulosic soil amendments of Heterodera tabacum. Plant Dis. Reptr. 52:441-445.
- Taylor, G. S. 1968. Ozone injury on Bel-W-3 tobacco controlled by at least two genes. Phytopathology 58:10-69 (Abs.).

- Ahrens, J. F. 1969. Control of established winter annual weeds, dandelion and vetch in Taxus. Proc. Northeastern Weed Control Conf. 23:83-88.
- Ahrens, J. F. 1969. Control of weeds under dwarfed apple trees. Proc. Northeastern Weed Control Conference (Supplement) 23:14.
- Ahrens, J. F. 1969. Herbicides. pp. 51-59. In: Handbook of North American Nut Trees. R. Jaynes, Ed. North American Nut Growers Assoc.
- Ahrens, J. F. 1969. Persistence and counteraction of bensulide in turf. Proc. Northeastern Weed Control Conf. 23:405.
- Ahrens, J. F. 1969. Preplanting applications of diphenamid and trifluralin and postplanting applications of simazine in azaleas. Proc. Northeastern Weed Control Conference (Supplement) 23:15.
- Ahrens, J. F. and J. B. Kring. 1969. Activated carbon absorbs pesticides. Frontiers of Plant Science Spring Issue.
- Ahrens, J. F., T. R. Flanagan and M. L. McCormack, Jr. 1969. Chemical Control of Sod in Christmas Tree Plantings. CAES Bulletin 700.

- DeRoo, H. C. 1969. Leaf water potentials of sorghum and corn, estimated with the pressure bomb. Agron. J. 61: 969-970.
- DeRoo, H. C. 1969. Sap stress and water uptake in detached shoots of wilt-diseased and normal rhododendrons. Hort. Sci. 4: 51-52.
- DeRoo, H. C. 1969. Water stress gradients in plants and soil-root systems. Agronomy J. 61: 511-515.
- DeRoo, H. C. 1969. Water stress in tobacco. Cigar Manufacturers Assoc. Seminar Abstracts. p. 17.
- Miller, P. M. and J. F. Ahrens. 1969. Marigolds A Biological Control of Meadow Nematodes in Gardens. CAES Bulletin 701.
- Miller, P. M. and J. F. Ahrens. 1969. Marigolds in the garden. Horticulture 47:30-31.
- Miller, P. M. and J. F. Ahrens. 1969. Influence of growing marigolds, weeds, two cover crops and fumigation on subsequent populations of parasitic nematodes and plant growth. Plant Disease Reporter. 53:642-646.
- Taylor, G. S. 1969. A black mildew of the genus *Diporotheca*, found on roots of *Nicotiana tabacum* in Connecticut. Plant Disease Reptr. 53:85-86.
- Taylor, G. S. 1969. Torvald Bertinuson and Maynard Petersen. Strength of shade cloth (Abstr.) Cigar Manufacturers Association Research Seminar, Hartford, Conn.

- Ahrens, J. F. and O. A. Leonard. 1970. Phytotoxicity of zonal applications of dichlobenil in Douglas fir. Proc. N.E. Weed Control Conf. 24: 25-29.
- Ahrens, J. F. and O. A. Leonard. 1970. Effect of dichlobenil on growth, assimilation, and transport in peach seedlings. Weed Science Society of America. p. 51.
- Ahrens, J. F., O. A. Leonard, and N. R. Townley. 1970. Chemical control of tree roots in sewer lines. J. Water Pollution Control Fed. 42:1643-1655.
- DeRoo, H. C. 1970. Leaf water potentials of tobacco, estimated with the pressure bomb. Tobacco Sci. 14:105-106; Tobacco 171:121-122.

- DeRoo, H. C. and R. E. Moore. 1970. Keeping Christmas trees fresh longer in the home. American Christmas Tree Journal XIV:23-26.
- Leonard, O. A. and J. F. Ahrens. 1970. Control of tree roots in sewer lines. Weed Science Soc. of America meeting, p. 59.
- Miller, P. M. and G. S. Taylor. 1970. Effects of several nematicides and benomyl on the incidence of weather fleck of tobacco. Plant Disease Reptr. 54:672-674.
- Miller, P. M. and G. S. Taylor. 1970. Nematicidal control of Heterodera tabacum. Phytopathology 60:411-414.
- Rich, Saul and G. S. Taylor. Crops damaging periods of ambient ozone in Connecticut. Plant Disease Reptr. 53:969-973.
- Taylor, G. S. 1970.Tobacco protected against fleck by benomyl and other fungicides. Phytopathology 60:578. (Abstract).
- Taylor, G. S. and P. M. Miller. 1970. Weather fleck on tobacco made worse by certain nematicides. Phytopathology 60:578-579.

- Ahrens, J. F. 1971. Weed control in container-grown nursery stock. Proc. NEWSS 25:240.
- Ahrens, J. F. 1971. Chemical control of crabgrass (*Digitaria* spp.) and other weeds in nursery plantings with fall and spring applications. Proc. NEWSS 25:241-248.
- Ahrens, J. F. 1971. Control of quackgrass (*Agropyron repens* (L.) Beauv.) in woody plants with RH-315. Proc. NEWSS Suppl. 25:10.
- Ahrens, J. F. 1971.Postplanting applications of herbicides on bare-root nursery stock. Proc. NEWSS Suppl. 25:11.
- Ahrens, J. F. 1971. Chemical control for weeds in hardwood cuttings of ornamental shrubs. Proc. NEWSS Suppl. 25:12.
- Ahrens, J. F. 1971. Chemical control for weeds in conifer seedlings. Proc. NEWSS Suppl. 25:13.
- Ahrens, J. F. 1971. Weed science and man's environment. Proc. NEWSS Suppl. 25:54-56.
- Ahrens, J. F. and C. L. Elmore. 1971. Leaching and selectivity of herbicides in container-grown

- ornamentals. Weed Sci. Soc. America. Abstr. Page 92.
- Taylor, G. S. 1971. Chemical control of ozone injury on tobacco leaves. Cigar Manufacturers Assoc. Res. Seminar, Abstr.
- Turner, Neil C., Henry C. DeRoo, and Wm. H. Wright. 1971. A pressure chamber for the measurement of plant water potential. Spec. Soils Bull. 33.

- Ahrens, J. F. 1972. Chemical control of weeds in one-year old conifer seedbeds. Proc. 1972 Meetings Northeastern Area Nurserymen's Conference. p. 5-6.
- Ahrens, J. F. 1972. Granular herbicides front line fighters in war on weeds. Weeds Today 3:12-13.
- Ahrens, J. F. 1972. Herbicide combinations for gladiolus cormels. Bull. North Amer. Gladiolus Council 110:64-68.
- Ahrens, J. F. 1972. Phytotoxicity and persistence of simazine in a shallow lake. Proc. NEWSS 26:166.
- Ahrens, J. F. 1972. Root toxicity of chemical grout fortified with metham or dichlobenil. Abstr. 1972 Meetings Weed Science Soc. Am. p. 32
- Ahrens, J. F. 1972. Rooting cuttings from plants treated with herbicides. Proc. Int. Plant Propagators' Society 22:374-389.
- Ahrens, J. F. 1972. Rooting of rhododendron cuttings from container-grown plants treated with trifluralin and simazine. The Plant Propagator 18:12-18.
- Ahrens, J. F. 1972. Rooting cuttings from plants treated with herbicides. Proc. Int. Plant Propagators' Society 22:374-389.
- DeRoo, H. C. 1972. Artificial root media and fertilizations for container-grown chrysanthemums. 11 pp. CAES Circular 245.
- DeRoo, H. C. 1972. Keeping Christmas trees fresh longer indoors. Amer. Christmas Tree Growers Journal XVI:7-9.
- Stephens, G. R., N. C. Turner, and H. C. DeRoo. 1972. Some effects of defoliation by gypsy moth (*Porthetria dispar* L.) and elm spanworm

(*Ennomos subsignarius* Hbn.) on water balance and growth of deciduous forest trees. Forest Sci. 18:326-330.

Taylor, G. S. 1972. Benomyl controls Botrytis stem rot of tobacco seedlings. Phytopathology 62:500-501 (Abstr.).

1973

- Ahrens, J. F. 1973. Fall vs. spring applied herbicides for control of annual weeds in nursery plantings. Abstract. 1973. Meeting of Weed Science Society of America. p. 16-17.
- Ahrens, J. F. 1973. Control of annual weeds in chrysanthemums. Abs. Proceedings Northeastern Weed Science Society 27:306-307.
- Ahrens, J. F. 1973. Control of sod in Christmas tree plantings with simazine, atrazine, and glyphosate. Proc. Northeastern Weed Science Society 27:310-314.
- Ahrens, J. F. 1973. Herbicide combinations for weed control in gladiolus. Conn. Greenhouse Newsletter 52:4-8.
- Ahrens, J. F. 1973. Weed and brush control from seedbed to harvest. Proc. Cornell Univ. School for Christmas tree growers. p. 1-13. (Reprinted in Amer. Christmas Tree Jour. 18:11-18, 1974).
- Miller, P. M., and G. S. Taylor. 1973. Fusarium wilt of tomatoes influenced by previous soil pasteurization with DD-MENCS or steam. Plant Disease Reptr. 57:267-269.
- Taylor, G. S. and S. Rich. 1973. Ozone fleck on tobacco reduced by benomyl and carboxin in soil. Phytopathology 63:208. (Abstract)

1974

- Ahrens, J. F. 1974. Fall applications of herbicides for control of quackgrass and yellow nutsedge in *Taxus cuspidata capitata*. Proc. Northeast Weed Sci. Soc. 28:379-385.
- Ahrens, J. F. 1974. Preplant herbicides for control of quackgrass in ornamentals. Proc. Northeast Weed Sci. Soc. 28:372-377.
- Ahrens, J. F. 1974. Selectivity of glyphosate and asulam in ornamental plantings and Christmas trees. Proc. Northeast Weed Control Conf. 28:361-368.

- Ahrens, J. F. 1974. Weed control in field-grown chrysanthemums. Proc. Northeast Weed Sci. Soc. 28:386-394.
- Taylor, G. S. 1974. Ozone injury on tobacco seedlings can predict susceptibility in the field. Phytopathology 64:1047-1048.
- Taylor, G. S., and S. Rich. 1974. Ozone injury to tobacco in the field influenced by soil treatments with benomyl and carboxin. Phytopathology 64:814-817.
- Turner, N. C. and H. C. DeRoo. 1974. Hydration of eastern hemlock as influenced by waxing and weather. Forest Sci. 20:19-24.

- Ahrens, J. F. 1975. Vine killers on Katahdin potatoes in Connecticut. Proc. Northeast Weed Cont. Conf. 29:276-280.
- Ahrens, J. F. 1975. Preliminary results with glyphosate for control of *Polygonum crispidatum*. Proc. Northeast Weed Cont. Conf. 29:326.
- Ahrens, J. F. 1975. Further experiments on the control of quackgrass in ornamentals. Proc. Northeast Weed Cont. Conf. 29:349-350.
- Ahrens, J. F. 1975. Chemical control of nutsedge in gladiolus cormels. Proc. Northeast Weed Cont. Conf. 29:351-353.
- Ahrens, J. F. 1975. Selectivity of glyphosate and asulam in ornamental plantings. Abstract 1975 Meeting Weed Sci. Soc. Amer. p. 16.
- Ahrens J. F. and D. M. Dunbar. 1975. Are herbicides effective in control of Pales and Northern Pine Weevils in Christmas tree plantations? Amer. Christmas Tree Jour. May issue. p. 17-20.
- Ahrens, J. F. and G. R. Stephens. 1975. The Effects of Additives on Freshness and Flammability of Christmas Trees. CAES Bulletin 760
- Ahrens, J. F. and G. R. Stephens. 1975. Effect of harvest date or dry storage on moisture content and flammability of white spruce. Amer. Christmas Tree Jour. 19:13-16.
- DeRoo, H. C. 1975. Agricultural and Horticultural Utilization of Fermentation Residues. CAES Bulletin 750.

Taylor, G. S. 1975. Cold tolerance of *Phytophthora parasitica* var. *nicotianae* isolated from tobacco in Connecticut. Plant Disease Reptr. 59:249-252.

Taylor, G. S., P. M. Miller, and J. L. McIntyre. 1975. Chemical control of tobacco black shank in Connecticut. Plant Disease Reptr. 59:434-438.

1976

Ahrens, J. F. 1976. Chemical control of *Artemesia vulgaris* in ornamentals. Proc. Northeast Weed Sci. Soc. 30:303-307.

Ahrens, J. F. 1976. Control of Japanese knotweed. Nutmeg Newsletter, Feb.-Mar.

Ahrens, J. F. 1976. Directed sprays of cacodylic acid and paraquat for control of established weeds in ornamentals. Nutmeg Newsletter, Feb.-Mar.

Ahrens, J. F. 1976. Experimental herbicides for field-grown ornamentals. Proc. Northeast Weed Sci. Soc. 30:297-302.

Ahrens, J. F. 1976. Fire codes and tree freshness. Proc. 1976 School for Christmas Tree Growers, Cornell University. pp. 71-76.

Ahrens, J. F. and E. E. Stevenson. 1976. Leaching of herbicides in two container mixes. Abstr. 1976 Mtg. Weed Sci. Soc. Amer. p. 31.

Ahrens, J. F., C. G. Merrill and M. Cubanski. 1976. Herbicides for Conifer Seedbeds. CAES Bulletin 766.

Ahrens, J. F., E. E. Stevenson, M. Cubanski and C. D. Merrill. 1976. Herbicides for seedbeds of deciduous woody plants. Proc. Northeast Weed Sci. Soc. 30:277-282.

DeRoo, H. C. 1976. Effects of large applications of gypsum and fermentation residues on the growth of tomato plants. HortScience 11:215-216.

Elmore, C. L., J. F. Ahrens, and W. A. Humphrey. 1976. Leaching of herbicides in container mixes. Plant Propagator 22(22):7-10.

McIntyre, J. L. and G. S. Taylor. 1976. Screening tobacco seedlings for resistance to *Phytophthora parasitica* var. *nicotianae*. Phytopathology 66:70-73.

Miller, P. M., H. Tomlinson, and G. S. Taylor. 1976. Reducing severity of ozone damage to

tobacco and beans by combining benomyl or carboxin with contact nematicides. Plant Disease Reptr. 60:433-436.

Stephens, G. R. and J. F. Ahrens. 1976. Keeping Christmas trees fresh. Frontiers of Plant Science 29(1):6-7.

Starr, J. L., J.-Y. Parlange, H. C. DeRoo, and C. R. Frink. 1976. Field infiltration of water and dye in a 180-cm diameter column. Agron. Abstr. P. 123.

Taylor, G. S. and P. M. Miller. 1976. Control of tobacco cyst nematode in Connecticut with oxamyl and ethoprop. Proc. Am. Phytopathol. Soc. (1975) 2:108.

1977

Ahrens, J. F. 1977. Glyphosate for control of perennial weeds and brush in conifer plantings. Abstract 1977. Mtg. Weed Sci. Soc. of Amer. P. 46.

Ahrens, J. F. 1977. Postemergence herbicides on the bark and basal sprouts of shade trees. Proc. Northeast Weed Sci. Soc. 31:335-339.

Ahrens, J. F. and M. Cubanski. 1977. Herbicides for hemlock seedbeds. Proc. Northeast Weed Sci. Soc. 31:315-319.

DeRoo, H. C. 1977. Meeting mountain laurel's container mix requirements. American Nurserymen, CXLV(11):14, 88-92.

1978

Ahrens, J. F. 1978. Control of established weeds in container-grown nursery stock. Abstract. Proc. Northeast Weed Sci. Soc. 32:300.

Ahrens, J. F. 1978. Glyphosate and paraquat on the bark of shade trees. Abstract. Proc. Northeast Weed Si. Soc. 32:282.

Ahrens, J. F. 1978. Glyphosate for weed control in apple orchards. Abstract. Proc. Northeast Weed Sci. Soc. 32:189.

Ahrens, J. F. 1978. Nurseries need weed control. Weeds Today 9:12, 13, 16.

Ahrens, J. F. 1978. Phytotoxicity of vapors from herbicides on soil in plastic containers. Abstract. 1978. Mtg. Weed Sci. Soc. Amer. p. 34.

- Ahrens, J. F. 1978. Preemergence and postemergence herbicides for nursery plantings. Abstract. Proc. Northeast Weed Sci. Soc. 32:290.
- McIntyre, J. L., and G. S. Taylor. 1978. Race 3 of *Phytophthora parasitica* var. *nicotianae*. Phytopathology 68:35-38.
- McIntyre, J. L., D. C. Sands, G. S. Taylor. 1978. Overwintering, control, and pathogenicity studies on the tobacco hollow stalk pathogen, *Erwinia carotovora* var. *carotovora*. Phytopathology 68:435-440.
- Starr, J. L., H. C. DeRoo, C. R. Frink and J.-Y. Parlange. 1978. Leaching characteristics of a layered field soil. Soil Sci. Soc. Am. J. 42:386-391.
- Taylor, G. S. 1978. Rapid production of *Phytophthora parasitica* var. *nicotianae* zoospores in vitro from infested cloth. Plant Disease Reptr. 64:281-282.
- Taylor, G. S. and R. E. B. Moore. 1978. Egglaying of tree cricket leads to canker on red maples. Frontiers of Plant Science, Fall 1978.
- Taylor, G. S., J. L. McIntyre, and P. E. Waggoner. 1978. Black Shank of Tobacco in Connecticut Fields. CEAS Bulletin 773.

- Ahrens, J. F. 1979. All there is to know about herbicides. Amer. Nurserymen, 149:16, 40, 44, 48, 50, 52, 54, 55.
- Ahrens, J. F. 1979. Broadcast sprayer attachment simplifies herbicide application in confined areas. Amer. Nurseryman 149:11, 87-90.
- Ahrens, J. F. 1979. Chemical control of multiflora rose. Proc. Northeast Weed Sci. Soc. 33:213-217.
- Ahrens, J. F. 1979. Control of Japanese knotweed. Groundskeepers Magazine, Spring, 1979. pp. 5, 6, 19.
- Ahrens, J. F. 1979. Control of yellow nutsedge in nursery plantings. Proc. Northeast Weed Sci. Soc. 33:223-227.
- Ahrens, J. F. 1979. Cuttings from herbicide treated nursery stock what can we expect? Proc. Int. Plant Prop. Soc. 29:348-357.

- Ahrens, J. F. 1979. Herbicides. pp. 290-300. In R. A. Jaynes. (Ed.), Nut tree culture in North America. Northern Nut Growers Association.
- Ahrens, J. F. 1979. Herbicides for ground cover plantings. Proc. Northeast Weed Sci. Soc. 33:256-261.
- Ahrens, J. F. 1979. Repeated applications of granular herbicides on container-grown ornamentals. Abstracts. 1979 Mtg. Weed Sci. Soc. of Amer. p. 110.
- Ahrens, J. F. 1979. Throw your strawberries a hairpin curve. Amer. Fruit Growers 99:40-41.
- DeRoo, H. C. and G. S. Taylor. 1979. Growing Tobacco Seedlings in Multipot Trays. CAES Bulletin 775.
- DeRoo, H. C. and J. L. Starr. 1979. Recycling of clippings from lawns will save energy from nitrogen fertilizer. Frontiers of Plant Science 32(1):4-5.
- Moore, R. E. B. 1979. Aphid control on shade tobacco. Insecticide and Acaricide Tests 4:168.
- Moore, R. E. B. 1979. Control of adult black vine weevils on nursery grown taxus in Connecticut. Insecticide and Acaricide Tests 4:194.
- Moore, R. E. B. 1979. Green peach aphid control in shade with three concentrations of Orthene 75SP mixed with pecan dust. Insecticide and Acaricide Tests 4:168.
- Moore, R. E. B. 1979. Japanese beetle control on bluegrass turf. Insecticide and Acaricide Tests 4:199.
- Moore, R. E. B. and J. D. Hare. 1979. Foliar sprays of mid and late season control of Colorado potato beetle. Insecticide and Acaricide Tests 4:95.
- Taylor, G. S. and P. E. Waggoner. 1979. Resistance to black shank in the field predicted by a test of tobacco seedlings. Phytopathology 69:1132-1134.
- Taylor, G. S. and R. E. B. Moore. 1979. A canker of red maple associated with oviposition by the narrow-winged tree cricket. Phytopathology 69:236-239.

- Ahrens, J. F. 1980. Broadcast applications of herbicides with knapsack sprayers. Groundskeepers Magazine, Spring, 1980. 1-4.
- Ahrens, J. F. 1980. Control of yellow nutsedge in woody ornamentals. Proc. Northeast Weed Sci. Soc. 34:324-329.
- Ahrens, J. F. 1980. Effects of glyphosate on the bark of nine deciduous trees. Abstracts 1980. Mtg. Weed Sci. Soc. Amer. p. 42.
- Ahrens, J. F. 1980. Effects of surfactant or preemergence herbicides on the selectivity of asulam and woody plants. Proc. Northeast. Weed Sci. Soc. 34:330-333.
- Ahrens, J. F. 1980. Herbicides for newly planted blueberries. Abstract. Proc. Northeast Weed Sci. Soc. 34:270.
- Ahrens, J. F. 1980. Herbicides for newly planted strawberries. Abstract. Proc. Northeast Weed Sci. Soc. 34:259.
- DeRoo, H. C. 1980. Nitrate fluctuations in ground water as influenced by use of fertilizer. CAES Bulletin 779.
- Dodds, J. A. and G. S. Taylor. 1980. Cucumber mosaic virus infection of tobacco transplants and purslane (*Portulaca oleracea* L.) Plant Disease 64:294-296.
- Dodds, J. A. and G. S. Taylor. 1980. Purslane (*Portulaca oleracea* L.) as a possible source of cucumber mosaic virus infection of tobacco transplants. Phytopathology 70:461 (Abstract).
- Moore, R. E. B. 1980. Azalea phytotoxicity test, 1979. Insecticide and Acaricide Tests 5:165.
- Moore, R. E. B. 1980. Fletcher scale control on Taxus, 1979. Insecticide and Acaricide Tests 5:187.
- Moore, R. E. B. 1980. Foliar sprays for mid and late season control of the Colorado potato beetle: 1979. Insecticide and Acaricide Tests 5:91.
- Moore, R. E. B. 1980. Japanese beetle control, South Windsor, Connecticut, 1979. Insecticide and Acaricide Tests 5:197.

- Ahrens, J. F. 1981. Chemical control of established weeds in field-grown arborvitae. Proc. Northeastern Weed Sci. Soc. 35:248-252.
- Ahrens, J. F. 1981. Preemergence herbicides for transplanted herbaceous perennials. Proc. Northeastern Weed Sci. Soc. 35:267-272.
- Ahrens, J. F. 1981. Tolerance of dormant Fraser fir to postemergence herbicides. Proc. Northeastern Weed Sci. Soc. 35:203-206.
- Ahrens, J. F. 1981. Weed control in landscape plantings. J. Arboriculture 7:85-88 (reprinted in Groundskeepers Magazine, Spring, 1981)
- Ahrens, J. F. and M. Cubanski. 1981. Herbicide trials in newly seeded hemlock, white spruce, white pine, and Douglas fir. Proc. Northeastern Weed Sci. Soc. 35:213-217.
- Ahrens, J. F. and R. E. B. Moore. 1981. Residual control of aphids in Christmas tree plantations with aldicarb. 1977-80. Insecticide and Acaricide Tests 6:163.
- Moore, R. E. B. 1981. Japanese beetle control, South Windsor, Connecticut, 1980. Insecticide and Acaricide Tests 6:168.
- Moore, R. E. B. and J. D. Hare. 1981. Mid and late season foliar sprays and the evaluation of Thimet for control of the Colorado potato beetle. Insecticide and Acaricide Tests 6:90-91.

- Ahrens, J. F. 1982. Annual applications of preemergence herbicides on four ornamentals. Abstracts 1982 Mtg. Weed Sci. Soc. America p. 34.
- Ahrens, J. F. 1982. Herbicides for field-grown nursery stock. Proc. Northeastern Weed Sci. Soc. 36:282-286.
- Ahrens, J. F. 1982. Modifying knapsack sprayers for herbicide applications. Proc. Northeastern Weed Sci. Soc. 36:290-291. (Abstract)
- Ahrens, J. F. 1982. Napropamide and terbacil for newly planted strawberries. Advances in Strawberry Production 1:31-36.
- Ahrens, J. F. and A. Bing. 1982. Chemical control of large crabgrass on railroad ballast. Proc. Northeastern Weed Sci. Soc. 36:238-240.

- Ahrens, J. F. and J. B. Dwyer. 1982. Postemergence herbicides for Christmas tree plantings. Proc. Northeastern Weed Sci. Soc. 36:215-216 (Abstract).
- Ahrens, J. F. and M. Cubanski. 1982. Herbicides for seedbeds of evergreens. Proc. Northeastern Weed Sci. Soc. 36:246-247.
- Moore, R. E. B. 1982. Four registered pesticides effective against gypsy moth. Frontiers of Plant Science 34(2):6.
- Rathier, T. M. 1982. Reclaiming nutrients in wastes for use in agriculture. Frontiers of Plant Science 34(2):4-5.
- Rathier, T. M. 1982. Spent mushroom compost for greenhouse crops. Connecticut Greenhouse Newsletter UConn. Coop. Ext. Serv. No. 109. Pp. 1-5.

- Ahrens, J. F. 1983. Growth suppression in woody ornamentals with flurprimidol. Abstracts 1983 Mtg. Weed Sci. Soc. America, p. 37.
- Ahrens, J. F. 1983. Herbicides for conifer transplants. Proc. Northeastern Weed Sci. Soc. 37:305-309.
- Ahrens, J. F. 1983. Postemergence grass herbicides for woody ornamentals and Christmas trees. Proc. Northeastern Weed Sci. Soc. 37:318.
- Ahrens, J. F. and M. Cubanski. 1983. Herbicides for conifer seedbeds. Proc. Northeastern Weed Sci. Soc. 37:312.
- Rathier, T. M. 1983. A comparison of sources for lowering container media pH. American Nurseryman, January 1, 1983. pp. 105-107.
- Rathier, T. M. 1983. Is acid rain damaging our crops? Frontiers of Plant Sci. 36(1):4-5.
- Taylor, G. S. 1983. Cryptosporiopsis canker of *Acer rubrum*: Some relationships among host, pathogen, and vector. Plant Disease 67:984-986.

1984

Ahrens, J. F. 1984. Control of common groundsel in container ornamentals. Abstract. Proc. Northeast Weed Sci. Soc. 38:241-242.

- Ahrens, J. F. 1984. Controlling weeds in or near the greenhouse. Connecticut Greenhouse Newsletter 121:5-9.
- Ahrens, J. F. 1984. Herbicides for landscape uses. Proc. 16th Annual Professional Turf and Landscape Conference. Nassau/Suffolk Landscape Gardeners Assoc. 1-11.
- Ahrens, J. F. 1984. Herbicides for newly planted peaches. Abstract. Proc. Northeast Weed Sci. Soc. 38:176-177.
- Ahrens, J. F. 1984. Oryzalin injury to eastern hemlock. Abstract. Proc. Northeast Weed Sci. Soc. 38:249-250.
- Ahrens, J. F. 1984. Weed control. A Chapter in Connecticut-Rhode Island Christmas Tree Growers. Published by Cooperative Extension Services of Connecticut and Rhode Island.
- Ahrens, J. F. and J. J. Maisano, Jr. 1984. Herbicides a potential hazard. Connecticut Greenhouse Newsletter 120:7-9.
- Ahrens, J. F. and M. Cubanski. 1984. Herbicides for newly seeded conifers. Abstract. Proc. Northeast Weed Sci. Soc. 38: 247.
- Ahrens, J. F., G. R. Stephens and R. A. Jaynes. 1984. Conifers evaluated for Christmas trees and ornamentals. Frontiers of Plant Science 37(1):2-5.
- Rathier, T. M. and C. R. Frink. 1984. Simulated acid rain: Effects on leaf quality and yield of broadleaf tobacco. Water, Air and Soil Poll. 22:389-394.
- Rathier, T. M., C. R. Frink and G. S. Taylor. 1984. Metered applications of calcium nitrate in overhead Irrigation: Effects on yield and quality of shade-grown cigar wrapper tobacco. Tob. Sci. 28:3-6.

- Ahrens, J. F. 1985. Control of common groundsel (*Senecio vulgaris* L.) in container ornamentals. Abstracts Weed Sci. Soc. Of America 25:36.
- Ahrens, J. F. 1985. Evaluation of sulfometuron methyl for weed control in Christmas tree plantings. Proc. Northeast Weed Sci. Soc. 39:249-253.
- Ahrens, J. F. 1985. Phytotoxicity of selected industrial use herbicides in root zones of

ornamental plants. Proc. Northeast Weed Sci. Soc. 39:256-258.

Ahrens, J. F. 1985. Vegetation management - the latest in herbicide technology. Proc. Maine Christmas Tree Symposium, Univ. of Maine, Orono. 1985. (Invited paper)

Ahrens, J. F. and M. Cubanski. 1985. Evaluation of postemergence grass herbicides in conifer seedbeds and Christmas trees. Proc. Northeast Weed Sci. Soc. 39:243-246.

Moore, R. E. 1985. Control black vine weevil on container-grown Taxus, 1982. Insecticide & Acaricide Tests 10:325.

Moore, R. E. 1985. Phytotoxicity test on field-grown woody ornamentals, Connecticut, 1982. Insecticide & Acaricide Tests 10:307.

1986

Ahrens, J. F. 1986. Control of weeds in small fruits. Proc. New England Small Fruit School. January 7, 1986. pp. 55-69.

Ahrens, J. F. 1986. Herbicides for forest nurseries. Proceedings Canadian Forest Tree Nursery Workshop. July 11-14, 1985. Pp. 4-5.

LaMondia, J. A. 1986. Interactions between the tobacco cyst nematode and fusarium wilt on Connecticut broadleaf tobacco (ABSTRACT). Phytopathology 77:119.

McClure, M. S. 1986. Hemlock wooly adelgid (*Adelges tsugae*). Arborist Newsletter 85(4):16-17.

McClure, M. S. 1986. Hemlock woolly adelgid (*Adelges tsugae* Annand). Arborist Newsletter 86(2):3.

McClure, M. S. 1986. Population dynamics of Japanese hemlock scales: A comparison of endemic and exotic communities. Ecology 67:1411-1421.

McClure, M. S. 1986. Role of predators in regulation of endemic populations of *Matsucoccus matsumurae* (Homoptera: Margarodidae) in Japan. Environmental Entomology 15:976-983.

McClure, M. S. 1986. Importing ladybird beetles to control red pine scale. Arborist Newsletter 86(4):20-21. Reprinted from Frontiers of Plant Science.

McClure, M. S. 1986. Importing ladybird beetles to control red pine scale. Frontiers of Plant Science 39(1):5-7.

McClure, M. S. 1986. Scale insect pests of pines and hemlocks. Proceedings of the Tree Wardens, Arborists, and Utilities Conference 86:34-35.

Moore, R. E. 1986. Control black vine weevil larvae (BVW) with soil insecticides in Connecticut, 1984. Insecticide & Acaricide Tests 11:431.

Moore, R. E. 1986. Control of Japanese beetle larvae feeding on the roots of eastern Hemlocks at a nursery in Essex, Connecticut, 1984. Insecticide & Acaricide Tests 11:405.

Taylor, G. S. 1986. Nematicide alternatives for Connecticut Cigar tobacco. (ABSTRACT). Phytopathology 77:122.

Taylor, G. S. and T. M. Rathier. 1986. Effect of planting depth and slow release fertilizers on fusarium incidence and yield of Connecticut asparagus. Asparagus Research Newsletter Vol. 3, No. 2. February 1986. pp. 8-16.

1987

Ahrens, J. F. 1987. Control of field violet in strawberries with actifluorfen and oxyfluorfen. Proc. Northeastern Weed Science Society, Vol. 42:233-234.

Ahrens, J. F. 1987. Effects of herbicides on ground covers and turfgrass. Proc. Northeast. Weed Sci. Soc. 41:195-199.

Ahrens, J. F. 1987. Experiments with the injection of oxyfluorfen in irrigation water. Pp. 5-8 In: Proceedings Canadian Forest Tree Nursery Weed Control Workshop. July 20-22, 1987. Berthier, Quebec.

Ahrens, J. F. 1987. Herbicides for control of Oriental bittersweet. Proc. Northeast. Weed Sci. Soc. 41:167-170.

Ahrens, J. F. 1987. Herbicides for field-grown woody ornamentals. Proc. Northeastern Weed Science Society, Vol. 42:128.

Ahrens, J. F. 1987. Selectivity of herbicides in white pine and Colorado spruce. Proc. Northeast. Weed Sci. Soc. 41:204-205.

Ahrens, J. F. 1987. Using herbicides to produce a better Christmas tree. Amer. Christmas Tree Journal 31:38-42.

LaMondia, J. A. and G. S. Taylor. 1987. Influence of the tobacco cyst nematode (*Globodera tabacum*) on fusarium wilt of Connecticut broadleaf tobacco. Plant Disease 71:1129-1132.

LaMondia, J. A. and S. B. Martin. 1987. The interaction of *Pratylenchus penetrans* and binucleate *Rhizoctonia* spp. in root rot of strawberry. (ABSTRACT). Phytopathology 77:1735.

McClure, M. S. 1987. Biology and control of hemlock woolly adelgid. CAES Bulletin 851.

McClure, M. S. 1987. Controlling hemlock scales with least environmental impact. Arborist Newsletter 87(1):14-19.

McClure, M. S. 1987. Controlling Hemlock Scales with Least Environmental Impact. CAES Bulletin 844.

McClure, M. S. 1987. Hemlock infestations. The Nature Conservancy Newsletter 87(2):8.

McClure, M. S. 1987. Hemlock woolly adelgid may also attack spruce. Connecticut Woodlands 52(2):12, 15. Reprinted from Frontiers of Plant Science.

McClure, M. S. 1987. Hemlock wooly adelgid may also attack spruce. Frontiers of Plant Science 39(2):7-8.

McClure, M. S. 1987. Potential of the Asian predator *Harmonia axyridis* Pallas (Coleoptera: Coccinellidae) to control *Matsucoccus resinosae* Bean and Godwin (Homoptera: Margarodidae) in the United States. Environmental Entomology 16:224-230.

1988

Ahrens, J. F. 1988. Field violet control in strawberries. Page 4 In: Fruit-Growers Newsletter, Sept. 1988, Univ. of CT.

Ahrens, J. F. 1988. Herbicides in Christmas tree culture. pp. 7-12. In: Proceedings of Seminar on Balsam Fir. University of New Brunswick, Canada. March 25-26.

Ahrens, J. F. 1988. Weed control: A Brief Overview. Pp. 3-4 In: Connecticut Grape Growers Assoc. Newsletter, Winter 1988 Issue #1.

Ahrens, J. F., S. H. Broderick, N. K. Bender, E. G. Corbett, D. Russ, and D. B. Schroeder. 1988.

Chapter VII Weed Control. Pp. 19-23 In: Connecticut-Rhode Island Christmas Tree Growers Manual.

Douglas, S. M. and M. S. McClure. 1988. New integrated approach for controlling X-disease of stone fruits. CAES Bulletin 854.

LaMondia, J. A. 1988. Tobacco resistance to *Globodera tabacum*. Annals of Applied Nematology 2:77-80.

LaMondia, J. A. and S. B. Martin. 1988. Plant parasitic nematodes and fungi are an unhealthy alliance against strawberries. Frontiers of Plant Science 40(2):3-5.

LaMondia, J. A. and W. H. Elmer. 1988. Vegetatively compatible groups of *Fusarium moniliforme* colonizing asparagus tissues. (Abstract). Phytopathology 78:1518.

McClure, M. S. 1988. Coevolution of armored scale insects and their host plants: Speciation processes. *In* D. Rosen (Ed.) Armoured Scale Insects, Their Biology, Natural Enemies and Control. Elsevier Science Publishers, The Netherlands. Pp 171-174.

McClure, M. S. 1988. Ecology: Habitats and hosts. *In* D. Rosen (Ed.) Armoured Scale Insects, Their Biology, Natural Enemies and Control. Elsevier Science Publishers, The Netherlands. Pp. 293-296.

McClure, M. S. 1988. Fletcher Insecticide scale and control Acaricide on *Taxus* using foliar sprays in Autumn. Insecticide and Acaricide Tests 13:365-366.

McClure, M. S. 1988. Hemlock woolly adelgid: a dangerous introduced pest. p. 6-16. In: A. G. Raske (Ed.) Proceedings of the 21st Annual Northeastern Forest Insect Work Conference. State University of New York, Syracuse, New York.

McClure, M. S. 1988. Hemlock woolly adelgid, *Adelges tsugae* Annand, (Homoptera: Adelgidae) may attack spruce. Proc. International Congr. Entomol. XVIII:440. (Abstract).

McClure, M. S. 1988. Hemlock woolly adelgid control using foliar sprays. Insecticide and Acaricide Tests 13:378.

McClure, M. S. 1988. Hemlock woolly adelgid. Proceedings of the Eastern Plant Board 63:124-138.

McClure, M. S. 1988. Host relationships: impact on host plants. *In* D. Rosen (Ed.) Armoured Scale Insects, Their Biology, Natural Enemies and Control. Elsevier Science Publishers, The Netherlands. pp. 297-299.

McClure, M. S. 1988. Influence of environmental factors. *In* D. Rosen (Ed.) Armoured Scale Insects, Their Biology, Natural Enemies and Control. Elsevier Science Publishers, The Netherlands. pp. 329-340.

McClure, M. S. 1988. Life tables, models and population dynamics. D. Rosen (Ed.) Armoured Scale Insects, Their Biology, Natural Enemies and Control. Elsevier Science Publishers, The Netherlands. pp. 341-347.

McClure, M. S. 1988. Patterns of host specificity. *In* D. Rosen (Ed.) Armoured Scale Insects, Their Biology, Natural Enemies and Control. Elsevier Science Publishers, The Netherlands. pp. 311-313.

McClure, M. S. 1988. Patterns of temporal and spatial distribution. *In* D. Rosen (Ed.) Armoured Scale Insects, Their Biology, Natural Enemies and Control. Elsevier Science Publishers, The Netherlands. pp. 319-324.

McClure, M. S. 1988. Seasonal history. *In* D. Rosen (Ed.) Armoured Scale Insects, Their Biology, Natural Enemies and Control. Elsevier Science Publishers, The Netherlands. pp. 325-328.

McClure, M. S. 1988. The armored scales of hemlock. p. 45-65. In: A. A. Berryman Causes, (Ed.) Dynamics of Forest Insects Populations: Patterns, Causes, Implications. Plenum Press, New York.

McClure, M. S. 1988. Winter and oil spray to control Fletcher scale on *Taxus*. Insecticide and Acaricide Tests 13:366.

1989

Ahrens, J. F. 1989. Control of bird vetch in Christmas trees. (Abstract). Proceedings Northeastern Weed Science Society. Vol. 43:108. Jan. 4-5, Baltimore, MD.

Ahrens, J. F. 1989. Control of field violet in strawberry plantings. (Abstract). Proceedings Northeastern Weed Science Society. Vol. 43:149. Jan. 4-5, Baltimore, MD.

Ahrens, J. F. 1989. Garlon and Roundup in controlling perennial weeds in Christmas tree

plantings. Needle points. A Bulletin of the New Jersey Christmas Tree Growers Assoc. 6:1, 12, 14.

Ahrens, J. F. 1989. Meeting the challenge. Weed Technology 3:531-536.

Ahrens, J. F. 1989. Needle retention. Needle Points. A Bulletin of the New Jersey Christmas Tree Growers Assoc. 6:5, 6, 20.

Ahrens, J. F. 1989. Selectivity of sulfometuron methyl in White Pine, Colorado Spruce and Balsam Fir. Proceedings Northeastern Weed Science Society 44:106.

Ahrens, J. F. 1989. Stinger and Redeem, two new herbicides for Xmas trees. CT Nursery Newsletter 2(2):15.

Ahrens, J. F. 1989. Strategies for reducing leaching of herbicides to ground water. Conn. Nursery Newsletter (December) 1:5-8.

Ahrens, J. F. 1989. Strategies for preventing leaching of herbicides to ground water. Nursery Notes, Univ. of Massachusetts 2(3):3-4.

Ahrens, J. F. 1989. Taming container weeds. Amer. Nurseryman 170:43-47.

Ahrens, J. F. 1989. The role of government in economic weed management. Proc. of the 12th Asian-Pacific Weed Sci. Soc. Conf., Seoul, Korea. pp 619-622.

Ahrens, J. F. 1989. Update on weed control in Christmas trees. Needle Points. A Bulletin of the New Jersey Christmas Tree Growers Assoc. 6:9, 13.

Ahrens, J. F. 1989. Weed Control considerations for the fall. CT Nursery Newsletter 1(1):3-6.

Ahrens, J. F. 1989. Weed control in container-grown ornamentals. Balls and Burlap, Washington State Nursery Landscape Assoc. 4(12):8-9.

LaMondia, J. A. 1989. Incidence of ergot infection high in Hartford County. Hartford County Agricultural Stabilization and Conservation Service Newsletter July 1989.

LaMondia, J. A. 1989. Sampling soil for plant parasitic nematodes. Fruit Grower's Newsletter, March 31, 1989. pp. 4-7.

LaMondia, J. A. 1989. The effect of oxamyl on *Globodera tabacum* population dynamics and shade tobacco yield. J. Nematology 21:570-571 (Abstract).

- LaMondia, J. A. and S. Bruce Martin. 1989. The influence of *Pratylenchus penetrans* and temperature on black root rot of strawberry by binucleate *Rhizoctonia* spp. Plant Disease 73:107-110.
- LaMondia, J. A. and W. H. Elmer. 1989. Pathogenicity and vegetative compatibility among isolates of *Fusarium oxysporum* and *F. moniliforme* colonizing asparagus tissues. Canadian Journal of Botany 67:2420-2424.
- McClure, M. S. 1989. Biology, population trends, and damage of *Pineus boerneri* and *P. coloradensis* (Homoptera: Adelgidae). Environmental Entomology 18:1066-1073.
- McClure, M. S. 1989. Evidence of a polymorphic life cycle in the hemlock woolly adelgid, *Adelges tsugae* (Homoptera: Adelgidae) Annals of the Entomological Society of America 82:50-54.
- McClure, M. S. 1989. Importance of weather to the distribution and abundance of introduced adelgid and scale insects. Agricultural and Forest Meteorology 47:291-302.
- McClure, M. S., C. G. in Merrill and D. Souto. 1989. Hemlock wooly adelgid control in foliar sprays applied by mist blower. Insecticide and Acaricide Tests 14:346-347.
- Rathier, T. M. and C. R. Frink. 1989. Nitrate in runoff water from container-grown juniper and Alberta spruce under different irrigation and N fertilization regimes. J. Environ. Hort. 7(1):32-35.

- Ahrens, J. F. 1990. Weed control in strawberries. The Grower. CT Cooperative Extension Bulletin. Vol. 90-9:3-5.
- LaMondia, J. A. 1990. Effect of oxamyl on *Globodera tabacum* population dynamics and shade tobacco growth and yield. Supplement to Jrnl. of Nematology. 22:654-657.
- LaMondia, J. A. 1990. Pathogenicity and vegetative compatibility of *Fusarium oxysporum* isolated from tobacco. Tob. Sci. 34:105-108. (also reprinted in Tob. Int. 192:58-61).
- LaMondia, J. A. and B. B. Brodie. 1990. The effects of moisture on the thermosensitivity of *Globodera rostochiensis* (Nematoda). Amer. Potato J. 67:340-356.

- LaMondia, J. A. and T. M. Rathier. 1990. The influence of soil pH, calcium level, and nitrogen form on Fusarium wilt of tobacco. Phytopathology 80(10):121 (Abstract).
- McClure, M. S. 1990. Cohabitation and host species effects on the population growth of *Matsucoccus resinosae* (Homoptera: Margarodidae) and *Pineus boerneri* (Homoptera: Adelgidae) on red pine. Environ. Entomol. 19:672-676.
- McClure, M. S. 1990. Control of hemlock woolly adelgid. Tree News, Univ. of Mass. March 1990, p. 2.
- McClure, M. S. 1990. Density-dependent feedback and population cycles in hemlock woolly adelgid, *Adelges tsugae* Annand. Proc. XIX World Congress of the International Union of Forest Research Organizations, Montreal, Canada. p. 477. (Abstract).
- McClure. M. S. 1990. Hemlock woolly adelgid control by microinjection and implantation. Tree Times Quarterly 1(1): 1.
- McClure, M. S. 1990. Role of wind, birds, deer, and humans in the dispersal of hemlock woolly adelgid (Homoptera: Adelgidae). Environmental Entomology 19:36-43.

- Ahrens, J. F. 1991. Selectivity of clopyralid in woody ornamentals. Proc. Northeast. Weed Sci. Soc. 45:74 (Abstract).
- Ahrens, J. F. 1991. Selectivity of sulfonyl urea herbicides in woody ornamentals. Proc. Northeast. Weed Sci. Soc. 45:77 (Abstract).
- Ahrens, J. F. 1991. Things Christmas tree growers can do to maximize needle retention in white and Norway spruce. CT Christmas Tree Growers Assoc. Newsletter. May 1991.
- Ahrens, J. F. 1991. Update of herbicides for Christmas tree plantings. Michigan Christmas Tree Journal. 33(2):22-26.
- Ahrens, J. F. 1991. Update of herbicides for Christmas tree plantings. The Bulletin (New York Christmas Tree Growers' Assoc., Inc.) XXVI (3):18-20.
- Ahrens, J. F. 1991. Update on weed control in Christmas trees July 16, 1991. Newsletter, CT Christmas Tree Growers' Assoc. Inc., pp. 13-14.

- Ahrens, J. F. and J. D. Dzen. 1991. Raised bed culture of Christmas trees. Amer. Christmas Tree J. 35(3):52-54.
- Ahrens, J. F. and L. Q. Huang. 1991. Persistence and movement of conventional and controlled release alachlor. Weed Science Society of America. Abstracts 31:64.
- LaMondia, J. A. 1991. Anthracnose of strawberries. Grower, UCONN Vegetable and Small Fruit Newsletter 92-93.
- LaMondia, J. A. 1991. Breeding for tobacco resistance to *Globodera tabacum tabacum*. Plant Resistance Newsletter, Vol. 1, pp. 14-15, December 1991.
- LaMondia, J. A. 1991. First report of strawberry anthracnose caused by *Colletotrichum acutatum* in Connecticut. Plant Disease 75(12):1286. (Disease Note)
- LaMondia, J. A. 1991. Predisposition of broadleaf tobacco to Fusarium wilt by early season nematode infection. Phytopathology. 81: 123. (Abstract).
- LaMondia, J. A. 1991. The influence of the tobacco cyst nematode and Fusarium wiltresistant tobacco on *Fusarium oxysporum* densities in roots and soil. Phytopathology 81:1160. (Abstract)
- LaMondia, J. A. 1991. The genetics of tobacco resistance to *Globodera tabacum tabacum*. Plant Disease. 75:453-454.
- McClure, M. S. 1991. Adelgid and scale insect guilds on and pine. pp. 256-270. In Y. N. Baranchikov, W. J. Mattson, F. P. Hain, and T.L Payne (Eds.). Forest Insect Guilds: Patterns of Interaction with Host Trees. U.S. Dept. Agric. For. Serv. Gen. Tech. Rep. NE-153.
- McClure, M. S. 1991. Control of hemlock woolly adelgid. Yankee Nursery Quarterly 1(1): 1-3.
- McClure, M. S. 1991. Density-dependent feedback and population cycles in *Adelges tsugae* (Homoptera: Adelgidae) and *Tsugae Canadensis*. Environ. Entomol. 20:258-264.
- McClure, M. S. 1991. Nitrogen fertilization of hemlock increases susceptibility to hemlock woolly adelgid. J. Arboriculture 17:227-230.
- McClure, M. S. 1991. Nitrogen fertilizer increases susceptibility to woolly adelgid. American Nurseryman 174(2):131 (Abstract).

- McClure, M. S. 1991. Pesticides will protect ornamentals from hemlock woolly adelgid. Frontiers of Plant Science. 44(1):2-3.
- Mulgrew, S. M. and J. F. Ahrens et al. 1991. 1991 New England guide to chemical weed and brush control in Christmas trees. A Cooperative Ext. Public. by the New England Weed Control Specialists. L-679.
- Williams, C. H. and J. F. Ahrens. 1991. 1991 New England control of weeds in nursery crops. A Cooperative Ext. Public. by the New England Weed Control Specialists.

- Ahrens, J. F. 1992. 1992 Update of herbicides for Christmas tree plantings. Amer. Christmas Tree J. 36(1):49-53, January 1992.
- Ahrens, J. F. 1992. Control of mugwort in ornamentals with clopyralid. Proc. Northeast. Weed Sci. Soc. 46: 105.
- Ahrens, J. F. 1992. Current trends in weed control: Ornamentals. 1992 Weed Control Manual, Meister Publ. Co., p. 288.
- Ahrens, J. F. 1992. Scouting and thresholds in weed control: Ornamentals. 1992 Weed Control Manual, Meister Publ. Co., p. 289.
- Ahrens, J. F. 1992. Weed control. Chapter in Southern New England Christmas Tree Growers' Manual, pp. 35-48.
- LaMondia, J. A. 1992. Anthracnose fruit rot of strawberry found in Connecticut fields. Frontiers of Plant Science 44(2):5-6.
- LaMondia, J. A. 1992. Predisposition of broadleaf tobacco to Fusarium wilt by early infection with *Globodera tabacum tabacum* or *Meloidogyne hapla*. J. Nematol. 24(3):425-431.
- LaMondia, J. A. and G. S. Taylor. 1992. Registration of 'C8' and 'C9,' Fusarium wilt resistant broadleaf tobacco cultivars. Crop Sci. 32(4):1066-1067.
- LaMondia, J. A. and R. L. Wick. 1992. Occurrence of *Heterodera iri* in putting greens in the Northeastern Unites States. Plant Disease 76:643.
- LaMondia, J. A. and W. H. Elmer. 1992. Influence of chitin soil amendments and flutolanil application on black root rot of strawberry. Adv. Strawb. Res. 11:21-27.

LaMondia, J. A., T. M. Rathier, V. L. Smith, T. M. Likens, and M. H. Brand. 1992. Tissue proliferation/crown gall in rhododendron. Yankee Nursery Quarterly 2(2):1-3.

McClure, M. S. 1992. Advance of the adelgid: at stake, the survival of eastern hemlock, Audubon 94(4):26.

McClure, M. S. 1992. Effects of implanted and injected pesticides and fertilizers on the survival of *Adelges tsugae* (Homoptera: Adelgidae) and on the growth of *Tsuga canadensis*. J. Econ. Entomol. 85:468-472.

McClure, M. S. 1992. Hemlock wooly adelgid. American Nurseryman. 175(6):82-89.

McClure, M. S. 1992. Hemlock woolly adelgid. New Horizons 3(2):3 (Abstract).

McClure, M. S. 1992. Managing insect outbreaks. Landscape and Irrigation 16(8):38.

McClure, M. S. 1992. The future of hemlock in Connecticut's forests and ornamental landscapes is in peril. Branford Land Trust News 3(1):2-4.

Williams, C. H. and J. F. Ahrens. 1992. 1992 New England control of weeds in nursery crops. Coop. Extension Bulletin, Univ. New Hampshire.

1993

Ahrens, J. F. 1993. A new herbicide for Christmas tree plantings. Christmas Tree Magazine p. 12, 14. July.

Ahrens, J. F. 1993. Effects of butt treatments and hot water on water uptake by cut Colorado spruce. Connecticut Christmas Tree Growers Newsletter 33(4):8-9.

Ahrens, J. F. 1993. Managing hairy vetch as a cover crop in nurseries of woody ornamentals. Abstract, Proc. NEWSS 58:48.

LaMondia, J. A. 1993. Evaluation of reduced fumigation rates on tobacco cyst nematode populations and shade tobacco yield. Fung. Nemat. Tests 48:216.

LaMondia, J. A. 1993. Gordon S. Taylor, 1921-1992. Phytopathology 83:365.

LaMondia, J. A. 1993. In vitro evaluation of fungicides against *Colletotrichum acutatum* isolates from strawberry. Adv. Strawb. Res. 12:34-37.

LaMondia, J. A. 1993. In vitro fungicide evaluation against *Colletotrichum acutatum* from strawberry. Phytopathology 83:1377 (Abstract).

LaMondia, J. A. 1993. Juvenile emergence and reproduction of *Globodera tabacum tabacum* in response to tobacco, tomato, and black nightshade. Phytopathology 83:245 (Abstract).

McClure, M. S. 1993. The white-tailed deer. American Nurseryman 177(9):31.

1994

Ahrens, J. F. and S. Bossworth, et al. 1994. 1994 New England guide to chemical control of problem weeds and brush around homes and non-cropland. A New England Cooperative Extension Bulletin.

LaMondia, J. A. 1994. Evaluation of nematicides for control of root-knot and lesion nematodes on strawberry, 1991-1993. Fung. Nemat. Tests 49:181.

LaMondia, J. A. 1994. *Globodera tabacum tabacum* population dynamics and damage to tobacco. Phytopathology 84:1129 (Abstract).

LaMondia, J. A. 1994. The association of lesion nematodes with black root rot in strawberry fields. NE-SARE Small Fruits Newsl. 4(1):10-11.

LaMondia, J. A. 1994. The effects of chitin-urea sail amendments on *Globodera tabacum tabacum* population changes under shade tobacco. Tobacco Sci. 38:18-20.

LaMondia, J. A. 1994. The effect of rotation crops on strawberry black root rot pathogens in field microplots. J. Nematology 26:108 (Abstract).

McClure, M. S. 1994. Establishing natural enemies of hemlock woolly adelgid in North America. Northwest Passage 15(2):3-5.

McClure, MS. 1994. Hemlock woolly adelgid: Is there my hope for Hemlock? Hort Impact 94(4):1-2.

McClure, M. S. 1994. Is there any hope for hemlock? Connecticut Woodlands 59(3):5-6.

Patmos, M. and J. F. Ahrens et al. 1994. 1994 New England guide to weed and brush control in Christmas trees. A New England Cooperative Extension Bulletin. Williams, C. H. and J. F. Ahrens, et al. 1994. 1994 New England control of weeds in nursery crops. A New England Cooperative Extension Bulletin.

1995

- Ahrens, J. F. and T. L. Mervosh. 1995. Herbicides for postemergence control of hairy vetch in ornamentals. Proc. Northeast Weed Sci. Soc. 49:67 (abstract).
- Cowles, R. S. and J. A. Downer. 1995. Eucalyptus snout beetle detected in California. Calif. Agric. 49(1):38, 40.
- Cowles, R. S. 1995. Black vine weevil biology and management. J. Amer. Rhododendron Soc. Vol. 49, pp. 83-85, 94-97.
- Cowles, R. S. 1995. Black vine weevil. Combined Proceedings of the International Plant Propagators' Society 45:125-126.
- Elmer, W. H. and J. A. LaMondia. 1995. Influence of mineral strawberry black root rot. Adv. Strawb. Res. 14:42-48.
- LaMondia, J. A. 1995. Hatch and reproduction of *Globodera tabacum tabacum* in response to tobacco, tomato, or black nightshade. J. Nematology 27(3):382-386.
- LaMondia, J. A. 1995. Influence of resistant tobacco and tobacco cyst nematodes on root infection and secondary inoculum of *Fusarium oxysporum* f. sp. *nicotianae*. Plant Disease 79:337.
- LaMondia, J. A. 1995. Inhibition with benomyl to growth in vitro of *Colletotrichum acutatum* and *C. fragariae* and strawberry fruit infection by benomyl-resistant isolates of *C. acutatum*. Adv. Strawb. Res. 14:25-30.
- LaMondia, J. A. 1995. Response of perennial herbaceous ornamentals to *Meloidogyne hapla*. Suppl. J. Nematol. 27(4S):645-648.
- LaMondia, J. A. 1995. Shade tobacco yield loss and *Globodera tabacum tabacum* population changes in relation to initial nematode density. J. Nematology 27(2):114-119.
- LaMondia, J. A. and T. M. Rathier. 1995. The influence of plant nutrition on Fusarium wilt of broadleaf tobacco. Tob. Sci. 39:111-116.
- McClure, M. S. 1995. *Diapterobates humeralis* (Oribatida: Ceratozetidae): An effective control

- agent of hemlock woolly adelgid (Homoptera: Adelgidae) in Japan. Environ. Entomol. 24:1207-1215.
- McClure, M. S. 1995. Managing Hemlock Woolly Adelgid in Ornamental Landscapes. CAES Bulletin 925.
- McClure, MS. 1995. Using natural enemies from Japan to control hemlock woolly adelgid. Frontiers of Plant Science, 47(2):5-7.
- Mervosh, T. L., G. K. Sims, and E. W. Stoller. 1995. Clomazone fate in soil as affected by microbial activity, temperature, and soil moisture. J. Agric. Food Chem. 43:737-743
- Mervosh, T. L. and J. F. Ahrens. 1995. Isoxuben spray combinations for container-grown woody ornamentals. Proc. Northeast Weed Sci. Soc. 49:2 (abstract).
- Mervosh, T. L., E. W. Stoller, F. W. Simmons, T. R. Ellsworth, and G. K. Sims. 1995. Effects of starch encapsulation on clomazone and atrazine movement in soil and clomazone volatilization. Weed Sci. 43:445-453.
- Mervosh, T. L., G. K. Sims, E. W. Stoller, and T. R. Ellsworth. 1995. Clomazone sorption in soil: incubation time, temperature, and soil moisture effects. J. Agric. Food Chem. 43:2295-2300.
- Rathier, T. M. 1995. Optimum soluble and slow release N rates for Rhododendrons and the fate of such N applied to various potting media (Abstract). HortScience 30(4):794.

- Ahrens, J. F. 1996. Current trends in weed control. Weed Control Manual. Meister Publ. 30:391-392.
- Ahrens, J. F. and T. L. Mervosh. 1996. Postemergence weed control in dormant herbaceous perennials. Proc. Northeast Weed Sci. Soc. 50:61 (abstract).
- Cheah, C. A. S.-J. and M. S. McClure. 1996. Exotic natural enemies of *Adelges tsugae* and their potential for biological control. pp. 103-112 In Salom, S. M. Tigner, T. C., and Reardon, R. C. (eds). Proc. First Hemlock Woolly Adelgid Review, USDA For. Serv., FHTET 96-10.
- Cowles, R. S. 1996. Vine weevil adulticides. In: Proceedings of the 2nd International Workshop on Vine Weevil. D. V. Alford and G.F. Backhaus (eds.). Mitteilungen aus der

- Biologischen Bundesanstalt für Land- und Forstwirtschaft. Bull. No. 316:113-117.
- Cowles, R. S. 1996. Japanese beetle quarantine and nursery trade: an agricultural perspective. Proceedings of the 1996 Annual Japanese Beetle Review. January 24-25, 1996. McMinnville, TN.
- Cowles, R. S. 1996. Principles of habitat manipulation: stimulo-deterrence meets Japanese beetles. Second Annual Japanese Beetle Review. January 24-25, 1996. McMinnville, TN.
- Cowles, R. S. and Villani, M. G. 1996. Susceptibility of Japanese beetle, oriental beetle and European chafer to halofenozide, an insect growth regulator. J. Econ. Entomol. 89:1556-1565.
- Cowles, R. S., J. G. Millar, E. J. Perry, J. S. McElfresh, and N. Garrison. 1996. Identification of the sex pheromone of the western poplar clearwing moth (Lepidoptera: Sesiidae). Environ. Entomol. 25:109-113.
- LaMondia, J. A. 1996. A research progress report: Management of the Northern root-knot nematode, *Meloidogyne hapla*, in herbaceous perennials. Perennial Plants, pp. 11-18, Autumn 1996.
- LaMondia, J. A. 1996. Efficacy of Avid (abamectin) against the foliar nematode *Aphelenchoides fragariae*, 1995. Fungicide and Nematicide Tests 51:185.
- LaMondia, J. A. 1996. Efficacy of band or broadcast Vydate for tobacco cyst nematode control in shade tobacco, 1995. Fungicide and Nematicide Tests 51:193.
- LaMondia, J. A. 1996. Response of additional herbaceous perennial ornamentals to *Meloidogyne hapla*. Suppl. Journal of Nematology 28(4S):636-638.
- LaMondia, J. A. 1996. Trap crops and population management of *Globodera tabacum tabacum*. J. Nematol. 28(2):238-243.
- LaMondia, J. A. and J. F. Ahrens. 1996. Effects of napropamide and pendimethalin on Connecticut tobacco, weed control, and fall-seeded rye (*Secale cereale*). Tobacco Science 40:44-47.
- LaMondia, J. A. W. H. Elmer, T. L. Mervosh, R. S. Cowles. 1996. Management of pests by rotation. Phytopathology 86(11S): 93 (Abstract).

- LaMondia, J. A. and T. M. Rathier. 1996. Aphid control on Connecticut shade tobacco with systemic insecticides, 1995. Arthropod Mgmt. Tests 21:304.
- LaMondia, J. A. and T. M. Rathier. 1996. Evaluation of Admire for tobacco, aphid control on Connecticut broadleaf tobacco, 1994. Arthropod Mgmt. Tests 21:304-305.
- McClure, M. S. 1996. Biology of *Adelges tsugae* and its potential for spread in the northeastern United States. pp. 16-23. *In* Salom, S. M., Tigner, T. C., Reardon, R. C. (eds). Proc. First Hemlock Woolly Adelgid Review, USDA For. Serv., FHTET 96-10.
- McClure, M. S. 1996. Can Asian ladybugs stop hemlock woolly adelgid? Connecticut Woodlands 61(4):12-14.
- McClure, M. S. 1996. Coping with hemlock woolly adelgid. NEC-ISA Arboricultural Quarterly 96(3):9-11.
- McClure, M. S. 1996. Woolly bully. Amer. Nurseryman 184:52-57.
- McClure, M. S. S. M. Salom, and K. S. Shields. 1996. Hemlock woolly adelgid. USDA Forest Serv., FHTET-96-35:14.
- Mervosh, T. L. 1996. An integrated approach helps manage weeds in nurseries. Frontiers of Plant Science 49(1):3-5.
- Mervosh, T. L. and J. F. Ahrens. 1996. Isoxaben spray combinations and granular herbicides for container-grown woody ornamentals. Proc. Northeast Weed Sci. Soc. 50:7 (abstract).
- Mervosh, T. L. and J. F. Ahrens. 1996. Sulfentrazone and halosulfuron for preemergence weed control in woody ornamentals. Proc. Northeast Weed Sci. Soc. 50:62 (abstract).
- Varela, L., R. S. Cowles, and D. R. Donaldson. 1996. Spring insecticide treatments control adelgids on Douglas fir. Calif. Agric. 50(5):34-37.

Ahrens, J. F. and T.L Mervosh. 1997. Evaluations of glyphosate and 2,4-D formulations in dormant conifers. Proc, Northeast Weed Sci. Soc. 51:101.

- Cowles, R. S. 1997. Several methods reduce insecticide use in control of black vine weevils. Frontiers of Plant Science 49(4):2-4.
- Cowles, R. S. and T. M. Abbey. 1997. Integration of biological and chemical controls is used to manage twospotted spider mites in container-grown nurseries. Yankee Nursery Quarterly 7(1):18-19.
- Cowles, R. S., D. O. Gilrein, and S. R. Alm. 1997. The Trojan Horse of the nursery industry. American Nurseryman 186(3):51-57.
- LaMondia, J. A. 1997. Control of *Meloidogyne hapla* in herbaceous perennial ornamentals by sanitation and resistance. Journal of Nematology (Abstract) 29:590.
- LaMondia, J. A. 1997. Efficacy of band versus broadcast Vydate for tobacco cyst nematode control in shade tobacco. Fungicide and Nematicide Tests 52:208.
- LaMondia, J. A. 1997. Management of *Meloidogyne hapla* in herbaceous perennial ornamentals by sanitation and resistance. Suppl. J. Nematol. 29(4S):717-720.
- LaMondia, J. A. 1997. Root-knot of strawberry. *In:* Methods and Practices of Plant Disease Diagnosis. C. R. Semer and J. J. McRitchie, eds. APS Press, St. Paul, MN.
- LaMondia, J. A. 1997. The effects of root-knot and lesion nematodes on strawberry vigor and yield. Proceedings of the North American Strawberry Growers Annual Meeting 14:14-17.
- LaMondia, J. A. and D. E. Aylor. 1997. Blue mold disease returns to Connecticut to threaten \$70 million tobacco crop. Frontiers of Plant Science 50(1):5-8. Fall 1997.
- LaMondia, J. A. and S. M. Douglas. 1997. Sensitivity of *Botrytis cinerea* from Connecticut greenhouses to benzimidazole and dicarboximide fungicides. Plant Disease 81:729-732.
- LaMondia, J. A. and T. M. Rathier. 1997. Aphid control on Connecticut shade tobacco with systemic insecticides, 1996. Arthropod Management Tests 22:326.
- LaMondia, J. A. and W. H. Elmer. 1997. Management of strawberry black root rot by rotation and mineral nutrition. Proceedings of the North American Strawberry Growers Annual Meeting 14:36-41.

- LaMondia, J. A., W. H. Elmer, T. L. Mervosh, and R. S. Cowles. 1997. Effect of rotation and companion crops on strawberry black root rot pathogens, 1995-1996. Biological & Cultural Tests for Control of Plant Diseases 12:51.
- LaMondia, J. A., V.L Smith, and T. M. Rathier. 1997. Tissue proliferation in rhododendron: Lack of association with disease and effect on plants in the landscape. HortScience 32(6): 1001-1003.
- McClure, M. S. 1997. Biological control in native and introduced habitats: Lessons learned from the sap-feeding guilds on hemlock and pine. pp. 31-52. *In* D. A. Andow, D. W. Ragsdale, and R. F. Nyvall (eds.) Ecological Interactions and Biological Control, Westview Press, Boulder, Colorado.
- Mervosh, T. L. 1997. Herbicide activity on field horsetail and other weeds. Proc., Northeast. Weed Sci. Soc. 51:14.
- Mervosh, T. L. 1997. Weed control in landscape beds. Lawn & Landscape 18(5):46, 50, 52, 54, 90.
- Mervosh, T. L. 1997. Weed management principles for container-grown ornamentals. Yankee Nursery Quarterly 7(1):5-9.
- Mervosh, T. L. and J. F. Ahrens. 1997. Herbicidal activity of and woody ornamental tolerance to sulfentrazone and halosulfuron. Proc., Weed Sci. Soc. Amer. 37:29.
- Mervosh, T. L. and J. F. Ahrens. 1997. Sulfentrazone and halosulfuron: Herbicidal efficacy and safety to field-grown woody ornamentals. Proc., Northeast. Weed Sci. Soc. 51:102.
- Sasaji, H. and M. S. McClure. 1997. Description and distribution of *Pseudoscymnus tsugae* sp. nov. (Coleoptera: Coccinellidae), an important predator of hemlock woolly adelgid in Japan. Ann. Entomol. Soc. Amer. 90:563-568.
- Smith, V. L., S. M. Douglas, and J. A. LaMondia. 1997. First report of powdery mildew of tomato caused by an *Erysiphe* sp. in Connecticut. Plant Disease (Note) 81:229.

Ahrens, J. F. 1998. Which fared better: Plugs or transplants of balsam and fraser firs in a Christmas tree plantation? The Real Tree Line, Conn. Christmas Tree Growers' Assoc. 38:14-15.

- Ahrens, J. F. and T. L. Mervosh. 1998. Effects of glyphosate formulations on injury to dormant Christmas trees. Abstr. Proc. Northeast. Weed Sci. Soc. 52:130.
- Cheah, C. A. S.-J. and M. S. McClure. 1998. Life history and development of *Pseudoscymnus tsugae* (Coleoptera: Coccinellidae), a new predator of the hemlock woolly adelgid (Homoptera: Adelgidae). Environ. Entomol. 27(6):1531-1536.
- Cowles, R. S. 1998. Managing spruce spider mites in Christmas trees. Massachusetts Christmas Tree Growers' Newsletter. October.
- Derr, J. F., J. C. Neal, L. K. Kuhns, R. J. Smeda, L. A. Weston, C. Elmore, C. A. Wilken, J. Ahrens, A. Senesac, and T. Mervosh. 1998. Weed management in landscape and nursery plantings. *In* M. E. McGriffen (ed). Weed Management in Horticultural Crop. Am. Soc. Hortic. Sci. and Weed Sci. Soc. Am. Workshop Proc. Feb. 6-7, 1997. ASHS Press, Alexandria, VA. 139pp.
- LaMondia, J. A. 1998. Management of anthracnose leaf spot and fungicide resistance in euonymus. Phytopathology (Abstract) 88:S51.
- LaMondia, J. A. 1998. The development of Connecticut shade tobacco with resistance to the tobacco cyst nematode, *Globodera tabacum tabacum*. The Proceedings of the 38th Tobacco Workers' Conference, Lexington, KY, 1998, p. 52 (Abstract).
- LaMondia, J. A. and T. M. Rathier. 1998. Evaluation of application method for aphid control by imidacloprid on Connecticut broadleaf tobacco, 1997. Arthropod Management Tests 23:289-290.
- McClure, M. S. and C. A. S.-J. Cheah. 1998. Released Japanese ladybugs are multiplying and killing hemlock woolly adelgids. Frontiers of Plant Science 50(2):6-8.
- Mervosh, T. L. 1998. New England Guide to Chemical Control of Problem Weeds and Brush Around Homes and on Non-Cropland.
- Mervosh, T. L. 1998. Weed control in pumpkins with ethalfluralin and microencapsulated clomazone. Proc., Northeast. Weed Sci. Soc. 52:83.
- Mervosh, T. L. and J. F. Ahrens. 1998. Preemergence herbicides for container-grown perennials. Abstr. Northeast Weed Sci. Soc. 52:131.

- Nielsen, D. G. and R. S. Cowles. 1998. Preventing white grub infestation in container-grown nursery stock. J. Environ. Hort. 16: 202-207.
- Patmos, M. and J. F. Ahrens. 1998. 1998 New England Guide to Weed and Brush Control in Christmas Trees. New England Coop. Ext. Bull.
- Welch. K and T. Abbey. 1998. Pesticide Guide Toward Integrated Pest Management for Connecticut Nurseries — 1998-1999. The Connecticut Agricultural Experiment Station.

- Abbey, T. and V. Smith. 1999. The Food Quality Protection Act and the Green Industry. The Yankee Grower.
- Cowles, R. S., S.R Alm, and M. G. Villani. 1999. Selective toxicity of halofenozide to exotic white grubs (Coleoptera: Scarabaeidae). J. Econ. Entomol. 92:427-434.
- Cowles, R. S. 1999. Chemical control of adult vine weevils: Are we fooling ourselves? Abstract, 3rd Internat. Vine Weevil Workshop, Angers, France. 9-11 June. pp. 28-29.
- Cowles, R. and T. Abbey. 1999. Integrated Management of Spider Mites on Ornamental Nursery Crops. American Nurserymen. 190(4):68-77.
- Cowles, R. S. and T. M. Abbey. 1999. Of mites and men. American Nurseryman 190(4):68-77.
- Cowles, R. S., Koppenhöfer, A., McGraw, B., Alm, S. R., Ramoutar, D., Peck, D. C., Vittum, P., Heller, P., and Swier, S. 1999. Insights into managing annual bluegrass weevils. Golf Course Management 76(8):86-92.
- Cowles, R. S., Koppenhöfer, A., McGraw, B., Alm, S. R., Ramoutar, D, Peck, D. C., Vittum, P., Heller, P. and Swier, S. 1999. Insights into managing annual bluegrass weevils. Turfgrass and Environmental Research Online 7(15):1-11. USGA.
- Elmer, W. H. and J. A. LaMondia. 1999. Influence of ammonium sulfate and rotation crops on strawberry black root rot. Plant Disease 83:119-123.
- Elmer, W. H. and J. A. LaMondia. 1999. Studies on the suppression of Fusarium crown and root rot with NaCI. Acta Horticulturae 479:211-218.

- Elmer, W. H., J. A. LaMondia, and G. S. Taylor. 1999 Asparagus cultivar trials in Connecticut. Acta Horticulturae 479:189-194.
- Ferrandino, F. J., J. A. LaMondia, and D. E. Hill. 1999. Susceptibility of commercial winter squash cultivars to late season defoliation due to powdery and downy mildew. Biological and Cultural Tests for Control Tests of Plant Diseases 14:184.
- Hiskes, R.T, 1999. Pine Sawflies. The Connecticut Gardener 5(2):4-5.
- Hiskes, R. T. 1999. Pine Sawflies. The Connecticut Gardener 5(3):5.
- Hiskes, R. T. 1999. Two-Spotted Spider Mites. The Connecticut Gardener 5(4):10.
- Hiskes, R. T. 1999. Insects That Overwinter in Our Homes. The Connecticut Gardener 5(5):8.
- LaMondia, J. A. 1999. Effects of *Pratylenchus penetrans* and *Rhizoctonia fragariae* on vigor and yield of strawberry. J. Nematology 31(4):418-423.
- LaMondia, J. A. 1999. Efficacy of insecticides for control of *Aphelenchoides fragariae* and *Ditylenchus dipsaci* in flowering perennial omarnentals. Suppl. J. Nematology 31(4S):644-649.
- LaMondia, J. A. 1999. Efficacy of insecticides for control of foliar nematodes in flowering perennial ornamentals. Perennial Plants 7:41-49.
- LaMondia, J. A. 1999. Fungicides for control of powdery mildew in tomato. Fungicide and Nematicide Tests 54:255.
- LaMondia, J. A. 1999. Influence of rotation crops on the strawberry pathogens *Pratylenchus penetrans, Meloidogyne hapla, and Rhizoctonia fragariae*. Suppl. J Nematology 31(4S):650-655.
- LaMondia, J. A. 1999. Powdery mildew: A new disease of tomato. pp 326-330. *In* Proceedings of the New England Vegetable and Berry Conference, Sturbridge, MA, 14-16 December 1999.
- LaMondia, J. A. 1999. *Rhizoctonia/Pratylenchus* interactions in strawberry black root rot. APS Publication no. P-1999-0009-ssa.
- LaMondia, J. A. 1999. Seasonal population dynamics of lesion and root-knot nematodes in strawberries. Journal of Nematology (Abstract) 31:550.

- LaMondia, J. A. 1999. New tobacco cyst nematode resistant shade tobacco varieties. CAES Bulletin 957.
- LaMondia, J. A. 1999. Tomato cultivar response to powdery mildew, 1998. Biological and Cultural Tests for Control of Plant Diseases 14:119.
- LaMondia, J. A., M. P. N. Gent, F. J. Ferrandino, W. H. Elmer, and K. A. Stoner. 1999. The effect of compost amendment or straw mulch on potato early dying disease development and yield. Plant Disease 83:361-366.
- LaMondia, J. A., V. L. Smith, and S. M. Douglas. 1999. Host range and resistance to tomato powdery mildew, caused by *Oidium lycopersicum*. Phytopathology (Abstract) 89:S43.
- LaMondia, J. A. V. L. Smith, and S. M. Douglas. 1999, Host range of *Oidium lycopersicum* on selected solanaceous species in Connecticut. Plant Disease 83:341-344.
- LaMondia, J. A. and T. M. Rathier. 1999. Effect of application method, rate, and irrigation on imidacloprid efficacy against aphids in Connecticut shade tobacco, 1998. Arthropod Management Tests 24:301-302.
- LaMondia, J. A. and T. M. Rathier. 1999. Effect of application technique on imidacloprid efficacy against tobacco aphids on Connecticut cigar wrapper tobacco. Tobacco Science 43:68-74.
- McClure, M. S. and C. A. S.-J. Cheah. 1999. Reshaping the ecology of invading populations of hemlock woolly adelgid, *Adelges tsugae*, (Homoptera: Adelgidae) in eastern North America. Proceedings of the Symposium on the Ecology of Invasive Species, Yale School of Forestry and Environmental Studies, New Haven, CT. 1:247-254.
- McClure, M. S., C. A. S.-J. Cheah, and T. C. Tigner. 1999. Is *Pseudoscymnus tsugae* the answer to the hemlock woolly adelgid problem?: An early perspective. Proceedings of the Symposium on Sustainable Management of Hemlock Ecosystems in Eastern North America. LIDSA Forest Service, GTR-NE267:89-96.
- Mervosh, T. L. 1999. Weed patrol. American Nurseryman 190(5):32-34, 36, 38.
- Mervosh, T.L and T. M. Abbey. 1999. Evaluation of fabric discs, mulches, and herbicides for preventing weeds in containers. Proceedings, Northeast. Weed Sci. Soc. 53: 122.

Mervosh, T. L. and J. F. Ahrens. 1999. Herbicide tolerances of container-grown herbaceous ornamentals. Proceedings, Northeast. Weed Sci. Soc. 53:123.

Mervosh, T.L and J. F. Ahrens. 1999. Preemergence herbicides for herbaceous perennials in containers. Weed Sci. Soc. Amer. Abstracts 39:87-88.

Ramoutar, D., Cowles, R. S., and Alm, S. R. 1999. Pyrethroid resistance mediated by enzyme detoxification in *Listronotus maculicollis* (Coleoptera: Curculionidae) from Connecticut. J. Econ. Entomol. 102:1203-1208.

Ramoutar, D., Alm, S. R., and Cowles, R. S. 1999. Pyrethroid resistance in populations of *Listronotus maculicollis* (Coleoptera: Curculionidae) from southern New England golf courses. J. Econ. Entomol. 102:388-392.

Welch, K. and T. Abbey. 1999. Pesticide Guide Toward Integrated Pest Management for Connecticut Grounds Keepers 1998-1999. The Connecticut Agricultural Experiment Station.

Welch, K. and T. Abbey. 1999. Pesticide Guide Toward Integrated Pest Management for Connecticut Arborists 2000. The Connecticut Agricultural Experiment Station.

2000

Abbey, T. 2000. Integrated Pest Management for the Homeowner. CONN-G-99-004. University of Connecticut Sea Grant.

Abbey, T. 2000. Invasive Plant Information Sheet — Norway Maple (*Acer platanoides*). Connecticut Invasive Plant Working Group.

Abbey, T. 2000. Invasive Plant Information Sheet — Mile-A-Minute or Devil's Tearthumb (*Polygonum perfoliatum*). Connecticut Invasive Plant Working Group.

Abbey, T. 2000. Miticide Evaluations on Two Species of Herbaceous Perennials. Yankee Grower. Vol 2(1):1-3. January/February.

Abbey, T. 2000. New Tools for Ornamental Pest Control. Yankee Grower 2(5):1-2.

Abbey, T. 2000. Summary of the Connecticut Nursery IPM Survey. Yankee Grower. Vol 2(1):5-7.

Ahrens, J. F. and T. L. Mervosh. 2000. Herbicide evaluations in Christmas tree plantings of fir

(*Abies* spp.). Proceedings, Northeast Weed Sci. Soc. 54:88.

Cheah, C. A. S.-J. and M. S. McClure. 2000. Seasonal synchrony of life cycles between the exotic predator, *Pseudoscymnus tsugae* (Coleoptera: Coccinellidae) and its prey, the hemlock woolly adelgid, *Adelges tsugae* (Homoptera: Adelgidae). Agricultural and Forest Entomology 2(4):241-251.

Cowles, R. S., E. A. Cowles, A. M. McDermott, and D. Ramoutar. 2000. "Inert" formulation ingredients with activity: toxicity of trisiloxane surfactant solutions to twospotted spider mites (Acari: Tetranychidae). J. Econ. Entomol. 93:180-188.

Hiskes, R. T. 2000. Honeylocust Plant Bug. The Connecticut Gardener 6(1):5.

LaMondia, J. A. 2000. Connecticut River Valley Blue Mold Web Page. CAES. http://www.crosswinds.net/~bluemold/caes.htm

LaMondia, J. A. 2000. The effect of rotation crops on lesion nematodes, *Verticillium dahliae* and potato early dying severity. Phytopathology (Abstract) 90(6):S44.

LaMondia, J. A. 2000. Editor, Techniques in Nematode Ecology, an on-line Manual. The Society of Nematologists Ecology Committee, Lawrence, Kansas. PDF: https://portal.ct.gov/media/CAES/DOCUMENTS/Biographies/LaMondia/57pdf.pdf

LaMondia, J. A. and R. S. Cowles. 2000. The effects of insect parasitic nematodes on *Pratylenchus penetrans* populations in strawberries. Journal of Nematology 32:441.

LaMondia, J. A. and V. L. Smith, 2000. Tomato cultivar response to powdery mildew, 1999. Biological and Cultural Tests for Control of Plant Diseases 15:128.

Mervosh, T. L. 2000. Sorption of isoxaben and oryzalin to soils and potting media. Weed Science Society of America, Abstracts 40:11.

Mervosh, T. L. 2000. Weed control in pumpkins with preemergence herbicides or a killed rye mulch. Proceedings, Northeast. Weed Sci. Soc. 54:122.

Mervosh, T. L. and J. F. Ahrens. 2000. Clopyralid effects on field-grown woody ornamentals. Proceedings, Northeast Weed Sci. Soc. 54:86.

Rathier, T. 2000. Diagnosing Christmas Tree Problems. The Real Tree Line. Connecticut Christmas Tree Growers Association Newsletter 40(2): 14-15.

Welch, K. and T. Abbey. 2000. Pesticide Guide Towards Integrated Pest Management for Connecticut Arborists – 2000.

- Abbey, T. 2001. Check Those Plants for Unwanted Pests. Yankee Grower 3(1):8-10.
- Ahrens, J. F. 2001. Tips offered to wholesale producers and retailers on preventing moisture and needle loss in yule trees. The Real Tree Line 41(4):12.
- Ahrens. J. F. and T. L. Mervosh. 2001. Selectivity of flumioxazin in field-grown holly, yew and fraser fir. Northeast. Weed Sci. Soc. 55:56.
- Cowles, R. S. 2001. Control of juniper tip dwarf mite, 2000. Arthropod Management Tests.
- Cowles, R. S. 2001. Control of southern red mite with an experimental miticide, 2000. Arthropod Management Tests.
- Cowles, R. S. 2001. Control of spruce spider mite with an experimental miticide, 2000. Arthropod Management Tests.
- Cowles, R. S. 2001. Curative treatments to control white grubs in a field-grown nursery, 2000. Arthropod Management Tests.
- Cowles. R. S. 2001. Preventive treatments to control white grubs in a field-grown nursery, 2000. Arthropod Management Tests.
- Cowles, R. S. 2001. Protecting container-grown crops from black vine weevil larvae with bifenthrin. J. Environ. Hort. 19:184-189.
- Cowles, R. S. 2001. Synergism of soil insecticides with BIO-1020 in controlling black vine weevil larvae, 2000. Arthropod Management Tests.
- Hiskes, R. T. 2001. Burning Bush An Invasive Plant? Connecticut Horticultural Society Newsletter 44(6).
- Hiskes, R. T. 2001. Invasion of Japanese Knotweed. Connecticut Horticultural Society Newsletter 44(9).

- Hiskes, R. T. 2001. Invasion of Mile-a-Minute Annual Vine, Connecticut Horticultural Society Newsletter 44(4).
- LaMondia, J. A. and R. Horvath. 2001. Evaluation and comparison of spray coverage on Connecticut cigar wrapper tobacco. Tobacco Science 45:1-5.
- LaMondia, J. A. 2001. Host status of herbaceous perennial ornamentals to the northern root-knot nematode. Yankee Grower 3(6):7-10.
- LaMondia, J. A. 2001. Insect control in Connecticut broadleaf tobacco, 2000. Arthropod Management Tests 26.
- LaMondia, J. A. 2001. Nematode diseases of perennials. Yankee Grower 3(6):6-7.
- LaMondia, J. A. 2001. Nematodes: Common and important problems in the ornamental and landscape industry. Nematology Newsletter 47(3):1-4.
- LaMondia, J. A. 2001. Resistance of the euonymus anthracnose pathogen, *Colletotrichum gloeosporioides*, to selected fungicides. Journal of Environmental Horticulture 19:47-50.
- LaMondia, J. A. 2001. Scantic, a new Fusarium-wilt resistant broadleaf tobacco cultivar. CAES Bulletin 974.
- LaMondia, J. A. and D. E. Aylor. 2001. Epidemiology and management of a periodically introduced pathogen. Biological Invasions 3:273-282.
- McClure, M. S. 2001. Biological Control of Hemlock Woolly Adelgid in the Eastern United States. USDA Forest Serv, FHTET-2000-08:11p.
- McClure, M. S. 2001. Current status of biological control efforts against hemlock woolly adelgid (*Adelges tsugae* Annand). pp 88-89. *In* Volney, W. J. A., Spence, J. R., and Lefebvre, E. M. (eds.). Boreal Odyssey: Proceedings of the North American Forest Insect Work Conference. Canadian Forest Service, Information Report NOR-X-381.
- McClure, M. S., S. M. Salom, and K. S. Shields. 2001. Hemlock woolly adelgid. USDA Forest Serv., FHTET-2001-03:14p.
- Mervosh, T. L. (editor). 2001. Invasive Plant Management Guide. Connecticut Invasive Plant Working Group web site: https://cipwg.uconn.edu/

- Mervosh, T. L. 2001. Weed warfare: weed management in production of herbaceous perennials. American Nurseryman 194(4):50-53.
- Mervosh, T.L and J. F. Ahrens. 2001. Evaluations of flumioxazin for weed control in container-grown woody ornamentals, Northeast. Weed Sci. Soc. 55:54-55.
- Rathier, T. M. 2001. Cultural and Pest Management Update. Real Tree Line 41(3).
- Rathier, T. M. 2001. Cultural and Pest Management Update. Real Tree Line 41(4).

- Abbey, T. 2002. Native Plants as Alternatives to Invasive Ornamentals. The Connecticut Agricultural Experiment Station. New Haven, CT.
- Abbey, T. (ed.) *Turfgrass Nutrient and Integrated Pest Management Manual.* University of Connecticut College of Agriculture and Natural Resources.
- Abbey, T. M. and T. L. Mervosh. 2002. Mulches for weed suppression in containers of herbaceous perennials. Proceedings, Northeast. Weed Sci. Soc. 56:75.
- Ahrens, J. F. 2002. Start weed management now in Christmas tree plantations. The Real Tree Line 42(3):10-11.
- Ahrens, J. F. 2002. The good and not so good news about Canaan fir (West Virginia balsam). The Real Tree Line 42(3):12. Also reprinted in Christmas Trees Magazine 30:23 (2003).
- Ahrens, J. F. 2002. Tips offered for wholesale producers and retailers in preventing moisture and needle loss in Yule trees. The Real Tree Line 42(4):12.
- Ahrens, J. F. 2002. Weed control in Christmas tree plantations for May 2002. The Real Tree Line 42(2):15.
- Ahrens, J. F. and T. L. Mervosh. 2002. Preliminary results with herbicides for control of Asiatic dayflower in conifer beds. Proceedings, Northeast. Weed Sci. Soc. 56:67.
- Cheah, C. A. S.-J. and C. Donahue. 2002. Potential biological control of balsam woolly adelgid. Abstract in the Proceedings of the 65th Annual Meeting of the Acadian Entomological Society, Machias, Maine. July 21-23, 2002.

- Cheah, C. A. S.-J. and M. S. McClure. 2002. *Pseudoscymnus tsugae* in Connecticut forests: the first five years. Proceedings or the Hemlock Woolly Adelgid in the Eastern United States Symposium, East Brunswick, NJ, February 5-7, 2002. Eds. Onken, B., Reardon, R., Lashomb, J. pp. 150-165.
- Cowles, R. S. 2002. Control of conifer root aphids in Christmas trees, 2001. Arthropod Management 27:G41.
- Cowles, R. S. and C. A. S.-J. Cheah. 2002. Foliar sprays for control of hemlock woolly adelgid, 2001. Arthropod Management Tests 27:G48.
- Cowles, R. S. and C. A. S.-J. Cheah, 2002. Systemic control of hemlock woolly adelgid, 1999. Arthropod Management Tests 27:G47.
- Halbrendt, J. M. and J. A. LaMondia. 2002. Nematicidal activity of selected plant residues to *Xiphinema americanum*. Proceedings of the Fourth International Congress of Nematology; Nematology 4:285.
- Koppenhöfer, A. M., R. S. Cowles, E. A. Cowles, E. M. Fuzy, and L. Baumgartner. 2002. Comparison of neonicotinoid insecticides as synergists for entomopathogenic nematodes. Biological Control 24:90-97.
- LaMondia, J. A. 2002. Aphid control in Connecticut broadleaf tobacco, 2001: Arthropod Management Tests 27.
- LaMondia, J. A. 2002. Broadleaf tobacco yield loss in relation to initial *Globodera tabacum tabacum* population density. Journal of Nematology 34(1):38-42.
- LaMondia, J. A. 2002. Connecticut River Valley Blue Mold Web Page. CAES. http://www.crosswinds.net/~bluemold/caes.htm
- LaMondia, J. A. 2002. Evaluation of fungicides for control of powdery mildew in *Monarda and Phlox*, 2001. Fungicide and Nematicide Tests 57:OT21.
- LaMondia, J. A. 2002. Genetics of burley and flue-cured tobacco resistance *Globodera* tabacum tabacum. Journal of Nematology 34(1):34-37.
- LaMondia, J. A. 2002. Nematode management on herbaceous perennial ornamentals. Phytopathology (Abstract) 92:S107. Pub No. P-2002-0098-SSA.

LaMondia, J. A. 2002. Registration of 'Scantic' broadleaf tobacco. Crop Science 42:983-984.

LaMondia, J. A. 2002. Seasonal populations of *Pratylenchus penetrans* and *Meloidogyne hapla* in strawberry roots. Journal of Nematology 34(4):409-413.

LaMondia, J. A. and J. M. Halbrendt. 2002. Rotation crops for control of nematodes pathogenic to tree and small fruits (A progress report). Proceedings of the 78th Cumberland-Shenandoah Fruit Workers Conference. 180-183.

LaMondia, J. A. and R. S. Cowles. 2002. Effect of entomopathogenic nematodes and *Trichoderma harzianum* on the strawberry black root rot pathogens *Pratylenchus penetrans* and *Rhizoctonia fragariae*. Journal of Nematology 34(4):351-357.

LaMondia, J. A., W. H. Elmer, T. L. Mervosh, and R. S. Cowles. 2002. Integrated management of strawberry pests by rotation and intercropping. Crop Protection 21:837-846.

McClure, M. S. 2002. Elongate Hemlock Scale. USDA Forest Service, Pest Alert. NA-PR-01-02.

McClure, M. S. 2002. The Elongate Hemlock Scale, *Fiorinia externa* Ferris (Homoptera: Diaspididae): A New Look at an Old Nemesis. Proceedings of the HWA Symposium at East Brunswick, New Jersey. Feb. 5-7, 2002.

McClure, M. S., and C. A. S.-J. Cheah. 2002. Establishing *Pseudoscymnus tsugae* Sasaji & McClure (Coleoptera:Coccinellidae) for biological control of hemlock woolly adelgid, *Adelges tsugae* Annand, (Homoptera: Adelgidae) in the eastern United States. Pp. 92-93. *In* Proceedings of the First International Symposium of Biological Control of Arthropods. USDA Forest Service, FHTET.

McClure, M. S. and C. A. S.-J. Cheah. 2002. Important mortality factors in the life cycle of hemlock woolly adelgid, *Adelges tsugae* Annand (Homoptera:Adelgidae) in the Northeastern United States. Proceedings of the Hemlock Woolly Adelgid Symposium, East Brunswick, NJ, February 5-7, 2002. Eds. Onken, B., Reardon, R., Lashomb, J. Pp.13-22.

Mervosh, T. L. and T. M. Abbey. 2002. Weed management alternatives for container-grown shrubs. Proceedings, Northeast. Weed Sci. Soc. 56:76.

Rathier, T. M. 2002. Cultural and Pest Management Update. Real Tree Line 42(1).

Rathier, T. M. 2002. Cultural and Pest Management Update. Real Tree Line 42(2).

Rathier, T. M. 2002. Cultural and Pest Management Update. Real Tree Line 42(3).

Rathier, T. M. 2002. Cultural and Pest Management Update. Real Tree Line 42(4).

Welch, K. and T. Abbey. 2002. Pesticide Guide Towards Integrated Pest Management for Connecticut Arborists – 2002.

2003

Ahrens, J. F. 2003. A review of Christmas tree weed management for the fall. The Real Tree Line 43(3):8, 12, 21.

Ahrens, J. F. 2003. Caveat Emptor (buyer beware!) The Real Tree Line 43(1):24.

Ahrens, J. F. 2003. Managing Christmas tree weeds in mid-spring of 2003. The Real Tree Line 43(2):9, 11.

Ahrens, J. F. 2003. Tips offered to wholesale producers and retailers on preventing moisture and needle loss in yule trees. The Real Tree Line 43(4): 16.

Ahrens, J. F., S. Barolli and R. Gray. 2003. Evaluation of sprayable herbicides for containergrown ornamentals. Abstract. Proc. NEWSS 57:36.

Barolli, S., J. F. Ahrens, and R. Gray. 2003. Improved methods of applying herbicides in container-grown ornamentals. Abstract. Proc. NEWSS 57:45.

Cowles, R. S. 2003. Management of Balsam Twig Aphids in Christmas Trees. CAES Bulletin 988.

Cowles, R. S. 2003. Modeling the effectiveness of bifenthrin for reducing populations of Japanese and oriental beetle larvae in nursery containers. Journal of Environmental Horticulture 21(2):78-81.

Cowles, R. S. 2003. Practical black vine weevil management. J. Amer. Rhododendron Soc. 57(4):219-221, 224.

Koppenhöfer, A. M., R. S. Cowles, E. A. Cowles, E. M. Fuzy and H. K. Kaya. 2003, Effect of neonicotinoid synergists on entomopathogenic nematode fitness. Entomologia Experimentalis et Applicata 106:7-18.

LaMondia, J. A. 2003. Interaction of *Pratylenchus penetrans* and *Rhizoctonia fragariae* in strawberry black root rot. Journal of Nematology 35:17-22.

LaMondia, J. A. 2003. Connecticut River Valley Blue Mold Web Page. CAES. http://crosswinds.net/~bluemold/caes.htm.

LaMondia, J. A. 2003. Influence of rotation crops on lesion nematode infection of strawberry, 2002. Biological and Cultural Tests for Control of Plant Diseases. Vol. 18:N002.

LaMondia, J. A. 2003. The association of lesion nematodes with strawberry black root rot. Nourse Commercial Newsletter.

LaMondia, J. A. and J. J. LaMondia. 2003. TCN Tracker - a decision based tobacco cyst nematode management aid for Connecticut cigar wrapper tobacco types. CAES Bulletin 992.

LaMondia, J. A. and J. M. Halbrendt. 2003. Differential host status of rotation crops to dagger, lesion and root-knot nematodes. Journal of Nematology 35:349.

LaMondia, J. A. and T. L. Mervosh. 2003. Strawberry black root rot - lack of association with terbacil application. Phytopathology 93(6):S48.

LaMondia, J. A., F. J. Ferrandino and M. J. Incorvia-Mattina. 2003. Evaluation of drift from helicopter-applied fungicides. Publication no. P-2004-001S-NEA.

https://www.apsnet.org/members/community/divisions/ne/meetings/Pages/2003MeetingAbstracts.aspx

Mervosh, T. L. 2003. Herbicides and rye mulch for vegetable production. Pp. 95-99 in New England Vegetable & Berry Conference Proceedings.

Mervosh, T. L. 2003. Sorption of the herbicides isoxaben and oryzalin to soils and container media. J. Environ. Hort. 21(1):11-15.

Mervosh, T. L. and J. F. Ahrens. 2003. Effective herbicides for Asiatic dayflower control in conifer beds. Abstract. Proc. NEWSS 57:38.

Mervosh, T.L and J. F. Ahrens. 2003. Liverwort control in containers of woody ornamentals. Abstract. Proc. NEWSS 57:37.

Patmos, M. and J. F. Ahrens. 2003. New England Guide to Chemical Weed and Brush Control in Christmas Trees.

Rathier, T. 2003. Availability of Mineralized N To Shade Tobacco Fertilized With Organic Meals Under Plasticulture (abstract). National Agricultural Plastics Congress 31:94.

Rathier, T. 2003. Cultural and Pest Management Update. Real Tree Line 43(1).

Rathier, T. 2003. Cultural and Pest Management Update. Real Tree Line 43(2).

Rathier, T. 2003. Cultural and Pest Management Update. Real Tree Line 43(3).

Rathier, T. 2003. Cultural and Pest Management Update. Real Tree Line 43(4).

Rathier, T. 2003. Cultural and Pest Management Update. Real Tree Line 44(1).

Rathier, T. 2003. Get Your Hands Dirty — How to tell if your soil is healthy, how to make it healthier or how to make the best of a difficult soil. Christmas Trees Magazine 30(2): 23-24, 39.

2004

Ahrens, J. F. 2004. A weedy situation. American Nurseryman 199(12):51-54, 56-57.

Ahrens, J. F. 2004. On working toward weed-free Christmas tree plantations in 2004. The Real Tree Line 44:14, 15, 18. Reprinted in the Minnesota Christmas Tree Assoc. Newsletter 29(2):24-25.

Ahrens, J. F. and T. L. Mervosh. 2004. Flumioxazin sprays for field-grown ornamentals in 2003. Proceedings, Northeastern Weed Science Society 58:55.

Ahrens, J. F., S. Barolli and R. Gray. 2004. Herbicides for newly-planted container-grown ornamentals. Abstract, Proceedings NEWSS 58:59-61.

Cheah, C. 2004. Status in States and on Federal Lands: Connecticut. In Hemlock Woolly Adelgid Newsletter, Issue No. 6:5. USDA Forest Service, Northeastern Area, State and Private Forestry, Forest Health Protection.

Cheah, C., Montgomery, M., Salom, S., Parker, B., Costa, S. and Skinner, M. 2004. Biological Control of Hemlock Woolly Adelgid. Forest Health Technology Enterprise Team. Technical Coordinators: Reardon, R, & Onken, B. Technology Transfer FHTET 2004-04

Cowles, R. S. 2004. Highlights from the Sixth International Christmas Tree Research and Extension Meeting. Amer. Christmas Tree J. 48(1):49-51.

Cowles, R. S. 2004. Impact of azadirachtin on vine weevil (Coleoptera: Curculionidae) reproduction. Agric. & Forest Entomol. 6:291-294.

Cowles, R. S. 2004. Manipulation of Host-finding and Acceptance Behaviors in Insects: Importance to IPM. *In*: O. Koul, G. S. Dhaliwal and G. W. Cuperus, (eds.), pp. 185-204. Integrated Pest Management: Potential Constraints and Challenges. CAB International. London.

Cowles, R. S. 2004. Susceptibility of strawberry cultivars to the vine weevil *Otiorhynchus sulcatus* (Coleoptera: Curculionidae). Agric. & Forest Entomol. 6:279-284.

Halbrendt, J. M. and J. A. LaMondia. 2004. Crop rotation and other cultural practices. Pp.273-294 *In:* Nematology, Advances and Perspectives. Z. X. Chen, S. Y. Chen, and D. W. Dickson, eds.

Halbrendt, J. M. and J. A. LaMondia. 2004. Crop rotation and other cultural practices. Pp. 909-930 in, Nematology, Advances and Perspectives. Z. X. Chen, S. Y. Chen, and D. W. Dickson, eds.

Koppenhöfer, A. M., R. S. Cowles and E. M. Fuzy. 2004. Effects of turfgrass endophytes (Clavicipitaceae: Ascomycetes) on white grub development and field populations. Environ. Entomol. 32:895-906.

LaMondia, J. A. 2004. Connecticut River Valley Blue Mold Web Page. CAES. http://www.crosswinds.net/~bluemold/caes.htm

LaMondia, J. A. 2004. Evaluation of Avid and Pylon for control of foliar nematodes on Anemone, Phlox and Salvia, 2002. Fungicide and Nematicide Tests 59:N006.

LaMondia, J. A. 2004. Field performance of twenty-one strawberry cultivars in a black root rot-infested site. Journal of the American Pomological Society 58(4):226-232.

LaMondia, J. A. 2004. Plant parasitic nematodes: Diagnosis and management of nematodes in herbaceous perennials. Greenhouse Product News. 14(13):38-40.

LaMondia, J. A. 2004. Strawberry black root rot. Feature article, Advances in Strawberry Research 23:1-10.

LaMondia, J. A. and R. S. Cowles. 2004. The comparative effects of *Pratylenchus penetrans* infection and *Maladera castanea* feeding on strawberry black root rot. Journal of Nematology 36:328.

Mervosh, T.L 2004. Evaluations of clomazone, ethalfluralin and halosulfuron in pumpkins. Proceedings, Northeastern Weed Science Society 58:136-137.

Mervosh, T. L. 2004. Flumioxazin in field and container plantings of woody ornamentals. Weed Science Society of America, Abstracts 44:59.

Mervosh, T. L. and J. A. LaMondia. 2004. Strawberry black root rot and berry yield are not affected by terbacil herbicide. HortScience 39(6):1339-1342.

Mervosh, T. L. and J. F. Ahrens. 2004. Flumioxazin efficacy and safety to deciduous shrubs and ornamental grasses in containers. Proceedings, Northeastern Weed Science Society 58:46.

Rathier, T. 2004. Cultural and pest Management Update. Real Tree Line 44(2).

Rathier, T. 2004. Cultural and Pest Management Update. Real Tree Line 44(3):7-9.

Rathier, T. 2004. Cultural and Pest Management Update. Real Tree Line 44(4):6-8.

Shields, K. S. and C. A. S.-J. Cheah. 2004. 2003-2004 Winter Mortality of Hemlock Woolly Adelgid in the Northeastern U.S. Poster presented at the ESA National Meeting 2003 online at www.fs.fed.us/morgantown/fhp/hwa/pdfs.Cold-Hardiness-ESA03.pdf

Welch, K. and T. Abbey. 2004. Pesticide Guide Towards Integrated Pest Management for Connecticut Arborists-2004.

Welch, K. and T. Abbey. 2004. Pesticide Guide Towards Integrated Pest Management for Connecticut Nurseries-2004.

2005

Abbey, T. 2005. Invasive Plants in the Connecticut Landscape. Connecticut Horticultural Society Newsletter 48(8):1, 4.

Abbey, T. 2005. Native Plant Species in Connecticut. Connecticut Horticultural Society Newsletter 48(8):4, 5.

Abbey, T. 2005. Tree Health Care: Insects, Disease and Stress. *In*: Greening Connecticut's Cities and Towns: Managing Public Trees and Community Forestry, R. M. Ricard & G. D. Dreyer, eds. University of Connecticut, College of Agriculture and Natural Resources, pp. 265.

Abbey, T and T. Rathier. 2005. Effects of Mycorrhizal Fungi, Biostimulants and Water Absorbing Polymers on the Growth and Survival of Four Landscape Plant Species. Journal of Environmental Horticulture 23(2):108-111.

Ahrens, J. F. 2005. When the frost is on the pumpkin why worry about weeds? The Real Tree Line.

Cheah, C. A., M. Mayer, D. Palmer, T. Scudder and R. Chianese. 2005. Assessments of biological control of hemlock woolly adelgid with *Sasajiscymnus* (=Pseudoscymnus) tsugae (Coleoptera: Coccinellidae) in Connecticut and New Jersey. In the Proceedings of the 3rd HWA Symposium, Asheville, NC, Feb. 1-3, 2005 Compiled by Onken, B. and Reardon, R. pp. 116-130. USDA Forest Service publication FHTET-2005-01 and available online at http://na.fs.fed.us/fhp/hwa

Cowles, R. S. 2005. Hard to control insect pests in Christmas trees: white grubs and weevils. Needlepoints (New Jersey Christmas Tree Growers' Association Newsletter) 23 (198):1, 9, 22. Reprinted in Shearings (Massachusetts Christmas Tree Association Newsletter, April 2005, pp. 12-15. Also reprinted in Michigan Christmas Tree Journal 53(2):14-15.

Cowles R. S. and T. Rathier. 2005. Cultural and pest management update for Christmas tree plantations. The Real Tree Line 45(4):6-7.

Hiskes, R. 2005. Managing white grubs in home lawns. CAES Factsheet.

LaMondia, J. A. 2005. Connecticut River Valley Blue Mold Web Page. CAES. www.crosswinds.net/~bluemold/caes.htm

LaMondia, J. A. 2005. Strawberry black root rot. Feature article, Advances in Strawberry Research. In press.

LaMondia, J. A. 2005. Systemic acquired resistance and fungicides for management of tobacco blue mold. https://portal.ct.gov/-/media/CAES/DOCUMENTS/Biographies/LaM ondia/82pdf.pdf

LaMondia, J. A. 2005. The effect of lesion nematode management by rotation or green

manure crops on potato early dying severity. Journal of Nematology 37:378

LaMondia, J. A., R. S. Cowles and L. Los. 2005. Prevalence and potential impact of soil-dwelling pests in strawberry fields. HortScience 1366-1370.

Li, D. W. 2005. Release and Dispersal of Basidiospores from Amanita muscaria var. alba and their infiltration to a residence. Mycological Research 109:1235-1242.

Li, D. W. 2005. Airborne basidiospores of boletes and their potential to infiltrate a residence in central Connecticut. Indoor Air 2005: Proceedings of the 10th International Conference on Indoor Air Quality and Climate, Vol. II (1). Indoor Air 2005, Beijing, China. Sept 4-9 2005. pp. 1450-1454.

Lin, K. T., D. W. Li, D. A. Dennis, R. Woodcock, and C. S. Yang. 2005. Qualitative identification of Meruliporia incrassata using real time polymerase chain reaction (real time PCR). In Bioaerosols, Fungi, Bacteria, and Human Health: Mycotoxins physiology, clinical effects, exposure assessment, prevention and control in indoor environments and work. Edited by Eckardt Johanning. Fungal Research Group Foundation, Inc. Alb any, New York. Pp. 335-345.

Mervosh, T. L. 2005. Comparison of granular herbicides for residual weed control in containers. Proceedings, Northeastern Weed Science Society 59:35.

Mervosh, T. L. and J. F. Ahrens. 2005. Tolerances of container-grown perennials to preemergence herbicides. Proceedings, Northeastern Weed Science Society 59:61.

Mervosh, T. L. and D. Gumbart. 2005. Control of Oriental bittersweet, pale swallowwort and phragmites at Bluff Point Coastal Reserve in Connecticut. Proceedings, 2005 New England Invasive Plant Summit, pp. 33-34.

Rathier, T. 2005. Cultural and Pest Management Update. Real Tree Line 45(1):6-8.

Rathier, T. 2005. Cultural and Pest Management Update. Real Tree Line 45(2):6-7.

Rathier, T. 2005. Cultural and pest management update for Christmas tree plantations. The Real Tree Line 45(3):6-7.

Rathier, T. 2005. What you should know about soil physical characteristics. The Real Tree Line 45(4):17-18.

- Zhao, G., X. Min, D.-W.. Li, and Y. Wu. 2005. A poplar disease caused by *Septoria musiva*. Journal of Shandong Forestry Science and Technology. 2005(3):44-46.
- Zhao, G. H., D.-W.. Li, Y. Z. Wu, and B. Guan. 2005. Popular diseases caused by *Ceratocystis* sensu lato. Forest Pest and Disease 24(6):28-31.
- Zhao, G. H., D.-W.. Li, Y. Z. Wu, B. Guan, and C. Q. Xie. 2005. Research and application of bicontrol of popular wood sapstaining fungi in pulping processing. Practical Forestry Technology 2005(5):9-10.

- Ahrens, J. F. 2006. A review of our latest weed management trials. The Real Tree Line Magazine of the CT. Christmas Tree Grower's Association 46(1):12-13.
- Ahrens, J. F. 2006. Combination of sulfometuron methyl and hexazinone for Fraser fir plantations. Abstract Proc. Northeast Weed Science, section 60:70.
- Ahrens, J. F. 2006. Station scientist offers weed management tips for late spring in Christmas tree plantations. The Real Tree Line, Magazine of the CT. Christmas Tree Grower's Association 46(2):14-15.
- Barolli, S., J. F. Ahrens, and R. Gray. 2006. Effect of flumioxazin in the late fall on container-grown deciduous shrubs. Abstract, Proc. Northeast Weed Science section 60:69.
- Cheah, C. 2006. Hope for hemlocks. Connecticut Woodlands 71(3):13-15.
- Cheah, C. 2006. Release of beetles to control hemlock woolly adelgid in Cockaponsett State Forest in 2006. Cockaponsett State Forest Updates 5:12-06.
- Cowles, R. S. 2006. New products and their uses in Christmas tree mite and insect management. Shearings (Newsletter for the MA Christmas Tree Association) October, 2006. pp. 15-17.
- Cowles, R. S. 2006. A systems approach for designing agricultural systems to manage root weevils. pp. 8-13, In: M. R. Gibberd and S. E. Learmonth (eds.). Garden Weevil Management in Vineyards A Workshop to Identify Research For the Future. Proceedings of Workshop, Margaret River, Western Australia, 16-17

- August 2005. Curtin University, Margaret River, Western Australia. 75 pp.
- Cowles, R. S. 2006. Various insecticides tested for managing armored scale insects on Christmas trees. Real Tree Line 46(2):9-10.
- Cowles, R. S., S. Polavarapu, R. N. Williams, A. Thies and R.-U. Ehlers. 2006. Soft fruit applications. pp. 231-254, In: P. S. Grewal, R.-U. Ehlers and D. I. Shapiro-Ilan (eds.). Nematodes as Biocontrol Agents. CABI Publishing. Cambridge, MA. 505 pp.
- Ellis, D., E. Corrigan and T. Mervosh. 2006. Giant hogweed (*Heracleum mantegazzianum*) and mile-a-minute vine (*Polygonum perfoliatum*): distribution and management. Conn. Invasive Plant Working Group, Symposium Proceedings. p. 23.
- LaMondia, J. A. 2006. Connecticut River Valley Blue Mold Web Page. CAES. http://www.ctvalleytobacco.org
- LaMondia, J. A. 2006. Evaluation of fungicides for Botrytis fruit rot in strawberries, 2005. Fungicide and Nematicide Tests. 61:SMF003
- LaMondia, J. A. 2006. Evaluation of fungicides for tobacco blue mold management, 2004. Fungicide and Nematicide Tests. 61:FC059
- LaMondia, J. A. 2006. Evaluation of fungicides for tobacco blue mold management, 2005. Fungicide and Nematicide Tests. 61:FC060.
- LaMondia, J. A. 2006. Management of lesion nematodes and potato early dying with rotation crops. Journal of Nematology 38(4):442-448.
- LaMondia, J. A. 2006. Timing of broadleaf tobacco post-harvest tillage affects tobacco cyst nematode population development. Journal of Nematology 38:278.
- LaMondia, J. A., and W. H. Elmer. 2006. Characteristics of *Meloidogyne spartinae* infection of the salt marsh grass *Spartina alterniflora*. Phytopathology 97:S179.
- LaMondia, J. A., F. J. Ferrandino and M. J. Incorvia Mattina. 2006. Fungicide drift from aerial and ground spray application to Connecticut shade tobacco. CAES Bulletin 1003. https://portal.ct.gov/-
- Mervosh, T. L. and D. Gumbart. 2006. Management of Oriental bittersweet (*Celastrus*

orbiculatus) and pale swallowwort (*Cynanchum rossicum*) at a Connecticut coastal reserve. Weed Science Society of America, Abstracts 46:20.

Mervosh, T. and D. Gumbart. 2006. Management of Oriental bittersweet vines and pale swallowwort at Bluff Point State Park and Coastal Reserve. Conn. Invasive Plant Working Group, Symposium Proceedings. p. 25.

Mervosh, T. L. and J. F. Ahrens. 2006. Quinoclamine for control of liverwort in the propagation of woody ornamentals. Proceedings, Northeastern Weed Science Society 60:68.

Patmos, M. and J. F. Ahrens. 2006. New England guide to chemical weed and brush control in Christmas trees. Cooperative online Extension publication produced by the University of New Hampshire 14 pp.

Rathier, T. 2006. Cultural and pest management update for Christmas tree plantations. The Real Tree Line 46(1):6-7.

Rathier, T. 2006. Cultural and pest management update for Christmas tree plantations. The Real Tree Line 46(2):6-7.

Rathier, T. 2006. Cultural and Pest Management Update. Real Tree Line 46(3):6-7.

Rathier, T. 2006. Cultural and Pest Management Update. Real Tree Line 46(4):6-7.

Rathier, T. 2006. Plasticulture Strategies to Improve Timing of N Availability to Shade Tobacco. Proceedings National Agricultural Plastics Congress. 33.

Robbins P. S., S. R. Alm, C. D. Armstrong, A. L. Averill, T. C. Baker, R. J. Bauernfiend, F. P. Baxendale, S. K. Braman, R. L. Brandenburg, D. B. Cash, G. J. Couch, R. S. Cowles, R. L. Crocker, Z. D. DeLamar, T. G. Dittl, S. M. Fitzpatrick, K. L. Flanders, T. Forgatsch, T. J.Gibb, B. D. Gill, D. O. Gilrein, C. S. Gorsuch, A. M. Hammond, P. D. Hastings, D. W. Held, P. R. Heller, R. T. Hiskes, J. L. Holliman, W. G. Hudson, M. G. Klein, V. L. Krischik, D. J. Lee, C. E. Linn, Jr., N. J. Luce, K. E. MacKenzie, C. M. Mannion, S. Polavarapu, D. A. Potter, W. L. Roelofs, B. M. Royals, G. A. Salsbury, N. M. Schiff, D. J. Shetlar, M. Skinner, B. L. Sparks, J. A. Sutschek, T. P. Sutschek, S. R. Swier, M. M. Sylvia, N. J. Vickers, P. J. Vittum, R. Weidman, D. C. Weber, R. C. Williamson and M. G. Villani. 2006. Trapping *Phyllophaga* spp. (Coleoptera: Scarabaeidae: Melolonthinae) in the United States and Canada using sex attractants. J. Insect Sci. 6(39):1-124. http://www.insectscience.org/6.39/

Welch, K. and T. Abbey. 2006. Pesticide Guide Towards Integrated Pest Management for Connecticut Arborists. The Connecticut Agricultural Experiment Station. 425 pp.

Welch, K. and T. Abbey. 2006. Pesticide Guide Towards Integrated Pest Management for Connecticut Christmas Tree Growers. The Connecticut Agricultural Experiment Station. 62 pp.

Welch, K. and T. Abbey. 2006. Pesticide Guide Towards Integrated Pest Management for Connecticut Nurseries. The Connecticut Agricultural Experiment Station. 394 pp.

Zhao, G. H., X. Y. Chen, Wu, Y. Z. and Li, D.-W.. 2006. Study on fungi from pine wood nematode infested wood. Journal of Nanjing Forestry University (Natural Sciences Edition) 30(2):79-81.

Zhao, G. H., X. Y. Chen, C. Q. Xie, B. Guan, Y. L. He, and D. W. Li. 2006. Study on Isolates of Ceratocystis on Rubber Wood in China. Journal of West China Forestry Science 35(1):6-11.

2007

Ahrens, J. F. 2007. Christmas tree weeds and thoughts on plantings for 2007. The Real Tree Line 47(1).

Ahrens, J. F. 2007. New England Guide to Chemical Weed and Brush Control in Christmas Trees. Online New England Coop. Exten. Publication, 14 pp.

Ahrens, J. F. 2007. Weed control options for the Summer. The Real Tree Line. 47(2):14-15.

Ahrens, J. F. 2007. Weed management trials in Christmas trees. Abstract. Proc. NEWSS 61:38.

Ahrens J. F. and M. Newton. 2007. Benefits of the Triazine Herbicides in the Production of Ornamentals and Conifer Trees. Book Chapter 13 in The Triazine Herbicides. Elsevier Science Publishers pp. 225-234.

Barolli, S. and J. F. Ahrens. 2007. Evaluation of granular herbicides in container-grown ornamentals. Abstract Proc. NEWSS 61:33-34.

Cowles, R. S. 2007. New insights into biology and management of annual bluegrass weevil. Connecticut Clippings 41(4):10-11.

- LaMondia, J. A. 2007. Connecticut River Valley Blue Mold Web Page. CAES. http://www.ctvalleytobacco.org
- LaMondia, J. A. 2007. Connecticut grown oilseed for biodiesel fuel and integrated pest management. The Voice, The Connecticut Academy of Arts and Sciences Newsletter Spring 2007 p. 1-5.
- LaMondia, J. A. 2007. The tobacco cyst nematode affects photosynthesis of shade-grown cigar wrapper tobacco. Journal of Nematology 39:71.
- LaMondia, J. A. and W. H. Elmer. 2007. Occurrence of *Meloidogyne spartinae* on *Spartina alterniflora* in Connecticut and Massachusetts. Plant Disease 91:327.
- LaMondia, J. A., and W. H. Elmer. 2007. The plant parasitic nematode *Meloidogyne spartinae* a possible contributor to salt marsh decline. Proceedings of the Connecticut Conference on Natural Resources.
- Li, D. W. 2007. Common Airborne and indoor fungi and their spores. Pp. 243-263. In "Advanced Approaches to Indoor Microbial Contamination" edited by Chin Yang and P. Heinsohn. John Wiley & Sons, Inc., New Jersey.
- Li, D. W. 2007. *Stachybotrys eucylindrospora*, sp. nov. resulting from a re-examination of *Stachybotrys cylindrospora*. Mycologia 99:332-339.
- Li, D. W. and G. H. Zhao. 2007. *Goidanichiella cylindrospora sp.* nov. from Connecticut, USA. Mycotaxon 101:41-45.
- Li, D. W., Yang, C. and Harrington F. 2007. Microscopic analysis methods for fungi. Pp. 75-103. In "Advanced Approaches to Indoor Microbial Contamination" edited by Chin Yang and P. Heinsohn. John Wiley & Sons, Inc., New Jersey.
- Li, X., R. S. Cowles, E. A. Cowles, R. Gaugler, and D. Cox-Foster. 2007. Relationship between the successful infection by entomopathogenic nematodes and the host immune response. International Journal for Parasitology 37:365-374.
- Mervosh, T. L. 2007. Control of Oriental bittersweet A non-native, invasive woody vine. Connecticut Weekly Agricultural Report (February 2007).

- Mervosh, T. L. and J. F. Ahrens. 2007. Tolerance of ornamental shrubs to halosulfuron. Abstract. Proc. NEWSS 61:36.
- Mervosh, T. L. and D. P. Roach. 2007. Efficacy of glyphosate, imazapyr and triclopyr for phragmites management in a Connecticut marsh. Northeastern Weed Science Society, Proceedings 61:73.
- Mervosh, T. L. and D. P. Roach. 2007. Evaluation of herbicides for phragmites management in Connecticut marshes. Weed Science Society of America, Abstracts 47:57.
- Rathier, T. 2007. Cultural and Pest Management Update. Real Tree Line 47(1):6-7.
- Rathier, T. 2007. Cultural and Pest Management Update. Real Tree Line 47(2):6-7.
- Rathier, T. 2007. Cultural and Pest Management Update. Real Tree Line 47(3):6-7.
- Rathier, T. 2007. Cultural and Pest Management Update. Real Tree Line 47(4):6-7.
- Yang, C. and Li, D. W. 2007. Microbial ecology in the indoor environment. Pp. 191-214. In "Advanced Approaches to Indoor Microbial Contamination" edited by Chin Yang and P. Heinsohn. John Wiley & Sons, Inc., New Jersey.
- Zhao G. H. and D. W. Li. 2007. Biology of lignicolous fungi: cell biology and morphology. Journal of Jiangsu Polytechnic College of Agriculture and Forestry 2007 (2):40-42.
- Zhao G. H. and D. W. Li. 2007. First report of *Memnoniella echinata* from *Pinus thunbergii*. Journal of West China Forestry Science 36(3):78-79.
- Zhao, G-H., D.-W. Li, Y-C Li, C-Q Xie, and W. Xu. 2007. Biological control of sap-stain fungi in poplar wood. Journal of Fujian College of Forestry 27(2):134-137.

- Ahrens J. F. 2008. Wouldn't it be lovely if weeds were not a problem for Christmas tree growers? The Real Tree Line 48(1):14-15.
- Ahrens, J. F. and M. Patmos. 2008. New England Guide to Chemical Weed and Brush Control in Christmas Trees. Cooperative Bulletin with UNH.

- Ahrens, J. F. and T. L. Mervosh. 2008. Tolerance of Fraser fir to herbicides applied before and after bud break. Proceedings, Northeastern Weed Science Society 62:81.
- Cheah, C. 2008. The case for *Sasajiscymnus tsugae*: Biological control has helped save Connecticut's hemlocks. Abstract for a poster presented at the Fourth Symposium on Hemlock Woolly Adelgid in the Eastern United States, Hartford, Connecticut February 12-14, 2008; Onken, O. and Reardon, R. Compilers. pp. 279-280. USDA Forest Service FHTET-2008-01.
- Cohen, A. C., C. A. S.-J. Cheah, J. Strider, and F. Hain. 2008. Diet development for hemlock woolly adelgid and their predators. In: Fourth Symposium on Hemlock Woolly Adelgid in the Eastern United States, Hartford, Connecticut February 12-14, 2008; Onken, O. and Reardon, R. Compilers. pp. 150-156. USDA Forest Service FHTET-2008-01.
- Cowles, R. S. 2008. Effective products require the right equipment and timing to work. Evergreen Bull. 6(2):3.
- Gugino, B. K., G. S. Abawi, J. A. LaMondia, and D. A. Neher. 2008. Train-the-trainer workshops as a platform for disseminating applied nematological research to vegetable and small fruit stakeholders in the Northeast. Phytopathology
- https://www.apsnet.org/meetings/Documents/20 08_Meeting_Abstracts/a08ma306.htm
- Halbrendt, J. M., J. A. LaMondia, and I. A. Zasada. 2008. Evaluation of millet and rapeseed as rotation or green manure crops to control nematodes in orchard replant sites. Proceedings of the Fifth International Congress of Nematology, p. 280.
- Halbrendt, J. M., I. A. Zasada and J. A. LaMondia. 2008. Evaluation of Canadian Forage Pearl Millet as a rotation or green manure crop to control lesion and dagger nematodes. Pennsylvania Fruit News 87(1):39-42.
- LaMondia, J. A. 2008. Actigard increases fungicide efficacy against *Peronospora tabacina*, cause of tobacco blue mold. Phytopathology 98(6):S207.
- LaMondia, J. A. 2008. Actigard increases fungicide efficacy against tobacco blue mold. Plant Disease 92:1463-1467.
- LaMondia, J. A. 2008. Connecticut River Valley Blue Mold Web Page CAES. http://www.ctvalleytobacco.org

- LaMondia, J. A. 2008. Early crop root destruction for management of tobacco cyst nematodes. Journal of Nematology 40(1):26-29.
- LaMondia, J. A. 2008. Resistance to blue mold in Connecticut shade tobacco. Phytopathology 99(6S):193.
- LaMondia, J. A. 2008. The association of tobacco mosaic virus with green spot of cured tobacco leaves. Plant Disease 92:37-41.
- LaMondia, J. A. and J. M. Halbrendt. 2008. The effects of Brassica seed meal amendments on *Meloidogyne hapla* viability in laboratory bioassays. Proceedings of the Third International Biofumigation Symposium.
- LaMondia, J. A. and W. H. Elmer. 2008. Ecological Relationships between *Meloidogyne spartinae* and Salt Marsh Grasses in Connecticut. Journal of Nematology 40(3):217-220.
- LaMondia, J. A. and W. H. Elmer. 2008. *Meloidogyne spartinae* and a *Fusarium* sp. as possible stresses associated with decline of the salt marsh grass *Spartina alterniflora*. New England Estuarine Research Society Meeting.
- Li, D. W. and C. Yang. 2008. Spore counting. In "Recognition, Evaluation & Control of Indoor Mold" AIHA Green Book.
- Li, D. W., R. S. Cowles, and C. R. Vossbrinck. 2008. *Metarhiziopsis microspora* gen. et sp. nov. associated with the elongated hemlock scale. Mycologia 100:460-466.
- Li, D. W., Kendrick, B., Spero, D. and Macdonald C. 2008. *Balaniopsis triangularis* sp. nov. from indoor environments. Mycotaxon 105:105-110.
- Mervosh, T. L. and J. F. Ahrens. 2008. Safety and efficacy of flumioxazin as a preemergence herbicide in nursery containers. Weed Science Society of America Abstracts, Vol. 48.
- Mervosh, T. L. and J. F. Ahrens. 2008. Tolerance of container-grown ornamentals to experimental and registered herbicides. Proceedings, Northeastern Weed Science Society 62:82.
- Rathier, T. 2008. Cultural and Pest Management Update. Real Tree Line 48(1):6-7.
- Rathier, T. 2008. Cultural and Pest Management Update. Real Tree Line 48(2):6-7.
- Rathier, T. 2008. Cultural and Pest Management Update. Real Tree Line 48(3):6-7.

Rathier, T. 2008. Cultural and Pest Management Update. Real Tree Line 48(4):6-7.

Rathier, T. 2008. Cultural and Pest Management Update. Real Tree Line 49(3):6-7.

Rathier, T. 2008. Cultural and Pest Management Update. Real Tree Line 49(4):6-7.

Rathier, T. and M. Brown. 2008. Improvement in leaf quality of shade grown tobacco with supplemental soluble N applications under plasticulture. Proceedings 34th National Agricultural Plastics Congress.

Smith, H. A. 2008. Habitat Manipulation for the Conservation of Natural Enemies, in Encyclopedia of Pest Management, D. Pimentel, ed. Taylor and Francis, USA.

Smith, H. A., W. E. Chaney, and T. A. Bensen. 2008. Role of syrphid larvae and other predators in suppressing aphid infestations in organic lettuce on California's Central Coast. Journal of Economic Entomology 101:1526-1532.

2009

Ahrens, J. F., and Mervosh, T. L. 2009. Herbicides for postemergence weed control in ten field-grown conifer species. Abstract, Proceedings NEWSS 63:61.

Ahrens, J. F. 2009. Guide to chemical weed and brush control in Christmas trees. 14 pp. University of New Hampshire Cooperative Extension Bulletin.

Ahrens, J. F. 2009. Station scientist issues weed control update for 2009. The Real Tree Line, the magazine of the Connecticut Christmas Tree Association 49 (2) 13-14. Reprinted in Tree Line, a magazine of the New Hampshire/Vermont Christmas Tree Association, June, 2009:6, 8.

Ahrens, J. F. 2009. Dr Ahrens offers methods for storing plugs or bare-root seedlings or transplants before planting. The Real Tree Line, the magazine of the Connecticut Christmas Tree Growers Association, 49:16.

Barolli, S, and Ahrens, J. F. 2009. Fall applications of flumioxazin on deciduous ornamentals. Proceedings NEWSS, 63:62.

Cowles, R. S. 2009. Optimizing dosage and preventing leaching of imidacloprid for management of hemlock woolly adelgid in

forests. Forest Ecology and Management 257:1026-1033.

Cowles, R. S. 2009. An effective, selective and less laborious approach for managing cryptomeria scale. Evergreen Bull. 7(1):3.

Cowles, R. S. 2009. An effective, selective and less laborious approach for managing cryptomeria scale. The Real Tree Line 49(2):19.

Johnson, C. S., Wemsman, E. A., and LaMondia, J. A. 2009. Effect of the Ph_p gene for resistance to *Phytophthora nicotianae* on reproduction of tobacco cyst nematodes. Plant Disease 93(3):309-315.

LaMondia, J. A. 2009. Efficacy of fungicides and a systemic-acquired-resistance activator against tobacco blue mold. Crop Protection 28:72-76.

LaMondia, J. A. 2009. Connecticut River Valley Blue Mold Web Page. CAES. http://www.ctvalleytobacco.org

Li, D. W., and Sutton, J. 2009. Evaluation of antagonistic microorganisms for biocontrol of *Botrytis cinerea* in cyclamen. J. Nanjing Forestry Univ. (Natural Science Edition) 33:1-10.

Li, X., Cowles, E. A., Cowles, R. S., Gaugler, R., and Cox-Foster, D. L. 2009. Characterization of immunosuppressive surface coat proteins from *Steinernema glaseri* that selectively kill blood cells in susceptible hosts, *Molecular & Biochemical Parasitology* 165:162-169.

Magyar, D., G. Frenguelli, E. Bricchi, E. Tedeschini, P. Csontos, D. W. Li. and J. Bobvos. 2009. The biodiversity of air spora in an Italian vineyard. Aerobiologia 25:99-109.

Mervosh, T. L. 2009. Pale swallow-wort management with foliar herbicide treatments. Proceedings, Northeastern Weed Science Society 63:76.

Mervosh, T. L., and Boettner, C. 2009. Impacts of several herbicides on pale swallow-wort (*Cynanchum rossicum*) and other vegetation. Weed Science Society of America Abstracts 49:185 (www.wssa.net).

Rathier, T. 2009. Cultural and Pest Management Update. Real Tree Line 49(1):6-7.

Rathier, T. 2009. Cultural and Pest Management Update. Real Tree Line 49(2):6-7.

Marra R. E. and Li D. W. 2009. First Report of *Pestalotiopsis paeoniicola* causing twig blight on

Paeonia suffruticosa in North America. Plant Disease 93:966.

Rathier, T. 2009. Cultural and Pest Management Update. Real Tree Line 50(1):6-7.

Rathier, T. 2009. Cultural and Pest Management Update. Real Tree Line 50(2):6-7.

Rathier, T. 2009. New tricks for old dogs? A brief history of plasticulture use for Connecticut tobacco (abstract). Proceedings of the National Agricultural Plastics Congress 35:77.

Smith, H., Cowles, R., and Hiskes, R. 2009. Scale Insect Pests of Connecticut Trees and Ornamentals. CAES Fact Sheet. https://portal.ct.gov/-

/media/CAES/DOCUMENTS/Publications/Fact Sheets/Entomology/ScaleInsectPestsofConnectic utTreesandOrnamentalspdf.pdf

Smith, H., and Cowles, R. 2009. Monitoring Arthropod Pests of Connecticut Nurseries. CAES Fact Sheet. https://portal.ct.gov/media/CAES/DOCUMENTS/Publications/Fact_Sheets/Entomology/NurseryMonitoringpdf.pdf

Smith, H., and Cowles, R. 2009. El monitoreo de artrópodos plaga en los viveros del Noreste de los Estados Unidos. CAES Fact Sheet. https://portal.ct.gov/-

/media/CAES/DOCUMENTS/Publications/Fact Sheets/Entomology/NurseryMonitoringSPANIS Hpdf.pdf

Smith, H., R. Cowles and R. Hiskes. 2009. Scale insect pests of Connecticut trees and ornamentals. Connecticut Nursery and Landscape Magazine. Issue 5. Pp. 18-23.

Smith, H. and R. Cowles. 2009. Monitoring arthropod pests of Connecticut nurseries. Connecticut Nursery and Landscape Magazine. Issue 2. Pp. 12-15.

2010

Ahrens, J. F. 2010. 50 Years of Weed Control in Christmas Tree Plantations. The Real Tree Line 50(3):31-34.

Ahrens, J. F. 2010. CCTGA Forms a New Tree Improvement Committee. The Real Tree Line 50(2):21-22.

Ahrens, J. F. 2010. Don't let those pesky weeds invade your Christmas tree plantation. The Real

Tree Line, a magazine of the Connecticut Christmas Tree Assoc. 50(1):10.20. Reprinted in Shearings, a magazine of the Massachusetts Christmas Tree Assoc. under the title of "Weed management in Christmas trees in 2010."

Ahrens, J. F. 2010. Highlights of the Ninth International Christmas Tree Research and Extension Conference. The Real Tree Line 49:20-21.

Ahrens, J. F. 2010. New England Guide to Weed and Brush Control in Christmas Trees. Cooperative Bulletin with the University of New Hampshire 14 pp. Listed on the Univ. of New Hampshire Extension website.

Ahrens, J. F. 2010. Update on Westar and Glyphosate for Weed Control in Christmas Tree Plantations. The Real Tree Line 50(4):31-34.

Ahrens, J. F. and T. L. Mervosh. 2010. Abstract. Postemergence weed control in actively growing conifers. Proceedings Northeastern Weed Science Society 64:96.

Cheah, C. 2010. Combating the Mile-a-minute weed Invasion in Connecticut: Newsletter of the Connecticut Botanical Society Spring 2010, 37(1):5-6.

Cheah, C. 2010. Connecticut's threatened landscape: natural enemies for biological control of invasive species. Frontiers of Plant Science Spring 2010, 57(2).

Cheah, C. A. S.-J. and M. S. McClure. 2010. *Sasajiscymnus* (formerly *Pseudoscymnus*) *tsugae* (Coleoptera: Coccinellidae) In: Biological Control. A Guide to Natural Enemies in North America. Cornell University, College Of Agriculture and Life Sciences. Online at https://biocontrol.entomology.cornell.edu/predators/sasajiscymnus.php

Cohen, A. C. and C. A. Cheah. 2010. Packaging and Presentation of Artificial Diets for Hemlock Woolly Adelgid Predators. In: Proceedings of the Fifth Hemlock Woolly Adelgid Symposium August 17-19, 2010; Asheville, NC p. 133-135_Compilers: Brad Onken and Richard Reardon USDA Forest Service FHTET 2010-07 December 2010.

Cohen, A. C., C. A. Cheah, K. Kidd, F. P. Hain, and T. Hodgson. 2010 Developing Process Control and Quality Control in Rearing Systems for Hemlock Woolly Adelgid Predators. In: Proceedings of the Fifth Hemlock Woolly Adelgid Symposium August 17-19, 2010; Asheville, NC pp. 141-143. Compilers: Brad

- Onken and Richard Reardon USDA Forest Service FHTET 2010-07 December.
- Cowles, R. S. 2010. Breeding strawberries for tolerance to root pests. New York State Vegetable and Small Fruit Expo, Proceedings, 3 pp.
- Cowles, R. S. 2010. Do we really want treeless school grounds? Connecticut Tree Warden Newsletter.
- Cowles, R. S. 2010. Managing root feeding insects of strawberries. New York State Vegetable and Small Fruit Expo, Proceedings, 3 pp.
- Cowles, R. S. 2010. Optimizing a bark spray of dinotefuran to manage armored scales (Hemiptera: Diaspididae) in Christmas tree plantations. Journal of Economic Entomology 103:1735-1743.
- Cowles, R. S. 2010. The Facts About Systemic Insecticides and Their Impact on the Environment and Bee Pollinators. Clippings (Publication of the MN Turf and Grounds Foundation). Spring/Summer, 3 pp.
- LaMondia, J. A. 2010. January temperatures predict tobacco blue mold severity evidence for local source and long distance transport of inoculum in Connecticut. Plant Disease 94(1):119-124.
- LaMondia, J. A. 2010. Connecticut River Valley Blue Mold Web Page. CAES. http://www.ctvalleytobacco.org
- LaMondia, J. A. 2010. The Development of B2, a Broadleaf Tobacco Hybrid with Resistance to Multiple Pathogens. CT Dept Agriculture Connecticut Weekly Agricultural Report 90(4):1-3.
- LaMondia, J. A. 2010. Strawberry black root rot. New York Berry News 9(1):7-15.
- LaMondia, J. A. 2010. Management of the Tobacco t nematode in cigar wrapper tobaccos in Connecticut. Proceedings of the 44th Tobacco Workers Conference Paper #90.
- LaMondia, J. A. and J. M. Halbrendt. 2010. Rotation and green manure crops for management of lesion and dagger nematodes. Journal of Nematology 42:251.
- LaMondia, J. A. and R. S. Cowles. 2010. Evaluation of strawberry breeding lines for tolerance to black root rot and black vine weevil feeding. Phytopathology 100(6S):195.

- LaMondia, J. A., D. W. Li and C. R. Vossbrinck. 2010. First report of blight of common bean caused by *Phytophthora capsici* in Connecticut. Plant Disease 94(1):134.
- Li, D. W. 2010. *Spadicoides subsphaerica* sp. nov. from Connecticut Mycotaxon 111:257-261.
- Li, D. W. and J. A. LaMondia. 2010. Airborne fungi associated with ornamental plant propagation in greenhouses. Aerobiologia 26:15-28.
- Li, D. W., J. Y. Chen, and Y. X. Wang. 2010. Two new species of dematiaceous hyphomycetes from Hubei, China. Sydowia 62(1):171-179.
- McGraw, B. A., P. J. Vittum, R. S. Cowles, and A. M. Koppenhöfer. 2010. Entomopathogenic nematodes for the biological control of the annual bluegrass weevil. Golf Course Management.
- Mervosh, T. L. 2010. Use of pre-emergence herbicides in Christmas tree fields. Great Lakes Christmas Tree Journal, Spring 2010, pp. 14-19.
- Mervosh, T. L., J. S. Ward and J. P. Barsky. 2010. Several treatment options for control of Japanese stiltgrass in a woodland. Proc., Northeast. Weed Sci. Soc. 64:37.
- Rathier, T. 2010. Cultural and Pest Management Update. Real Tree Line 50(3):6-7.
- Rathier, T. 2010. Cultural and Pest Management Update. Real Tree Line 50(4):6-7.
- Smith, H. A. 2010. Leafhopper Pests of Connecticut Nurseries and Landscapes. https://portal.ct.gov/-
- /media/CAES/DOCUMENTS/Publications/Fact_Sheets/Entomology/LeafhopperPestsofConnectic_utNurseriesandLandscapespdf.pdf Spanish version: https://portal.ct.gov/-/media/CAES/DOCUMENTS/Publications/Fact_Sheets/Entomology/LeafhopperPestsofConnectic_utNurseriesandLandscapesSPANISHpdf.pdf
- Smith, H. A. 2010. Leafminer pests of Connecticut Nurseries. https://authoring-stage.ct.egov.com/-
- /media/CAES/DOCUMENTS/Publications/Fact

 Sheets/Entomology/LeafminerPestsofConnecticu

 tNurseriespdf.pdf
 Spanish
 version:

 https://portal.ct.gov/
- Zasada, I. A., J. Halbrendt, N. Kokalis-Burelle, J. A. LaMondia, and M. V. McKenry. 2010.

Managing nematodes without methyl bromide. Annual Review of Phytopathology 48:311-328.

Zhao, G.-H., D.-W.. Li, X. Gang-Jun. 2010. First report of powdery mildew caused by *Oidium cassiae-siameae* J. M. Yen on *Cassia corymbosa*. Mycosystema 29(6):869-873.

Zhao G.-H, D.-W. Li, J. H. Jiang, and J. Peng. 2010. First report of *Stachybotrys chartarum* causing leaf blight of *Tillandisia tenuifolia*. Plant Disease 94:1166.

2011

Abawi, G. S., C. H. Petzoldt, B. K. Gugino, and J. A. LaMondia. 2011. Prioritizing cover crops for improving root-health and yield of vegetables in the Northeast. Phytopathology 101:S1.

Ahrens, J. F. 2011. The Connecticut Tree Improvement Committee Issues a Progress Report. The Real Tree Line 51(2):15.

Ahrens, J. F. 2011. Weed control practices in the Northeastern United States. Proc. 10th International Research and Extension Conference. Eichengraben, Austria.

Ahrens, J. F. and T. L. Mervosh. 2011. Further Experiments with Mesotrione for Postemergence Weed Control in Actively Growing Conifers. Abstract Proc. Northeastern Weed Science Society 65:52.

Ahrens, J. F. and S. Barolli. 2011. Herbicide Sprays for Container-Grown Hydrangea. Abstract Proc. Northeastern Weed Science Society: 65:49.

Ahrens, J. F. and K. Bennett. 2011. New England Guide to weed and Brush Control in Christmas Trees. Cooperative Bulletin with The University of New Hampshire. 14 pp. Listed on the University of New Hampshire website.

Cheah, C. 2011. Sasajiscymnus tsugae: a ladybeetle from Japan. In: Implementation and Status of Biological Control of the Hemlock Woolly Adelgid. Technical Coordinators: Onken, B. and Reardon, R. Section II. Agents for Biological Control. USDA Forest Service FHTET-2011-04 December 2011 Chapter 4. p. 43-52.

Cloyd, R. A., J. A. Bethke, and R. S. Cowles. 2011. Systemic insecticides and their use in ornamental plant systems. Floriculture and Ornamental Biotechnology

Cloyd, R. A. and R. S. Cowles. Pesticide rotations and mixtures: Which is best for resistance management. OFA Bulletin No. 923:19-20.

Cohen, A. C., C. Cheah, K. Kidd, and T. Hodgson. 2011. Defining QA/QC standards for rearing laboratories. In: Implementation and Status of Biological Control of the Hemlock Woolly Adelgid. Technical Coordinators: Onken, B. and Reardon, R. Section Ill: Laboratory rearing for field release. USDA Forest Service FHTET-2011-04 December 2011. Chapter 13 pp. 139-147.

Cohen, A. C. and C. Cheah. 2011. Development of artificial diets for predators of hemlock woolly adelgids. In: Implementation and Status of Biological Control of the Hemlock Woolly Adelgid. Technical Coordinators: Onken, B. and Reardon, R. Section Ill. Laboratory rearing for field release. USDA Forest Service FHTET-2011-04 December 2011 Chapter 14. pp.148-157.

Cowles, R. S. 2011. Managing annual bluegrass weevil resistant to pyrethroids. New Jersey Turf EXPO Proceedings.

Cowles, R. S. 2011. Systemic insecticides for tree and shrub care. New Jersey Turf EXPO Proceedings.

Cowles, R. S. 2011. Practical armored scale management in Christmas trees. American Christmas Tree Journal.

LaMondia, J. A. 2011. B2, A new broadleaf cigar wrapper tobacco cultivar with resistance to multiple pathogens. CAES Bulletin 1031. https://portal.ct.gov/-

/media/CAES/DOCUMENTS/Publications/Bulle tins/b1031pdf.pdf

LaMondia, J. A. 2011. Connecticut River Valley Blue Mold Web Page. CAES. http://www.ctvalleytobacco.org

LaMondia, J. A. 2011. Strawberry root problems. New York Berry News 10(2):19-20.

LaMondia, J. A., and C. R. Vossbrinck. 2011. First Report of Target spot of Tobacco Caused by *Rhizoctonia solani* (AG-3) in Massachusetts. Plant Disease 95(4):496.

LaMondia, J. A., C. R. Vossbrinck, and F. J. Ferrandino. 2011. Early season potyvirus epiphytotic affects cigar wrapper tobacco in Massachusetts and Connecticut. Phytopathology 101:S260.

- Li, D. W. 2011. Five trillion basidiospores in a fruiting body of *Calvatia gigantea*. Mycosphere 2(4):457-462.
- Li, D. W. 2011. *Stachybotrys thaxteri* sp. nov. and nomenclatural status of three *Stachybotrys* species. Mycotaxon 115:239-250 https://doi.org/10.5248/115.239
- Li, D. W., J. Y. Chen, and Y. X. Wang. 2011. *Rhexodenticula zhengii* sp. nov. from fallen leaves from China. Mycotaxon 117:287-290.
- Mervosh, T. L. 2011. Pre-emergence herbicide options for weed control in Christmas tree fields. The Real Tree Line 51(1):15, 16, 19.
- Mervosh, T. L., C. A. Cheah, and D. R. Ellis. 2011. Biological control program for mile-aminute vine in Connecticut. Proceedings, Northeastern Weed Science Society 65:36 (Abstract #44 www.newss.net).
- Mervosh, T. L., J. S. Ward, and J. P. Barsky. 2011. Management options for Japanese stiltgrass (*Microstegium vimineum*) in natural areas. Weed Science Society of America, Abstracts 51:70 (www.wssa.net).
- Mervosh, T. L., J. S. Ward, and J. P. Barsky. 2011. Management options for Japanese stiltgrass (*Microstegium vimineum*) incursions. 5th Connecticut Conference on Natural Resources.
- Rathier, T. 2011. Cultural and Pest Management Update. Real Tree Line 51(1):6-7.
- Rathier, T. 2011. Cultural and Pest Management Update. Real Tree Line 51(2):6-7.

- Ahrens, J. F. and T. L. Mervosh. 2012. Tolerance of conifers to mesotrione alone or combined with other herbicides. Abstract Proc. Northeastern Weed Science Society 66:70.
- Ahrens, J. F. 2012. Christmas Tree growing in Austria. The Real Tree Line 5(1):14, 19.
- Ahrens, J. F. and K. Bennett. 2012. New England Guide to Weed and Brush Control in Christmas Trees. Cooperative Bulletin with the University of New Hampshire #72, www.newss.org
- Cain, N. P. and T. L. Mervosh. 2012. Approaches for swallow-wort control deciding how to begin. Proceedings,

- Northeastern Weed Science Society 66:80 (Abstract #81, www.newss.org).
- Cowles, R. S. 2012. Practical armored scale management in Christmas trees. The Real Tree Line. (Reprint from American Christmas Tree Journal).
- Cowles, R. S. 2012. Practical armored scale management in Christmas trees. Wisconsin Christmas Tree Growers' Newsletter. (Reprint from American Christmas Tree Journal)
- Cowles, R. S., D. Hickey, and D. Gavin. 2012. Root dips help transplant establishment. American Christmas Tree Journal. 56(1):16-19.
- Harper, R. W. and R. S. Cowles. Susceptibility of Chinese Hemlock (*Tsuga chinensis*) to injury from horticultural oil applications. Arboriculture and Urban Forestry.
- Koppenhöfer, A. M., S. R. Aim, R. S. Cowles, B. A. McGraw, S. Swier, and P. J. Vittum. 2012. Controlling annual bluegrass weevil: optimal insecticide timing and rates. Golf Course Management 80(3):98-104.
- LaMondia, J. A. 2012. Connecticut River valley Blue Mold Web Page. CAES. http://www.ctvalleytobacco.org
- LaMondia, J. A., and C. R. Vossbrinck. 2012. First Report of Target spot of Tobacco Caused by *Rhizoctonia solani* (AG-3) in Connecticut. Plant Disease 96: https://doi.org/10.1094/PDIS-04-12-0335-PDN
- LaMondia, J. A., D. W. Li, R. E. Marra, and S. M. Douglas. 2012. First report of *Cylindrocladium pseudonaviculatum* causing leaf spot of *Pachysandra terminalis*. Plant Disease 96(7):1069.
- LaMondia, J. A. 2012. Efficacy of azoxystrobin fungicide against sore shin of shade tobacco, caused by *Rhizoctonia solani* Tobacco Science 49:1-3.
- LaMondia, J. A. and R. L. Wick. 2012. Potyvirus infection of potato may threaten other solanaceous crops. Phytopathology http://apsjournals.apsnet.org/doi/pdf/10.1094/PH YTO-102-1-S1.1
- Li, D. W., K. Bryce, and C. Jingyuan. 2012. Two new hyphomycetes *Codinaea sinensis* sp. nov., *Parapleurotheciopsis quercicola* sp. nov. and two new records from *Quercus phillyraeoides* leaf litter. Mycological Progress https://doi.org/10.1007/s11557-011-0805-7

- Li, D. W. 2012. Microscopic Methods for Analytical Studies of Fungi. Pp. 113-132. In Laboratory Protocols in Fungal Biology: Current Methods in Fungal Biology, Vijai Kumar Gupta, Maria Tuohy, Manimaran Ayyachamy, Kevin M. Turner, and Anthonia O'Donovan ed. Springer. 604 pp.
- Li, D. W. and C. S. Yang. 2012. What does the development of fungal systematics mean to DNA-based methods for indoor mold investigations? Pp. 236-245. In Bioaerosols 6th International Scientific Conference on Bioaerosols, Fungi, Bacteria, Mycotoxins in Indoor and Outdoor Environments and Human Health. Edited by Eckardt Johanning, Philip R. Morey, Pierre Auger. Fungal Research Group Foundation, Inc., Albany, New York. 392 pp.
- Gent, J. F., J. M. Kezik, M. E. Hill, E. Tsai, D. W. Li, and B. P. Leaderer. 2012. Household mold and dust allergens: Exposure, sensitization and childhood asthma morbidity. Environmental Research 118:86-93. https://doi.org/10.1016/j.envres.2012.07.005
- Halbrendt, J. and J. A. LaMondia. 2012. Dagger nematodes and perennial fruit crops. Journal of Nematology 44:465.
- Keena, M. A., T. Trotter, C. Cheah, and M. Montgomery. 2012. Effects of temperature and photoperiod on the aestival egg diapause of *Scymnus* camptodromus (Coleoptera:Coccinellidae). Environmental Entomology 41:1662-1671.
- LaMondia, J. A. 2012. Biochar inhibits host recognition by *Globodera tabacum*. Journal of Nematology 44:473.
- Mervosh, T. L. 2012. Common weeds of Connecticut Christmas tree fields. The Real Tree Line. 52(1):16-17, 28.
- Mervosh, T. L. and J. F. Ahrens. 2012. Tolerances of container-grown ornamentals to mesotrione, dimethenamid-P, and pendimethalin plus dimethenamid-P applications. Proceedings, Northeastern Weed Science Society 66:67 (Abstract #69, www.newss.org).
- Zhao, G-H and Li, D.-W.. 2012. First report of *Cephaliophora tropica* on NL 351 poplar in China. Journal of West China Forestry Science 41(1):46-52.

- Ahrens, T. and R. S. Cowles. 2013. A remembrance of John F. Ahrens, Ph.D. American Christmas Tree Journal 57(1):22.
- Ahrens, J. F. and T. Mervosh. 2013. Pre and post budbreak applications of indaziflam in field-grown conifers. Proceedings, Northeastern Weed Science Society, Vol. 67 and Weed Science Society of America Abstracts, Vol. 53: Abstract 303. http://wssaabstracts.com/public/17/abstract-303.html
- Barolli, S. and J. F. Ahrens. 2013. Tolerance of container ornamentals to sprays of indazlflam and current herbicides. Proceedings, Northeastern Weed Science Society; Weed Science Society of America Abstracts Vol. 53: Abstract 302

http://wssaabstracts.com/public/17/abstract-302.html

- Cowles, R. S. 2013. Seeing spots: how homeowners may protect their fruit crops from spotted wing drosophila. Connecticut Gardener 19(3):6-7, back cover.
- Cowles, R. S. 2013. Guidelines for Preserving Trees in the Presence of the Emerald Ash Borer. CAES Fact Sheet. https://portal.ct.gov/-/media/CAES/DOCUMENTS/Publications/Fact_Sheets/Valley_Laboratory/EABFactSheet2012C
 OWLESLOCKEDpdf.pdf
- Harper, R. W. and R. S. Cowles. 2013. Susceptibility of Chinese hemlock (Tsuga chinensis) to injury from autumn horticultural oil applications. Arboriculture and Urban Forestry 39:6-10.
- Jie, C. Y., K. Geng, Y. L. Jiang, J. J. Xu, K. D. Hyde, E. H. C. Mckenzie, T. Y. Zhang, A. H. Bahkali, D. W. Li, and Y. Wang. 2013. *Stachybotrys* from soil in China, identified by morphology and molecular phylogeny. Mycological Progress. Published online first in December 2012. https://doi.org/10.1007/s11557-012-0878-y
- LaMondia, J. A. 2013. Connecticut River Valley Blue Mold Web Page. CAES. http://www.ctvalleytobacco.org
- LaMondia, J. A. 2013. Reduced sensitivity of *Peronospora tabacina*, causal agent of tobacco blue mold, to dimethomorph fungicide in Connecticut. Tobacco Science 50:19-24.
- LaMondia, J. A., D. W. Li. 2013. First report of *Calonectria pseudonaviculata* causing leaf spot

and stem blight of *Pachysandra procumbens*. Plant Health Progress: online.

Mervosh, T. L. and J. F. Ahrens. 2013. Indaziflam granules and dimethenamid-p sprays for container-grown ornamentals. Proceedings, Northeastern Weed Science Society, Vol. 67 and Weed Science Society of America Abstracts, Vol. 53: Abstract 304. http://wssaabstracts.com/public/17/abstract-304.html

Mervosh, T. L., C. A. Cheah and D. R. Ellis. 2013. Biological control program for mile-aminute weed (*Persicaria perfoliata*) in Connecticut. Proceedings, Northeastern Weed Science Society, Vol. 67 and Weed Science Society of America Abstracts, Vol. 53: Abstract 107. http://wssaabstracts.com/public/17/abstract-107.html

Cowles, R. S. 2013. Pollinator safety and neonicotinoid use in Christmas tree culture. *Connecticut Christmas Tree Grower Newsletter*. August 2013.

Cowles, R. S. 2013. The year of the bagworm. *Connecticut Christmas Tree Grower Newsletter*. November, 2013.

Kokalis-Burelle, N., I. Zasada, W. T. Crow, J. A. LaMondia, S. R. Stetina, and A. Westphal. 2013. Navigating the publication process for the Journal of Nematology. *J. Nematol.* 45:299.

LaMondia, J. A. and W. H. Elmer. 2013. Salt tolerance of *Meloidogyne spartinae* and *M. hapla. J. Nematol.* 45:300-301.

Li, D. W., G. Zhao, C. Yang, J. Ariunaa, and B. Kerin. 2013. Four note-worthy hyphomycetes from indoor environments. *Mycotaxon* 125:111-121.

Zhao G.-H., D. W. Li, and G.-J. Xi. 2013. Studies on the symptoms and *Phyllactinia populi* on Italian hybrid poplars and *Populus deltoides* cv. Zhonghua hongye. *J. West China Forestry Sci.* 42:1-6.

2014

LaMondia, J. A. 2014. Connecticut River Valley Blue Mold Web Page. CAES. http://www.ctvalleytobacco.org

LaMondia, J. A. 2014. Plant parasitic nematodes in irrigation water. Chapter 9. Pp. 83-95 *In*: Biology, Detection, and Management of Plant Pathogens in Irrigation Water. C. X. Hong, G.

W. Moorman, W. Wohanka, and C. Büttner, eds. American Phytopathological Society, St. Paul, MN.

LaMondia, J. A. 2014. Fungicide efficacy against *Calonectria pseudonaviculata*, causal agent of boxwood blight. Plant Disease 98:99-102.

LaMondia, J. A., D. W. Li, A. M. Madeiras and R. L. Wick. 2014. First report of Forsythia shoot blight caused by *Phytophthora nicotianae* in Connecticut. Plant Disease 98:online.

Li, D. W., J. Chen, and Y. Wang. 2014 (2013). Hyphomycetes: *Linodochium sinense* sp. nov. and new records from *Sycopsis sinensis* fallen leaves in China. Mycotaxon 126:15-22. https://doi.org/10.5248/126.15

Mervosh, T. 2014. Management options for five tough weeds in Christmas tree fields. The Real Tree Line 54:13, 17, 24.

Wiederhold, N. P., D. A. Sutton, D. W. Li, Y. Liang, E. H. Thompson, B. L. Wickes, M. L. Herrera, S. L. Rhoads and J. E. Mortensen. 2014. *Stachybotrys eucylindrospora* isolated from foreign material following a traumatic eye injury. Mycoses 57:437-441. https://doi.org/10.1111/myc.12173

Clavet, C., M. Requmtina, E. Hampton, R. S. Cowles, F. J. Byrne, and S. R. Alm. 2014. Clothianidin and imidacloprid residues in *Poa annua* (Poales: Poaceae) and their effects on *Listronotus maculicollis* (Coleoptera: Curculionidae). J. Econ. Entomol. 107:2095-2102.

Egan, C., D. W. Li, and J. Klironomos. 2014. Detection of arbuscular mycorrhizal fungal spores in the air across different biomes and ecoregions. Fungal Ecology 12:26-31.

Ganci, M., D. M. Benson, J. A. LaMondia and K. L. Ivors. 2014. The show must go on: Boxwood and beyond. http://www.apsnet.org/meetings/Documents/2014 meeting abstracts/aps2014abS106.htm

LaMondia, J. A., S. M. Douglas, K. Ivors, and N. Shiskoff. 2014. Kryptonite for boxwood blight: management with fungicides and sanitizers. https://www.apsnet.org/meetings/Documents/20 14 meeting abstracts/aps2014abS103.htm

LaMondia, J. A. and B. D. Eitzer. 2014. Strategies to control blue mold and reduce fungicide residues in cigar wrapper tobacco. Proceedings of the 46th Tobacco Workers Conference January 13-16, 2014, Pinehurst, NC. CORESTA.org

LaMondia J. A., D. W. Li, A. M. Madeiras and R. L. Wick 2014. First report of forsythia shoot blight caused by *Phytophthora nicotianae* in Connecticut. Plant Disease 98:1278.

McClure, M., C. A. Cheah, R. S. Cowles and R. Hiskes. 2014. Hemlock woolly Adelgid, *Adelges tsugae* (Annand). CAES Fact Sheet.

Zhang, X. H., G. H. Zhao, D. W. Li, S. Li and Q. Hong. 2014. Identification and evaluation of strain B37 of *Bacillus subtilis* antagonistic to sapstain fungi on poplar wood. The Scientific World Journal 2014:1-10.

2015

Benton, E. P., J. F. Grant, R. J. Webster, R. J. Nichols, R. S. Cowles, A. F. Lagalante, and C. I. Coots. 2015. Assessment of imidacloprid and its metabolites in foliage of eastern hemlock multiple years following treatment for hemlock woolly adelgid, *Adelges tsugae* (Hemiptera: Adelgidae), in forested conditions. J. Econ. Entomol. 108:2672-2682.

Cohen, A. and C. A. S. J. Cheah. 2015. Interim diets for specialist predators of hemlock woolly adelgids. Entomol. Ornithol. Herpetol. 4:153.

Cowles, R.S, C. Rodriguez-Saona, R. Holdcraft, G. M. Loeb, J. E. Elsensohn, and S. P. Hesler. 2015. Sucrose improves insecticide activity against *Drosophila suzukii* (Diptera: Drosophilidae). J. Econ. Entomol. https://doi.org/10.1093/jee/tou100

Cowles, R. S. 2015. Systemic insecticide impacts on the environment and bee pollinators. Tree Care Industry Magazine 26:38-40, 42, 44-45.

Cowles, R. S. 2015. The Big Picture: Grub control, neonics, and bees. Connecticut Gardener 21:10-12.

Dandurand, L.-M., G. R. Knudsen, R. Kooliyottil, and J. A. LaMondia. 2015. Alternative eradication strategies for the pale cyst nematode, *Globodera pallida*, using the trap crop *Solanum sisymbriifolium* and two biological control fungi. Methyl Bromide Alternatives Outreach Proceedings.

Hiskes, R. 2015. African ant, *Pheidole megacephala*, found in a Connecticut structure. CAES Fact Sheet. https://portal.ct.gov/-/media/CAES/DOCUMENTS/Publications/FactSheets/Valley Laboratory/AfricanAntFoundinConnecticutFINALpdf.pdf

Kung, W.-Y., K. Hoover, R. Cowles, and R. T. Trotter, III. 2015. Long-term effects of imidacloprid on eastern hemlock canopy arthropod biodiversity in New England. *Northeastern Naturalist* 22: NENHC-40-NENHC-55.

https://doi.org/10.1656/045.022.0120

LaMondia, J. A. 2015. Connecticut River Valley Blue Mold Web Page. CAES. http://www.ctvalleytobacco.org

LaMondia, J. A. 2015. Hatch stimulation and host status of tobacco (*Nicotiana tabacum*), eastern black nightshade (*Solanum ptychanthum*), and sticky nightshade (*Solanum sisymbriifolium*) to the tobacco cyst nematode, *Globodera tabacum*. J. Nematol. 47:251-252.

LaMondia, J. A. 2015. Management of Boxwood Blight Caused by *Calonectria pseudonaviculata*. Proceedings of The International Plant Propagator's Society 64:203.

LaMondia, J. A. and S. M. Douglas. 2015. *Calonectria pseudonaviculata* Can Cause Leaf Spot and Stem Blight of *Pachysandra terminalis* and *P. procumbens*. Proceedings of the International Plant Propagator's Society 64:205-206.

LaMondia, J. A. 2015. Fusarium wilt of tobacco. Crop Protection 73:73-77.

LaMondia, J. A. 2015. Management of *Calonectria pseudonaviculata* in boxwood with fungicides and less susceptible host species and varieties. Plant Disease 99:363-369.

Li, D. W. 2015. Indoor molds and their management. CAES Fact Sheet.

https://portal.ct.gov/media/CAES/DOCUMENT S/Publications/Fact_Sheets/Valley_Laboratory/IndoorMoldsandTheirManagementLiDpdf.pdf

Li, D. W., E. Johanning, and C. S. Yang. 2015. Airborne Fungi and Mycotoxins, p 3.2.5-1-3.2.5-21. *In* M. Yates, C. Nakatsu, R. Miller, and S. Pillai (ed.), Manual of Environmental Microbiology, 4th Edition. ASM Press, Washington, DC.

Pakpour, S, D. W. Li, and J. Klironomos. 2015. Relationships of fungal spore concentrations in the air and meteorological factors. Fungal Ecology 13:130-134.

Wang, Y., K. D. Hyde, E. H. C. McKenzie, Y-L. Jiang, D. W. Li, and D-G. Zhao. 2015. Overview of *Stachybotrys (Memnoniella)* and current species status. Fungal Diversity 71:17-83.

Zhou, L. W., Y. Cao, S.-H. Wu, J. Vlasákc, D. W. Li, M. Li, and Y.-C. Dai. 2015. Global diversity of the *Ganoderma lucidum* complex (Ganodermataceae, Polyporales) inferred from morphology and multilocus phylogeny. Phytochemistry 114:7-15.

Wang, Y. X., J. Y. Chen, D. W. Li, J. B. Huang, and L. Zheng. 2015. First report of canker of *Magnolia denudara* caused by *Fusarium decemcellulare* in Hubei, China. Plant Disease 99:1036-1037. https://doi.org/10.1094/PDIS-11-14-1111-PDN

Wu, F., Y. Yuan, S. H. He, A. R. Bandara, K. D. Hyde, V. F. Malysheva, D. W. Li, and Y. C. Dai. 2015. Global diversity and taxonomy of the *Auricularia auricula-judae* complex (Auriculariales, Basidiomycota). Mycol. Prog. 14:95.

2016

Aulakh, J. S. 2016. Herbicides for preemergence weed control in Christmas trees. CAES Fact Sheet. https://portal.ct.gov/-/media/CAES/DOCUMENTS/Publications/Fact_Sheets/Valley_Laboratory/HerbicidesforPreemergenceWeedControlinChristmasTreespdf.pdf

Aulakh, J. S. 2016. Horsenettle (*Solanum carolinense* L.)-Identification and management in Connecticut pastures and rangelands. CAES Fact Sheet. https://portal.ct.gov/-/media/CAES/DOCUMENTS/Publications/FactSheets/Valley_Laboratory/HorsenettleFactsheetpdf.pdf

Aulakh, J. S. 2016. *Phragmites*-Distinguishing the native from the non-native. CAES Fact Sheet. https://business.ct.gov/media/CAES/DOCUMENTS/Publications/FactSheets/Plant_Pathology_and_Ecology/PhragmitesFactsheetpdf.pdf

Aulakh, J. S. 2016. Woody vines-identification and control. CAES Fact Sheet. https://portal.ct.gov/-/media/CAES/DOCUMENTS/Publications/Fact_Sheets/Valley_Laboratory/WoodyVinesIdentificationandControlpdf.pdf

Aulakh, J. S., P. S. Chahal, and A. J. Jhala. 2016. Glyphosate-resistant weed control and soybean injury in response to different PPO-inhibiting herbicides. J. Agric Sci. 8.

Aulakh, J. S., P. S. Chahal, and A. J. Jhala. 2016. Glyphosate-resistant weed control and soybean tolerance to PPO-herbicides applied at two

different growth stages. Proceedings, Northeastern Plant, Pest, and Soils Conference 2016, p. 69.

Cheah C. A. S-. J. 2016. HWA winter mortality in Connecticut & implications for management and control. CAES Fact Sheet. https://portal.ct.gov/

/media/CAES/DOCUMENTS/Publications/Fact Sheets/Plant Pathology and Ecology/Hemlock WoollyAdelgidWinterMortality71216pdf.pdf

Cheah, C. A. S.-J. 2016. Potential biological control of armored scales in Christmas tree plantations. The Real Tree Line 56(3), Summer 2016, pp. 10, 18.

Cheah, C. A. S.-J. 2016. Predicting winter mortality of hemlock woolly adelgid in Connecticut. Abstract for an oral presentation at the 2016 North East Natural History Conference April 22-24 2016 at Springfield, Massachusetts. Available online at http://www.eaglehill.us/NENHC 2016/program/NENHC-2016-oral-abstracts.pdf

Cheah, C. and D. W. Li. 2016. The red bark phenomenon. CAES Fact Sheet. https://portal.ct.gov/-/media/CAES/DOCUMENTS/Publications/Fact Sheets/Valley_Laboratory/TheRedBarkPhenomenonpdf.pdf

Cowles, R. S. 2016. A synopsis of the neonicotinoid vs. bee controversy. Virginia Nursery and Landscaping Association Newsletter, April/May/June 2016, pp. 50-53.

Cowles, R. S. 2016. A synopsis of the neonicotinoid vs. bee controversy. Rhode Island Risk Management and Crop Insurance Newsletter, 5(4):13-16.

Ding, X. L., J. R. Ye, S. X. Lin, X. Q. Wu, D. W. Li, and B. Nian. 2016. Deciphering the molecular variations of pine wood nematode *Bursaphelenchus xylophilus* with different virulence. PLOS ONE 11(5):e0156040.

Ellis, D. and C. Cheah. 2016. Biological control of mile-a-minute weed (*Polygonum perfoliatum*). Proceedings, Northeastern Plant, Pest and Soils Conference, Philadelphia, PA, pp. 134-135.

Duzy, L. M., A. J. Price, K. S. Balkcom, and J. S. Aulakh. 2016. Assessing the economic impact of inversion tillage, cover crops, and herbicide regimes in Palmer amaranth (*Amaranthus palmeri*) infested cotton. Int. J. Agron.

- Hiskes, R. 2016. Field guide: selected invasive terrestrial plants found in Connecticut. CAES Fact Sheet. https://portal.ct.gov/media/CAES/DOCUMENTS/Publications/FactSheets/FieldGuideInvasiveTerrestrialPlantsJune2016pdf.
- Huang, L., Q. C. Li, Y. Zhang, D. W. Li, and J. R. Ye. 2016. *Colletotrichum gloeosporioides* s.s. is a pathogen of leaf anthracnose on evergreen spindle tree (*Euonymus japonicus*). Plant Disease 100(4):672-678. https://doi.org/10.1094/PDIS-07-15-0740-RE.
- Kaur, S., J. S. Aulakh, and A. J. Jhala. 2016. Growth and seed production of glyphosateresistant giant ragweed (*Ambrosia trifida* L.) in response to water stress. Can. J. Plant Sci. Available at: https://cdnsciencepub.com/doi/full/10.1139/cjps-2015-0309
- LaMondia, J. A. 2016. Boxwood blight: identification and management. Public Gardens: Journal of the American Public Gardens Association 31(4):24-25.
- LaMondia, J. A. 2016 Connecticut River Valley blue mold web page. CAES. http://www.ctvalleytobacco.org
- LaMondia, J. A. 2016. Curative fungicidal activity against *Calonectria pseudonaviculata*, causal agent of boxwood blight. Phytopathology 106:S2.3.
- LaMondia, J. A. 2016. Evaluation of fungicides for management of boxwood blight, 2014. Plant Dis. Manag. Rep. 10:O7010.
- LaMondia, J. A. 2016. Evaluation of fungicides for management of tobacco blue mold in shade-grown cigar wrapper tobacco, 2015. Plant Dis. Manag. Rep. 10:V105.
- LaMondia, J. A. 2016. Evidence for suppression of *Meloidogyne hapla* by *Pasteuria* in Connecticut. J. Nematol. 48:341.
- LaMondia, J. A. 2016. Susceptibility of *Buxus* accessions to the boxwood blight pathogen *Calonectria pseudonaviculata*. Phytopathology S4:89.
- LaMondia, J. A. and K. Maurer. 2016. Evaluation of fungicides for management of boxwood blight, 2015. Plant Dis. Manag Rep. 10:0T11.
- LaMondia, J. A. and P. Timper. 2016. Interactions of microfungi and plant parasitic

- nematodes. Chapter 23, Pp. 573-614. De-Wei Li (ed.), Biology of Microfungi. Springer, Switzerland.
- Li, D. W., N. P. Schultes, and C. Vossbrinck. 2016. Olpitrichum sphaerosporum: a new USA record and phylogenetic placement. Mycotaxon 131(1):123-133.
- Li, D. W. 2016. Introduction —Advances and predicament. Pp. 1-6, in De-Wei Li (ed.), Biology of Microfungi. Springer, Switzerland.
- Li, D. W., R. F. Castañeda-Ruiz, and J. A. LaMondia. 2016. Evolution of fungi and update on ethnomycology. Chapter 11, Pp. 237-266. De-Wei Li (ed.), Biology of Microfungi. Springer, Switzerland.
- Li, D. W. 2016. Biology of Microfungi. Springer, Switzerland. 650 pp. https://doi.org/10.1007/978-3-319-29137-6. ISBN 978-3-319-29135-2.
- Lin, C.-G., E. C. McKenzie, D. J. Bhat, S.-F. Ran, Y. Chen, K. D. Hyde, D. W. Li, and Y. Wang. 2016. *Stachybotrys*-like taxa from karst areas and a checklist of stachybotrys-like fungi of Thailand. Mycosphere 7(9):1273-1291.
- Magyar, D., M. Vass, and D. W. Li. 2016. Dispersal strategies of microfungi. Pp. 315-371, in De-Wei Li (ed.), Biology of Microfungi. Springer, Switzerland.
- Maurer, K. and J. LaMondia. 2016. Fungicide sensitivity in the boxwood blight pathogen *Calonectria pseudonaviculata*. (Abstr.) Phytopathology 106:S2.4.
- Monteiro, T. S. A., J. A. Brito, S. J. S. Vau, W. Yuan, J. A. LaMondia, and D. W. Dickson. 2016. First report of endotokia matricida in *Meloidogyne hapla*: a case study. J. Nematol. 48:354.
- Russo, N. J., C. A. S.-J. Cheah, and M. W. Tingley. 2016. Experimental evidence for branch-to-bird transfer as a mechanism for avian dispersal of the hemlock woolly adelgid (Hemiptera: Adelgidae). Environ. Entomol. First published online on August 1, 2016. https://doi.org/10.1093/ee/nvw083
- Wu, B., J. R. Ye, L. Huang, L. M. He, and D. W. Li. 2016. Validation of reference genes for RT-qPCR analysis in *Burkholderia pyrrocinia* JK-SH0072017. J. Microbiol. Meth. 132(1):95-98. https://doi.org/10.1016/j.mimet.2016.10.004

Yang, C., S. Pakpour, J. Klironomos, and D. W. Li. 2016. Microfungi in indoor environments: what is known and what is not? Pp. 373-412, in De-Wei Li (ed.), Biology of Microfungi. Springer, Switzerland. https://doi.org/10.1007/978-3-319-29137-6_15

2017

- Aulakh, J. S. 2017. Optimizing preemergence weed control in Christmas tree plantations. CAES Fact Sheet. https://business.ct.gov/-/media/CAES/DOCUMENTS/Publications/FactSheets/Valley Laboratory/ChristmasTreeWeedC ontrolFactsheetFinal002002pdf.pdf
- Aulakh, J. S. 2017. Yellow nutsedge (*Cyperus esculentus*) control in home lawns with cool season grasses. CAES Fact Sheet. https://portal.ct.gov/-/media/CAES/DOCUMENTS/Publications/FactSheets/Valley_Laboratory/YellowNutsedgeContr
- Castañeda-Ruiz, R. F., X. G. Zhang, D. W. Li, L. F. Pascholati Gusmão, S. Perez-Martinez, and D. Sosa. 2017. Notes on *Vamsapriya* and V. *camagueyensis* comb. nov. Mycotaxon 132:553-557. https://doi.org/10.5248/132.553

olFactsheet3rhpdf.pdf

- Cheah, C. A. S.-J. 2017. Climate change impacts in the Northeast on HWA and its coccinellid predator from Japan, *Sasajiscymnus tsugae*. Abstract for an oral presentation at the 2017 NorthEast Natural History Conference, April 22-23, 2017, Cromwell, CT.
- Cheah, C. A. S.-J. 2017. Predicting winter mortality of hemlock woolly adelgid in Connecticut by climatic divisions. Northeast. Nat. Vol. 24, Special Issue 7, 2017 B90-118.
- Cheah, C. A. S.-J. 2017. Update on ongoing hemlock research at Steep Rock. The Steep Rock Vista Winter 2016-2017, p. 4.
- Cheah, C. and D. Ellis. 2017. Biological control of mile-a-minute weed (MAM) in Connecticut. https://mam.uconn.edu/wp-content/uploads/sites/1170/2015/02/Poster-MAM-2015-2017-July-31-2017-.pdf
- Cowles, R. S. 2017. When do we need to consider alternatives to neonics? 2017 Proceedings of the 62nd NJ Agricultural Convention and Trade Show, pp. 109-112.

- Cowles, R. S. and B. D. Eitzer. 2017. Residues of neonicotinoid insecticides in pollen and nectar from model plants. J. Environ. Hort. 35(1):24-34.
- Galán, C., A. Ariatti, M. Bonini, B. Clot, B. Crouzy, A. Dahl, D. Fernandez-González, G. Frenguelli, R. Gehrig, S. Isard, E. Levetin, D. W. Li, P. Mandrioli, C. A. Rogers, M. Thibaudon, I. Sauliene, C. Skjoth, M. Smith, and M. Sofiev. 2017. Recommended terminology for aerobiological studies. Aerobiologia 33(3):293-295. https://doi.org/10.1007/s10453-017-9496-0
- Huang, L., Q.-C. Y. H. Li, G.-Q. Li, J.-Y. Yang, D. W. Li, and J.-R. Ye. 2017 *Bacillus velezensis* strain HYEB5-6 as a potential biocontrol agent against anthracnose on *Euonymus japonicus*. Biocontrol Sci. Techn. https://doi.org/10.1080/09583157.2017.1319910
- LaMondia, J. A. 2017. Connecticut River Valley Blue Mold web page. CAES. http://www.ctvalleytobacco.org
- LaMondia, J. A. 2017. *Pachysandra* species and cultivar susceptibility to the boxwood blight pathogen, *Calonectria pseudonaviculata*. Plant Health Progress 18:41-43.
- LaMondia, J. A. 2017. Susceptibility of Pachysandra species and cultivars to the boxwood blight pathogen *Calonectria* pseudonaviculata. Phytopathology 107:S2, 9.
- LaMondia J. A. and K. Maurer. 2017. *Calonectria pseudonaviculata* dispersal mechanisms and implications for boxwood blight management. Phytopathology S5:201-202.
- LaMondia J. A. and K. Maurer. 2017. Calonectria pseudonaviculata microsclerotia viability after exposure to fungicides. Phytopathology 107:S5,104.
- LaMondia, J. A. and K. Maurer. 2017. Evaluation of fungicides for management of boxwood blight, 2016. Plant Dis. Manag. Rep. 11:OT16.
- LaMondia, J. A. and N. Shishkoff. 2017. Susceptibility of boxwood accessions from the National Boxwood Collection to boxwood blight and potential for differences between *Calonectria pseudonaviculata* and *C. henricotiae*. HortScience 52:873-879.
- Li, D. W. 2017. Indoor molds and their management (Revised). CAES Fact Sheet. https://portal.ct.gov/-/media/CAES/DOCUMENTS/Publications/Fact

<u>Sheets/Valley Laboratory/IndoorMoldsandTheir</u> <u>ManagementLiDpdf.pdf</u>

Li, D. W., J. Y. Chen, and Y. X. Wang. 2017. *Wiesneriomyces machilicola*, a new species of hyphomycetes from China. Mycotaxon 132:559-563. https://doi.org/10.5248/132.559

Li, D. W., N. P. Schultes, J. Y. Chen, Y. X. Wang, and R. F. Castañeda-Ruiz. 2017. *Circinotrichum sinense*, a new asexual fungus from Hubei, China. Botany 95:1099-1108. https://cdnsciencepub.com/doi/10.1139/cjb-2017-0132

Maurer, K., A. B. DeFrancesco, and J. A. LaMondia. 2017. Evaluation of hop cultivation feasibility in Connecticut. Acta Hortic. https://doi.org/10.17660/ActaHortic.2017.1174.51

Maurer, K. and J. A. LaMondia. 2017. Evaluation of hop cultivation feasibility in Connecticut based on yield, growing characteristics, and susceptibility to diseases and pests. Phytopathology 107:S2.10.

Maurer, K. and J. A. LaMondia. 2017. Guidelines for integrated pest management for hops in Connecticut. CAES Bulletin 1050. https://portal.ct.gov/-

/media/CAES/DOCUMENTS/Publications/Bulle tins/IPMofHopsinCT1pdf.pdf

Maurer, K., R. S. Cowles, and J. A. LaMondia. 2017. Sensitivity of *Calonectria pseudonaviculata*, the pathogen of boxwood blight, to strobilurins and demethylation inhibitor fungicides in Connecticut. J. Environ. Hort. 35(4):138-145.

Monteiro, T. S. A., J. A. Brito, S. J. S. Vau, W. Yuan, J. A. LaMondia, L. G. Freitas, and D. W. Dickson. 2017. First report of matricidal hatching in *Meloidogyne hapla*. Nematoda 4:e092017.

Russo, N. J., C. A. S.-J. Cheah, C. S. Elphick, and M. W. Tingley. 2017. Avian spring migration as a dispersal mechanism for an invasive insect pest. Abstract for an oral presentation at the 2017 NorthEast Natural History Conference, April 22-23, 2017, Cromwell, CT.

Sampson, B., M. Miller-Butler, B. Smith, J. Adamczyk Jr., T. Mann, B. Layton, R. S. Cowles, D. W. Li, and S. Dara. 2017. Spotted wing drosophila flies killed by a fungal disease in Mississippi. Mississippi Vaccinium Journal 6(3):4-6.

Schultes, N. P., B. Murtishi, and D. W. Li. 2017. Phylogenetic relationships of *Chlamydomyces*, *Harzia*, *Olpitrichum* and their sexual allies, *Melanospora* and *Sphaerodes*. Fungal Biology 121(10):890-904.

http://doi.org/10.1016/j.funbio.2017.07.004

Stoner, K. A., B. D. Eitzer, and R. S. Cowles. 2017. Quantifying exposure of bees to neonicotinoids in nectar and pollen of nursery plants. Final report on a project funded by the Connecticut Department of Energy and Environmental Protection.

https://business.ct.gov/-

 $\label{lem:media/CAES/DOCUMENTS/Publications/pollinators/FinalReportQuantifyingExposureofBeesto} \\ \underline{NeonicsKStonerpdf.pdf}$

Wang, Y., J. Chen, D. W. Li, L. Zheng, and J. Huang. 2017. *CglCUT1* gene required for cutinase activity and pathogenicity of *Colletotrichum gloeosporioides* causing anthracnose of *Camellia oleifera*. Eur. J. Plant Pathol. 147(1):103-114. https://doi.org/10.1007/s10658-016-0983-x

Wang, Q. H., K. Fan, D. W. Li, S. G. Niu, L. Q. Hou, and X. Q. Wu. 2017. Walnut anthracnose caused by Colletotrichum siamense in China. Australasian Plant Pathology 46(6):585-595. https://doi.org/10.1007/s13313-017-0525-9

2018

Aulakh J. S. 2018. Weeds of ornamental plants and their control. CAES Fact Sheet. https://portal.ct.gov/-/media/CAES/DOCUMENTS/Publications/Fact Sheets/Valley_Laboratory/WEEDS-OF-ORNAMENTAL-PLANTS-AND-THEIR-CONTROL.pdf

Bird, G., G. S. Abawi, and J. A. LaMondia. 2018. Plant parasitic nematodes of New York, New Jersey and Pennsylvania. Chapter 2, pp. 27-55 in Plant Parasitic Nematodes in Sustainable Agriculture in North America Volume 2" edited by S. A. Subbotin and J. J. Chitambar; Springer.

Castañeda-Ruiz, R. F., D. W. Li, X. G. Zhang, B. Kendrick, B. Ramos-Garcia, S. Pérez-Martinez, and D. Sosa. 2018. *Ellismarsporium* gen. nov. and *Stanhughesiella* gen. nov. to accommodate atypical *Helminthosporium* and *Corynesporella* species. Mycotaxon 132:759-766. https://doi.org/10.5248/132.759

Cheah, C. and D. Ellis. 2018. Biological control of mile-a-minute weed (MAM) in Connecticut.

Available online https://mam.uconn.edu/biological-control/

Dara, S. K., T. Mann, D. W. Li, B. Layton, R. Cowles, and B. Sampson. 2018. Naturally occurring fungus as a potential microbial control agent for spotted wing drosophila. UC Cooperative Extension, CAPCA Adviser, Feb. 2018, pp. 32-33. https://capca.com/wp-content/uploads/2017/12/201710-SWD-Management-S Dara.pdf

Hiskes, R. and R. S. Cowles. 2018. Managing white grubs in home lawns. CAES Fact Sheet. https://portal.ct.gov/-

/media/CAES/DOCUMENTS/Publications/Fact Sheets/Valley_Laboratory/ManagingWhiteGrubs inHomeLawns2018pdf.pdf

Huang, L., J. Y. Yang, Y. N. Zhu, L. H. Zhu, Y. F. Zhang, J. R. Ye, and D. W. Li. 2018. Canker on culm of *Bambusa multiplex* (Lour.) Raeusch. Ex Schult. caused by *Fusarium incarnatum* (Roberge) Sacc. Journal of Phytopathology 167(2):91-97. https://doi.org/10.1111/jph.12776

Huang, L., Y. N. Zhu, J. Y. Yang, D. W. Li, Y. Li, L. M. Bian, and J. R. Ye. 2018. Shoot blight on Chinese fir (*Cunninghamia lanceolata*) is caused by *Bipolaris oryzae*. Plant Disease 102(3):500-506. https://doi.org/10.1094/PDIS-07-17-1032-RE

LaMondia, J. A. 2018. Management of Target spot in broadleaf cigar wrapper tobacco. Proceedings of 48th Tobacco Workers Conference, 2018, Myrtle Beach, SC. https://www.coresta.org/abstracts/mangagement-target-spot-broadleaf-cigar-wrapper-tobacco-31069.html

LaMondia, J. A. 2018. Rotation crops for management of *Pratylenchus penetrans* in Connecticut. J. Nematol. 50:644.

LaMondia, J. A. and L. M. Dandurand. 2018. Effects of resistant or susceptible tobacco (*Nicotiana tabacum*), eastern black nightshade (*Solanum ptychanthum*), and litchi tomato (*Solanum sisymbriifolium*) on reproduction of the tobacco cyst nematode *Globodera tabacum*. J. Nematol. 9:509-510.

LaMondia, J. A., R. L. Wick, and N. A. Mitkowski. 2018. Plant parasitic nematodes of New England — Connecticut, Massachusetts and Rhode Island. Chapter 1, pp. 1-25 in Plant Parasitic Nematodes in Sustainable Agriculture in North America Volume 2" edited by S. A. Subbotin and J. J. Chitambar, Springer.

- Li, D. W. and J. R. Ye. 2018. *Triadelphia acericola* and *T. centroseptata* spp. nov., and a synopsis of the genus. Mycotaxon 132:723-744. https://doi.org/10.5248/132.723
- Li, D. W., C. Yang, and A. Jalsrai. 2018. *Bactrodesmiastrum domesticum* sp. nov. and a noteworthy hyphomycete from indoor environments. Mycotaxon 132:779-787. https://doi.org/10.5248/132.779

Wang, Q. H., C. H. Duan, X. H. Liu, D. W. Li, S. G. Niu, L. Q. Hou, and X. Q. Wu. 2018. First report of walnut anthracnose caused by *Colletotrichum fructicola* in China. Plant Disease 102(1):247.

Zheng, X., P. Yin, M. Chen, D. W. Li, and T. T. Dai 2018 [2019]. First report of stem canker caused by *Botryosphaeria dothidea* on *Aucuba japonica* in China. Plant Disease 103(5):1020. https://doi.org/10.1094/PDIS-06-18-1081-PDN

Zhu, L. H., W. Xu, J. Y. Yang, D. W. Li, J. M. Ge, and J. R. Ye. 2019. First report of *Septotinia populiperda* causing leaf blotch of *Salix babylonica* in China. Plant Disease 103(4):768-769. https://doi.org/10.1094/PDIS-05-18-0827-PDN

2019

Allan-Perkins, E., D. W. Li, N. P. Schultes, S. Yavuz, and J. A. LaMondia. 2019. First report of the resurgence of hop powdery mildew (*Podosphaera macularis*) in a New England commercial hop yard. Plant Disease 103:1431. https://doi.org/10.1094/PDIS-12-18-2259-PDN

Allan-Perkins, E., D. Manter, and G. Jung. 2019. Soil microbial communities on roughs, fairways, and putting greens of cool-season golf courses. Crop Sci. 59:1753-1767.

Allan-Perkins, E., K. Maurer, and J. LaMondia. 2019. Guidelines for integrated pest management for hops in Connecticut. CAES Bulletin 1057. https://portal.ct.gov/-

 $\label{eq:media/CAES/DOCUMENTS/Publications/Bulle} $$ \underline{tins/B1057.pdf}$$

Aulakh J. S. 2019. Weed and sucker management in hops. https://portal.ct.gov/-/media/CAES/DOCUMENTS/Publications/Fact_Sheets/Valley_Laboratory/HOPS-Weed-control.pdf

Cheah, C. 2019. Climate impacts on Eastern hemlock sustainability. The Habitat 31(1):6-7, 13-14.

Cheah, C. 2019. Balsam woolly adelgid is back on our radar! The Real Tree Line 59(3):13.

Cheah, C. and D. Ellis. 2019. Spread of mile-aminute vine, *Persicaria perfoliata* L. (*Polgonaceae*), to Connecticut islands in Long Island Sound. Rhodora 121(987):219-221. https://doi.org/10.3119/19-02

Cheah, C. 2019. Battling mile-a-minute weed in Connecticut. The Habitat 31(2):6-7.

Cheah, C. 2019. Developing a mass rearing system for *Chilocorus stigma*, native predator of armored scales in Christmas tree plantations. 2019 John F. Ahrens Memorial Research funded grant proposal. The Real Tree Line 59(3):15, 24.

Cheah, C. 2019. Hemlock Woolly Adelgid (HWA) and other factors impacting Eastern hemlock. CAES Fact Sheet. https://portal.ct.gov/-

/media/CAES/DOCUMENTS/Publications/Fact Sheets/Valley Laboratory/Hemlock-Woolly-Adelgid-Factsheet-Dec-2018-Cheah-Final.pdf

Dandurand, L. M., I. A. Zasada, and J. A. LaMondia. 2019. Effect of the trap crop, *Solanum sisymbriifolium*, on *Globodera pallida, Globodera tabacum*, and *Globodera ellingtonae*. J. Nematol. 51: ISSN (Online) 2640-396X. https://doi.org/10.21307/jofnem-2019-030

Hiskes, R. 2019. Field guide and plant management calendar to selected terrestrial plants found in Connecticut. CAES Fact Sheet. https://portal.ct.gov/-

/media/CAES/DOCUMENTS/Publications/Fact Sheets/FieldGuideInvasiveTerrestrialPlantsJune2 016pdf.pdf

Hiskes, R. 2019. Fungal leaf spot diseases of *Amelanchier*. CAES Fact Sheet.

Hiskes, R. 2019. Pesticide guide toward integrated insect management for Connecticut arborists. CAES Bulletin 1058. https://portal.ct.gov/-

 $\label{lem:lem:media/CAES/DOCUMENTS/Publications/Bulle} $$ \underline{tins/B1058.pdf}$$

Hiskes, R. 2019. Pesticide guide toward integrated insect management for Connecticut landscapers. CAES Bulletin 1059. https://portal.ct.gov/-

/media/CAES/DOCUMENTS/Publications/Bulle tins/B1059.pdf

Hiskes, R. 2019. Pesticide guide toward integrated insect management for Connecticut nurseries. CAES Bulletin 1060.

https://portal.ct.gov/-/media/CAES/DOCUMENTS/Publications/Bulletins/B1060.pdf

LaMondia, J. A. 2019. Fungicides for boxwood blight management in Connecticut. CAES Fact Sheet. https://portal.ct.gov/-/media/CAES/DOCUMENTS/Publications/Fact_Sheets/Valley_Laboratory/Fungicides-for-boxwood-blight-management.pdf

LaMondia, J. A. 2019. Susceptibility of Boxwood species, cultivars, hybrids and accessions to boxwood blight. CAES Fact Sheet. https://portal.ct.gov/-

/media/CAES/DOCUMENTS/Publications/Fact Sheets/Valley_Laboratory/Boxwoodsusceptibility-to-blight-V1.pdf

LaMondia, J. A. 2019. Susceptibility of Pachysandra species and cultivars to boxwood blight. CAES Fact Sheet. https://portal.ct.gov/media/CAES/DOCUMENTS/Publications/Fact_Sheets/Valley_Laboratory/Pachysandrasusceptibility-to-blight.pdf

LaMondia, J. A., Y. Li, and S. Douglas. 2019. Best management practices for boxwood blight for Connecticut - For commercial, public and residential landscapes. CAES Fact Sheet. https://portal.ct.gov/-

/media/CAES/DOCUMENTS/Publications/Fact Sheets/Valley Laboratory/CT-BMPs-forboxwood-blight---landscapes-Version-3-March-2019.pdf

LaMondia, J. A., Y. Li, and S. Douglas. 2019. Best management practices for boxwood blight for Connecticut - Production and retail nurseries. CAES Fact Sheet. https://portal.ct.gov/media/CAES/DOCUMENTS/Publications/Fact Sheets/Valley Laboratory/CT-BMPs-for-boxwood-blightNurseries-Version-30-March-2019.pdf

LaMondia, J. A., R. S. Cowles, and N. Shishkoff. 2019. The effects of sanitizers on *Calonectria pseudonaviculata* conidia and microsclerotia viability. Abstract, APS Annual Meeting, Plant Health 2019, 182-P1. https://apsnet.confex.com/apsnet/2019/meetinga pp.cgi/Paper/13589.

Qiao, M., D.-W. Li, Z-F Yu, and R. F. Castañeda-Ruiz. 2019. *Spadicoides matsushimae* sp. nov., and *Anisospadicoides* gen. nov. for two atypical *Spadicoides* species. Mycotaxon 134:161-167. https://doi.org/10.5248/134.161

Schultes, N. P., N. Strzalkowski, and D. W. Li. 2019. *Botryotrichum domesticum* sp. nov., a new

hyphomycete from an indoor environment. Botany 97(6):311-319. https://cdnsciencepub.com/doi/10.1139/cjb-2018-0196

Stoner, K. A., R. S. Cowles, A. Nurse, and B. D. Eitzer. 2019. Tracking pesticide residues to a plant genus using palynology in pollen trapped from honey bees (Hymenoptera: Apidae) at ornamental plant nurseries. Environ. Entomol. 48(2):351-362.

https://doi.org/10.1093/ee/nvz007

Zhu, L. H., Y. Wan, Y. N. Zhu, C. L. Liu, and D. W. Li. 2019. First report of species of *Colletotrichum* causing leaf blotch of *Liriodendron chinense x tulipifera* in China. Plant Disease 103(6):1431. https://doi.org/10.1094/PDIS-12-18-2265-PDN

2020

Adams, A., J. LaMondia, R. Cowles, B. Nicholson and T. Mione. 2020. Stimulating hatch of tobacco cyst nematode *Globodera tabacum*, by hydroponically obtained weedy *Solanum* spp. root exudates. Nematropica 50:160-169.

Allan-Perkins, E., K. Maurer, and J. LaMondia. 2020. Impact of cultivar, trellis height, and pruning on commercial hop production in Connecticut. CAES Bulletin 1062. https://portal.ct.gov/-/media/CAES/DOCUMENTS/Publications/Bulletins/B1062.pdf

Allan-Perkins E., K. Maurer, M. Salvas, and J. LaMondia. 2020. Guidelines for integrated pest management for hops in Connecticut. CAES Bulletin 1063. https://portal.ct.gov/media/CAES/DOCUMENTS/Publications/Bulletins/B1063.pdf

Allan-Perkins E., D. W. Li, N. P. Schultes and J.A LaMondia. 2020. The identification of a new species, *Diaporthe humulicola*, a pathogen causing Diaporthe Leaf Spot on common hops. Plant Disease. 104:2377-2390. https://doi.org/10.1094/PDIS-08-19-1770-RE

Allan-Perkins, E., D. W. Li, N. Schultes, and J. A. LaMondia. 2020. New and re-emerging diseases of common hop in Connecticut. Phytopathology 110:S1.27. https://doi.org/10.1094/PHYTO-110-7-S1.27

Aulakh, J. S. 2020. Comparison Of preemergence herbicide treatments for weed

control in Canaan fir (*Abies balsamea* var. *phanerolepis*). CAES Bulletin 1064. https://portal.ct.gov/-/media/CAES/DOCUMENTS/Publications/Bulletins/B1064.pdf

Aulakh, J. S. 2020. Gemini G herbicide safety to *Sedum album* and *Sedum rupestre*. Proceedings Of the Northeastern Weed Science Society 5:52.

Aulakh. J. S. 2020. Giant hogweed (*Heracleum mantegazzianum*) identification and management. CAES Fact Sheet. https://portal.ct.gov/-/media/CAES/DOCUMENTS/Publications/Fact-Sheets/Valley Laboratory/Giant-Hogweed-Heracleum-mantegazzianum-Identification-and-Management.pdf

Aulakh, J. S. 2020. Lesser celandine (*Ficaria verna* Huds.) identification and management. CAES Fact Sheet. https://portal.ct.gov/media/CAES/DOCUMENTS/Publications/Fact_Sheets/Valley Laboratory/Lesser-celandine Factsheet.pdf

Aulakh, J. S. 2020. Palmer amaranth: A new devastating weed at your doorsteps. The Real Tree Line 60(2):22.

Aulakh, J. S. 2020. Role of nitrogen and herbicides in integrated management of mugwort (*Artemisia vulgaris* L.) in cool-season forage grasses. Invasive Plant Sci. Manag. 1-32. https://doi.org/10.1017/inp.2020.19

Aulakh, J. S. 2020. Weed control efficacy and Canaan Fir (*Abies balsamea 'var. phanerolepis'*)'s tolerance to different preemergence herbicides. Weed Technol. 34:202-213.

Aulakh, J. S. 2020. Weed alert: First report of Palmer amaranth in Connecticut—watch out for this pigweed! CAES Fact Sheet. https://portal.ct.gov/-/media/CAES/DOCUMENTS/Publications/Fact

/media/CAES/DOCUMENTS/Publications/Fact_Sheets/Palmer-Amaranth.pdf

Aulakh, J. S. 2020. Weed management update—indaziflam safety to Christmas trees in Connecticut. The Real Tree Line 60(1):12-13.

Aulakh, J. S. 2020. Role of nitrogen and herbicides in integrated management of mugwort (*Artemisia vulgaris* L.) in cool-season forage grasses. Invasive Plant Science and Management Journal 13:189-198.

Aulakh, J. S. 2020. Christmas tree tolerance to over-the-top application of weed suppression treatment. The Real Tree Line 60(3):15.

Aulakh, J. S. 2020. Christmas tree tolerance to over-the-top application of selective grass killers. The Real Tree Line 60(3):16.

Aulakh, J. S. and R. S. Cowles 2020. Synthetic auxin herbicides for use in Christmas tree plantations. The Real Tree Line 60(4):16.

Braun, J. C., R. S. Cowles, and J. A. LaMondia. 2020. The use of geostatistics to analyze factors influencing hop (*Humulus lupulus*) yield in Connecticut. CAES Technical Bulletin TB23. https://portal.ct.gov/-

/media/CAES/DOCUMENTS/Publications/Tech nical Bulletins/TB23.pdf

Castroagudin, V. L., J. Weiland, F. Baysal-Gurel, M. Cubeta, M. Daughtrey, N. Gauthier, J. LaMondia, D. Luster, F. Peduto-Hand, N. Shishkoff, J. Williams-Woodward, X. Yang, N. LeBlanc, and J. Crouch. 2020. One clonal lineage of *Calonectria pseudonaviculata* is primarily responsible for the boxwood blight epidemic in the United States. Phytopathology 110(11):1845-1853.

https://doi.org/10.1094/PHYTO-04-20-0130-R

Castroagudin, V. L., J. Weiland, F. Baysal-Gurel, M. Cubeta, M. Daughtrey, N. Gauthier, J. LaMondia, D. Luster, F. Peduto-Hand, N. Shishkoff, J. Williams-Woodward, X. Yang, N. LeBlanc, and J. Crouch. 2020. Genetic structure of contemporary populations of the boxwood blight pathogen in the U. S. Phytopathology 110:S2:79-80.

Cheah, C. 2020. Weather data is critical to forest research. Great Mountain Forest October 2020 Newsletter p.1

Chen F., J. Ye, A. K. S. Kameshwar, X. Wu, J. Ren, W. Qin, and D. W. Li. 2020. A novel cold-adaptive endo-1, 4- β -glucanase from *Burkholderia pyrrocinia* JK-SH007: Gene expression and characterization of the enzyme and mode of action. Front. Microbiol. 10(3137):1-11.

 $\underline{https://doi.org/10.3389/fmicb.2019.03137}$

Cowles, R. S. 2020. White pine weevil management in Christmas tree plantations. Great Lakes Christmas Tree Journal 16(1):28-30.

Cowles, R. S. 2020. Managing aphids and adelgids: The special role for imidacloprid (Part 1). Great Lakes Christmas Tree Journal 16(2)34-38.

Cowles, R. S. 2020. Mineral nutrition, soil tests, and cost-effective use of fertilizers for growing Christmas trees. The Real Tree Line 60(1):16-17.

Cowles, R. S. 2020. Guide to fertilizing Christmas trees, using results from the CAES soil testing labs. The Real Tree Line 60(2):13.

Cowles, R. S. 2020. Managing aphids and adelgids: The special role for imidacloprid (Part 1). The Real Tree Line 60(2):16-18.

Cowles, R. S. 2020. Managing root aphids and white grubs: The special role for imidacloprid (Part 2). The Real Tree Line 60(2):19-20.

Cowles, R. S. 2020. Biological prospecting for ecologically-based pest management in Christmas Tree remove plantations. The Real Tree Line 60(3):9-10.

Cowles, R. S. 2020. Asexual propagation of Christmas trees: A critical need for the industry. The Real Tree Line 60(4):14–15.

Cowles, R. S. 2020. Sulfur amendment of soil improves establishment and growth of firs in a field naturally infested With Phytophthora. J. Environ. Hort. 38(1):15-21.

Cowles, R. S. 2020. Zimmerman pine moth biology and management. Great Lakes Christmas Tree Journal 16(1):20-21.

Cui, Wen-Li, Xiao-Qiang Lu, Jin-Yue Bian, Xi-Ling Qi, De-Wei Li, Lin Huang. 2020. *Curvularia spicifera* and *Curvularia muehlenbeckiae* causing leaf blight on *Cunninghamia lanceolata*. Plant Pathology 69 (6):1139-1147.

https://doi.org/10.1111/ppa.13198

Cui, Wen-Li, Jin-Yue Bian, De-Wei Li, Jun-Wei Wang, Lin Huang 2020. First report of leaf blight on Chinese fir (*Cunninghamia lanceolata*) caused by *Bipolaris setariae*. Plant Disease. 104(9):2523. https://doi.org/10.1094/PDIS-12-19-2685-PDN

Daughtrey, M., C. Hall, J. Weiland, F. Baysal-Gurel, F. Gouker, P. Kong, J. Crouch, J. LaMondia, J. Pscheidt, L. Santamaria, N. Shishkoff, K. Snover-Clift, V. Castroagudin, S. Kodati, X. Li, and X. Yang. 2020. Boxwood Blight Insight Group Newsletter, Vol. 1, Issue 1. November 2020. https://irpcdn.multiscreensite.com/217658e5/files/uploaded/bbig-newsletter.pdf

Elmer, W., D. W. Li, S. Yavuz, A. Madeiras, and N. Schultes. 2019. Heuchera root rot, a new

disease for *Plectosphaerella cucumerina*. J. Phytopath. 168(1):56-62. https://doi.org/10.1111/jph.12867

Heredia, G., D. W. Li, L. Wendt, M. Réblová, R. M. Arias, M. Gamboa-Angulo, V. Stépánek, M. Stadler, and R. F. Castañeda-Ruiz. 2020. *Natonodosa speciosa* gen. et sp. nov. and rediscovery of *Poroisariopsis inornata*: Neotropical anamorphic fungi in Xylariales. Mycol. Progress 19:15-30. https://doi.org/10.1007/s11557-019-01537-8

Hiskes, R. T. 2020. Acorn pip/woolly catkin gall, *Cynpidae: Callirhytis quercusoperator*. CAES Fact Sheet. https://portal.ct.gov/media/CAES/DOCUMENTS/Publications/Fact_Sheets/Valley Laboratory/acorn-pip-gall-fact-sheet-2020-FINAL-jl.pdf

LaMondia, J. A. 2020. Curative fungicide activity against *Calonectria pseudonaviculata*, the boxwood blight pathogen. J. Environ. Hortic. 38(2)44-49. https://doi.org/10.24266/0738-2898-38.2.44

LaMondia J. A. and B. Eitzer. 2020. The effect of disease management programs on fungicide residues in shade tobacco. Proceedings of the 49th Tobacco Workers Conference, 2020, Louisville, KY. https://www.coresta.org/abstracts/effect-disease-management-programs-fungicide-residues-shade-tobacco-33163.html

- LaMondia J. A., and K. Maurer. 2020. *Calonectria pseudonaviculata* conidia dispersal and implications for boxwood blight management. Plant Health Progress 21:232-237. https://doi.org/10.1094/PHP-04-20-0024-RS
- Li, D. W. 2020. Wine cap mushroom: an intercrop in Christmas farms. Real Tree Line 60(3):17.
- Li, D. W., R. F. Castañeda-Ruiz and N. P. Schultes. 2020. Phylogenetic placement of *Acrospeira*. Mycotaxon 135:299-308. https://doi.org/10.5248/135.299
- Li, D. W., R. F. Castañeda-Ruiz, and N. P. Schultes. 2020. Phylogenetic placement of *Acrospeira mirabilis*. Mycotaxon 135(2):299-308. https://doi.org/10.5248/135.299.
- Li, D. W., N. P. Schultes, J. A. LaMondia, and R. S. Cowles. 2020. *Phytophthora abietivora*, a new species isolated from diseased Christmas trees in Connecticut, USA. Plant Disease 103:3057-3064. https://doi.org/10.1094/PDIS-03-19-0583-RE.

Marra R. E. and J. A. LaMondia 2020. First Report of Beech Leaf Disease, caused by the foliar nematode, *Litylenchus crenatae*, on American Beech (*Fagus grandifolia*) in Connecticut. Plant Disease 104:2527-2528. https://doi.org/10.1094/PDIS-02-20-0442-PDN

Qiao, H., X. R. Sun, X. Q. Wu, G. E. Li, Z. Wang, and D. W. Li. 2019. The phosphate-solubilising ability of *Penicillium guanacastense* and its effects on the growth of *Pinus massoniana* in phosphate limiting conditions. Biol. Open 8:bio046797. https://doi.org/10.1242/bio.046797

Salvas, M. and J. A. LaMondia. 2020. European corn borer (*Ostrinia nubilalis*): A new pest affecting Connecticut hops. CAES Fact Sheet. https://portal.ct.gov/-

/media/CAES/DOCUMENTS/Publications/Fact Sheets/Valley Laboratory/ECB-Hops FactsheetFINAL.pdf

Sun, J-W, Y-Z Si, D.-W. Li, G-Q Jin, L-H Zhu 2020. First report of leaf blotch of *Aesculus chinensis* caused by *Colletotrichum gloeosporioides* and *Colletotrichum fructicola* in China. Plant Disease 104(11):3065-3066. https://doi.org/10.1094/PDIS-04-20-0841-PDN

Wang, Q-H, Y-P Ji, Y-Y Qu, Y-K Qi, D.-W. Li, Z-Y Liu, and X-Q Wu. 2020. The response strategies of *Colletotrichum gloeosporioides* s.s. due to the stress caused by biological control agent *Bacillus amyloliquefaciens* deciphered by transcriptome analyses. Biological Control 150:104372.

https://doi.org/10.1016/j.biocontrol.2020.104372

Wang, P., B. Li, Y-T Pan, Y-Z Zhang, D.-W. Li, and L. Huang. 2020. Calcineurin responsive transcription factor CgCrzA required for cell wall integrity and infection-related morphogenesis in *Colletotrichum gloeosporioides*. The Plant Pathology Journal 36(5):385-397.

https://doi.org/10.5423/PPJ.OA.04.2020.0071

Wang, Y.X, J. Y. Chen, X. W. Xu, D. W. Li, and Q. Z. Wang. 2019. First report of brown apical necrosis of walnut caused by *Fusarium avenaceum* in Hubei, China. Plant Disease 103(11):2956-2957.

https://doi.org/10.1094/PDIS-05-19-0954-PDN

Wang, Y., J. Y. Chen, X. W. Xu, J. Cheng, L. Zheng, J. Huang, and D. W. Li. 2020. Identification and characterization of *Colletotrichum* species associated with anthracnose disease of *Camellia oleifera* in

China. Plant Disease 104(2):474-482. https://doi.org/10.1094/PDIS-11-18-1955-RE

Wang, Q. H., K. Fan, D. W. Li, C. M. Han, Y. Y. Qu, Y. K. Qi, and X. Q. Wu. 2020. Identification, virulence and fungicide sensitivity of *Colletotrichum gloeosporioides* s.s. responsible for walnut anthracnose disease in China. Plant Disease 104(5):1358-1368. https://doi.org/10.1094/PDIS-12-19-2569-RE

Wijayawardene, N. N., K. D. Hyde, L. K. T. Al-Ani, L. Tedersoo...D. W. Li, et al. 2020. Outline of fungi and fungus-like taxa. Mycosphere 11(1):1060-1456.

https://doi.org/10.5943/mycosphere/11/1/8

Zhang P., M. Qiao, Z. F. Yu, D. W. Li, and R. F. Castañeda-Ruiz. 2019. *Morganjonesia* gen. nov. for two atypical *Corynespora* and *Teratosperma* species. Mycotaxon 134:457-461. https://doi.org/10.5248/134.457

Zhang, K., H. Zhang, D.-W. Li, and R. F. Castañeda-Ruiz. 2020. *Mirohelminthosporium* gen. nov. for an atypical *Helminthosporium* species and *H. matsushimae* nom. nov. Mycotaxon 135:777–783. https://doi.org/10.5248/135.777

Zhang, K., W. Guo, D. Sosa, F. Magdama, L. Serrano, E. Malosso, D.-W. Li, R. F. Castañeda-Ruiz 2020. Phylogeny and morphology of *Ellismarsporium parvum* and a comb. nov. *E. varium*. Mycotaxon 135:443-452. https://doi.org/10.5248/135.443

Zhu, L. H., G. Q. Jin, D. L. Sun, Y. Wan, and D. W. Li. 2020. First report of *Colletotrichum gloeosporioides* sensu stricto causing leaf blotch on *Acer coriaceifolium* in China. Plant Disease 104(3):983. https://doi.org/10.1094/PDIS-08-19-1716-PDN.

2021

Aulakh, J. S., P. S. Chahal, V. Kumar, A. J. Price and K. Guillard 2021. Multiple Herbicide-Resistant Palmer Amaranth (*Amaranthus palmeri*) in Connecticut: Confirmation and Response to POST Herbicides. Weed Technol. 35(3):457-463. 10.1017/wet.2021.6

Aulakh, J. S. 2021. Evaluation of Herbicides and Application Rates for Mugwort (Artemisia vulgaris L.) Management in Cool Season Forage Grasses. CAES Bulletin 1068. https://portal.ct.gov/-/media/CAES/DOCUMENTS/Publications/Bulle tins/B1068.pdf

Aulakh, J. S. 2021. Stonecrops (Sedum ssp.) Tolerance to Gemini G (Isoxaben plus Prodiamine) and Basagran T&O (Bentazon) Herbicides. CAES Bulletin 1070. https://portal.ct.gov/-/media/CAES/DOCUMENTS/Publications/Bulletins/B1070.pdf

Aulakh, J. S. 2021. Broomsedge Invasion and Management in Christmas Trees. The Real Tree Line 61(2): 22.

Bian, J-Y, Q. Song, Y-L Fang, M-L Sun, J-Y Yang, Y-W Ju, D.-W. Li, and L. Huang. 2021. The fungal endophyte *Epicoccum dendrobii* as a potential biocontrol agent against *Colletotrichum gloeosporioides*. Phytopathology 111(2):293–303.

Cowles, R. S. 2021. The story of Christmas cookies. The Real Tree Line 61(1):14-15.

Cowles, R. S. 2021. 2020 Vision: adjusting to climate change. The Real Tree Line 61(1):20-22.

Cowles, R. S. 2021. Sustainable management of armored scales. The Real Tree Line 61(2):16-18.

Cowles, R. S. 2021. Cones. The Real Tree Line 61(3):10-12.

Cowles, R. S. 2021. Spruce spider mites. The Real Tree Line 61(3):16-18.

Daughtrey, M., C. Hall, J. Weiland, F. Baysal-Gurel, F. Gouker, P. Kong, J. Crouch, J. LaMondia, J. Pscheidt, L. Santamaria, N. Shishkoff, K. Snover-Clift, V. Castroagudin, S. Kodati, X. Li, and X. Yang. 2021. Boxwood Blight Insight Group Newsletter, Vol. 2, Issue 1. February, 2021. https://irpcdn.multiscreensite.com/217658e5/files/uploaded/BBIG%20Newsletter%20Vol%202%20Issue%201 bwhmLW5LSPGpsiTGf38j.pdf

Daughtrey, M., C. Hall, J. Weiland, F. Baysal-Gurel, F. Gouker, P. Kong, J. Crouch, J. LaMondia, J. Pscheidt, L. Santamaria, N. Shishkoff, K. Snover-Clift, V. Castroagudin, S. Kodati, X. Li, and X. Yang. 2021. Boxwood Blight Insight Group Newsletter, Vol. 2, Issue 2. May, 2021. https://irp.cdn-website.com/217658e5/files/uploaded/BBIG%20 Newsletter%20Vol%202%20Issue%202.pdf

Ding, X., Qingtong Wang, Yunfei Guo, Yulong Li, Sixi Lin, Qingwei Zeng, Feijian Sun, Dewei

- Li, Jianren Ye. 2021. Copy number variations of glycoside hydrolase 45 genes in *Bursaphelenchus xylophilus* and their impact on the pathogenesis of pine wilt disease. Forests 12(3):275.
- Jin, G. Q., Mao, G. Y., De-Wei Li, Yu Wan, Li-Hua Zhu. 2021. First report of *Alternaria alternata* causing leaf spots of *Liriodendron chinense* × *tulipifera* in China. J Plant Pathol. 103:689-690. https://doi.org/10.1007/s42161-021-00775-8
- Ju, Yue, Yuan-Zhi Si, De-Wei Li, Wu Xu, Jian-Wei Sun, Li-Hua Zhu. 2021. First report of leaf blotch of *Salix babylonica* caused by *Botryosphaeria dothidea* in China. Plant Disease 105(1): 224. https://doi.org/10.1094/PDIS-06-20-1284-PDN
- He, Jiao, De-Wei Li, Yu Zhang, Yun-Wei Ju, Lin Huang. 2021. *Fusarium rosicola* sp. nov. causing vascular wilt on *Rosa chinensis* in China. *Plant Pathology* 70: 2062-2073. https://doi.org/10.1111/ppa.13452
- Hiskes R. and R. S. Cowles. 2021. Pesticide Guide Toward Integrated Insect Management for Connecticut Christmas Tree Growers. CAES Bulletin 1069. https://portal.ct.gov/-/media/CAES/DOCUMENTS/Publications/Bulletins/B1069.pdf
- Kodati, S., Adesemoye, A. O., Yuen, G. Y., Volesky, J. D., and Everhart, S. E. 2021. Origin of agricultural plant pathogens: Diversity and pathogenicity of *Rhizoctonia* fungi associated with native prairie grasses in the Sandhills of Nebraska. PloS One 16(4):e0249335. https://doi.org/10.1371/journal.pone.0249335
- LaMondia, J. A. 2021. Management of lesion and dagger nematodes with rotation crops. Nematropica 51:9-16.
- LaMondia, J. A., E. Allan-Perkins, and S. Kodati. 2021. Factors affecting boxwood blight spread under landscape conditions. J. Environ. Hort. 39(3):100-107. https://doi.org/10.24266/0738-2898-39.3.100
- Niu, Zhenfu, Kai Zhang, De-Wei Li, Jian Ma, Rafael F. Castañeda-Ruiz. 2021. *Distobactrodesmium* gen. nov. to accommodate *Bactrodesmium rhamii* and notes on *Bactrodesmium*. Mycotaxon 136(1):141-158. https://doi.org/10.5248/136.141
- Qi, Xi-Ling, Jiao He, De-Wei Li, Lin Huang. 2021. First report of leaf spot on *Elaeagnus pungens* caused by *Epicoccum latusicollum* in

- China. *Forest Pathology* 51(5): e12716 https://doi.org/10.1111/efp.12716
- Si, Yuan-Zhi, Xiao-Ping Guo, De-Wei Li, Si Wu, and Li-Hua Zhu. 2021. First report of *Diaporthe fusicola* causing leaf blotch of *Osmanthus fragrans* in China. Plant Disease 105(4):1193-1194. https://doi.org/10.1094/PDIS-07-20-1450-PDN
- Si, Yuan-Zhi, Guan-Qun Jin, De-Wei Li, Jian-Wei Sun, and Li-Hua Zhu. 2021. Leaf spot of *Sapindus mukorossi* caused by *Diaporthe biconispora* in China. Australasian Plant Pathology 50:193-202. https://doi.org/10.1007/s13313-020-00762-0
- Schultes, Neil P., R. F. Castaneda-Ruiz, R. E. Marra, N. Strzalkowski and D. W. Li 2021. *Striatibotrys neoeucylindrosporus*, a new species of *Stachybotrys*-like fungus from North America. International Journal of Systematic and Evolutionary Microbiology 71(4):004778.
- Steven, B., LaReau J. C., Taerum S. J., Zuverza-Mena N., Cowles R. S. 2021. What's under the Christmas tree? A soil sulfur amendment lowers soil pH and alters fir tree rhizosphere bacterial and eukaryotic communities, their interactions, and functional traits. Microbiol Spectr. 9:e00166-21.

 $\underline{https://doi.org/10.1128/Spectrum.00166-21}$

- Yang, X., V. L. Castroagudín, M. L. Daughtrey, A. L. Loyd, J. E. Weiland, N. Shishkoff, F. Baysal-Gurel, L. Santamaria, C. Salgado-Salazar, J. A. LaMondia, J. A. Crouch, and D. G. Luster. 2021. A diagnostic guide for Volutella blight affecting *Buxaceae*. Plant Health Progress 22:578-590. https://doi.org/10.1094/PHP-02-21-0052-DG
- Zhang, Meng-Yu, Yuan-Zhi Si, Yue Ju, De-Wei Li, Li-Hua Zhu. 2021. First report of leaf spot caused by *Colletotrichum siamense* on *Salix matsudana* in China. *Plant Disease* 105 (11): 3744. https://doi.org/10.1094/PDIS-04-21-0776-PDN
- Zhang, Kai, Weihua Guo, De-Wei Li, Rafael F. Castañeda-Ruiz. 2021. *Vanakripa chinensis* sp. nov. from China and notes on the genus. *Mycotaxon* 136: 545-551. https://doi.org/10.5248/136.545

APPENDIX 2: STAFF LISTING FOR THE TOBACCO STATION/VALLEY LABORATORY

Staff	Title	Hired	Resigned/Retired
George H. Chapman	Chief Scientist (CVTIA)	1921	1923
Charles M. Slagg	Agronomy (USDA)	1923	1924
CAES Staff			
N. T. Nelson	Scientist, Plant Physiology	1924	1927
Paul J. Anderson,	Chief Scientist, Pathology	1925	1953
O. E. Street	Scientist, Chemistry	1929	1939
Tore R. Swanback,	Scientist, Agronomy	1927	1952
Dorothy Lenard Smith,	Secretary	1928	1957
C. Swanson,	Farm Superintendent	1933	1957
Stuart LeCompte Jr.	Scientist,	1939	1944
J. Yavener,	Farmer	1930	1953
A. Boyd Pack,	Agr. Res. Asst., Scientist	1947	1956
Louis A. Feil,	Handyman,	1948	1948
Hugh Derby,	Building Custodian	1948	1959
Morrill R. Goldsmith,	Agr. Res. Aid	1949	1977
Elmer L. Petersen,	Agr. Res. Aid	1950	1953
Gordon S. Taylor,	Chief Scientist, Pathology	1952	1987
Hendrik C. DeRoo,	Scientist, Physiologist	1953	1979
C. J. Tustin	Farmer, Agr. Res. Aid	1953	1977
Denise Van Hemert,	Agr. Res. Aid,	1954	1954
David E. Hill,	Scientist, Soils	1957	1965
John F. Ahrens,	Physiology, Weed Science	1957	1992
Robert W. P. Roos,	Agr. Res. Aid,	1957	1958
Dorothy L. Daley,	Agr. Res. Aid,	1958	1959
Maurice H. Wheeler,	Farmer,	1958	1964
Anna H. Wrobel,	Agr. Res. Aid, Secretary	1959	1970
Marcus H. Hills,	Janitor,	1960	1960
William Barnett,	Janitor,	1960	1969
Robert E. Moore	Entomologist	1961	1992
Larry B. Mallard,	Farmhand,	1964	1966
Edward A. Syphers,	Farmhand,	1968	1969
William Flaherty,	Maintenance	1969	1982
Lila M. DeRobertis,	Agr. Res. Aid, Secretary	1971	1987
Bruce J. Olsen,	Farmhand,	1972	1972
Richard Horvath	Farm Manager	1973	2006
Mark S. McClure	Chief Scientist, Entomology	1975	2003
Thomas M. Rathier	Scientist, Soils	1976	2009
John Winiarski	Technician	1977	2009

One Hundred Tears of Res	search and Service at the Tobacco Stati	on/valley Laboratory	79
Xavier Asbridge	Plant Inspector	1981	2001
Michael Scarchuk	Technician	1981	1988
Victor Ortiz	Maintainer	1982	1986
Neville Taitt	Maintainer	1986	1998
James A. LaMondia	Chief Scientist, Pathology	1986	2022
Stanley Rutkowski	Technician	1987	1989
Paula Mattson	Secretary	1988	1994
Jane Canepa-Morrison	Technician	1989	2021
Beth Beebe	Technician	1993	2000
Richard S. Cowles	Scientist, Entomology	1994	present
Carole A. Cheah	Scientist, Entomology	1994	present
Todd Mervosh	Scientist, Weed Science	1994	2014
Mary Klepacki Frost	Technician	1995	2004
Douglas Gaskill	Technician	1996	1998
Robert Ballinger	Technician	1997	1998
Timothy Abbey	IPM specialist	1998	2006
Rose Hiskes	Technician	1998	present
David Laiuppa	Technician	1999	2001
Steven Lamoureux	Technician	1999	2002
Jeffrey Fengler	Plant Inspector	2002	present
DeWei Li	Scientist, Mycology	2004	present
James Preste	Farm Manager	2005	present
Michelle Salvas	Technician	2007	present
Diane Riddle	Technician	2009	present
Hugh A. Smith	Scientist, Entomology	2008	2011
Nathaniel Child	Technician	2012	2017
Jatinder S. Aulakh	Scientist, Weed Science	2015	present
Isaac Bildad	Maintainer	2015	2021
Katja Maurer	Postdoctoral Scientist	2015	2017
Elisha Allan-Perkins	Postdoctoral Scientist	2018	2019
Srikanth Kodati	Postdoctoral Scientist	2020	2022
Ethan Paine	Technician	2021	present

Valley Laboratory 100th Anniversary Celebration 1921 - 2021









VALLEY LABORATORY, 153 COOK HILL ROAD

P.O. BOX 248, WINDSOR, CONNECTICUT 06095-0248

Putting Science to Work for Society Founded 1875

Protecting Agriculture, Public Health, and the Environment



Valley Lab 100th Anniversary Celebration

Friday, September 10, 2021

The Connecticut Agricultural Experiment Station Valley Laboratory on Cook Hill Road in Windsor was founded as the Tobacco Experiment Station in 1921 and will be celebrating its 100-year anniversary this year. We will hold a celebration on September 10 that will include the following grower meetings consisting of plot tours and talks in a tent, food, dignitaries, and friends. In between we will have food provided, information on the history of the Tobacco Station/Valley Laboratory, and symbolically break ground on our upcoming renovation. We will have pesticide credits available for growers. Come and participate in what should be a fun and productive day and a once-in-a-century event!

Tobacco Growers Meeting (Tent)

	9:00 a.m. Welcome and Introductions	Dr. James LaMondia	
	9:15 a.m. Worker Protection Standard Overview	Christina Berger, DEEP	
	9:45 a.m. Tobacco Insurance Program Changes	Colleen Kisselburgh	
	10:00 a.m. No-Till/Reduced-Till Tobacco	Dr. James LaMondia	
	10:15 a.m. Weather, water, early flowering and disease, the story of 202	21 Dr. James LaMondia	
	10:30 a.m. Breeding for Disease Resistance in Connecticut Broadleaf	Dr. James LaMondia	
	11:00 a.m. Farm Services Administration Update	Martha Dorsey, FSA	
11:15 a m. CT and MA Pasticide Re-certification Credits: 2 CELL credits for PA			

11:15 a.m. CT and MA Pesticide Re-certification Credits: 2 CEU credits for PA

Conn-Mass Tobacco Growers Association

11:30 a.m. Field plot Tour Dr. James LaMondia and James Preste

Christmas Tree Field Day (Field Plots)

9:00 a.m. New herbicides for weed control in Christmas trees	Dr. Jatinder Aulakh
9:30 a.m. Advances in understanding Phytophthora root rot	Dr. Richard Cowles
10:15 a.m. Mulching for weed control and mushroom production	Dr. DeWei Li
10:30 a.m. Insecticide selectivity for control of armored scales	Dr. Richard Cowles

11:00 a.m. Pesticide Re-certification Credits: 2 CEU for PA's, 3D (Arborists)

Mid-day: Food and music provided by Lancaster Leaf, ITG

12:00 p.m.-12:30 p.m. Presentations; 12:30 p.m. -1:30 p.m. Lunch, p.m.

Welcome and Introductions

Short History of the Tobacco Station/Valley Laboratory

The CAES Board of Control

Lancaster Leaf and Imperial Tobacco

Director Dr. Jason White

Dr. James LaMondia

Joan Nichols, BOC, Farm Bureau

Ben Refuge, ITG

Dignitaries and guests

12:30 p.m. Announcement about the addition/renovation of the laboratory Dr. Jason White

Nursery and Landscape Pest Management (Tent)

1:30 p.m. Effect of temperature and rainfall on Boxwood blight
2:00 p.m. Boxwood blight management
2:30 p.m. Box tree moth management
3:00 p.m. Nursery weed management
Dr. Srikanth Kodati
Dr. James LaMondia
Dr. Richard Cowles
Dr. Jatinder Aulakh

3:30 p.m. Pesticide Re-certification Credits: 2 CEU for PA's, 3A (Ornamental & Turf)

Forest Management Tour (Field Tour)

1:30 p.m. Biological control of hemlock woolly adelgid
2:00 p.m. Forest Management, the good, the bad, and the ugly
3:00 p.m. Beech leaf disease
3:30 p.m. Pesticide Re-certification Credits: 2 CEU for 2 (Forest Pest) and 3D (Arborists)

Hops (Hopyard Tour)

3:30 p.m. to 4:30 p.m. Valley Lab Hopyard tour: IPM Drs. James LaMondia & Srikanth Kodati

4:30 p.m. Pesticide Re-certification Credits: 1 CEU for PA's

4:30 p.m. Back East Brewer



Equal employment opportunity means employment of people without consideration of age, ancestry, color, criminal record (in state employment and licensing), gender identity or expression, genetic information, intellectual disability, learning disability, marital status, mental disability (past or present), national origin, physical disability (including blindness), race, religious creed, retaliation for previously opposed discrimination or coercion, sex (pregnancy or sexual harassment), sexual orientation, veteran status, and workplace hazards to reproductive systems unless the provisions of sec. 46a-80(b) or 46a-81(b) of the Connecticut General Statutes are controlling or there are bona fide occupational qualifications excluding persons in one of the above protected classes. To file a complaint of discrimination, contact Dr. Jason White, Director, The Connecticut Agricultural Experiment Station, 123 Huntington Street, New Haven, CT 06511, (203) 974-8440 (voice), or <u>Jason.White@ct.gov</u> (e-mail). CAES is an affirmative action/equal opportunity provider and employer. Persons with disabilities who require alternate means of communication of program information should contact the Chief of Services, Michael Last at (203) 974-8442 (voice), (203) 974-8502 (FAX), or <u>Michael.Last@ct.gov</u> (e-mail).