

Tree Fruit Scout Training

2024 Opportunities

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Fruit IPM Coordinator
NYS IPM Program

Winter Fruit Conferences

Feb. 2024

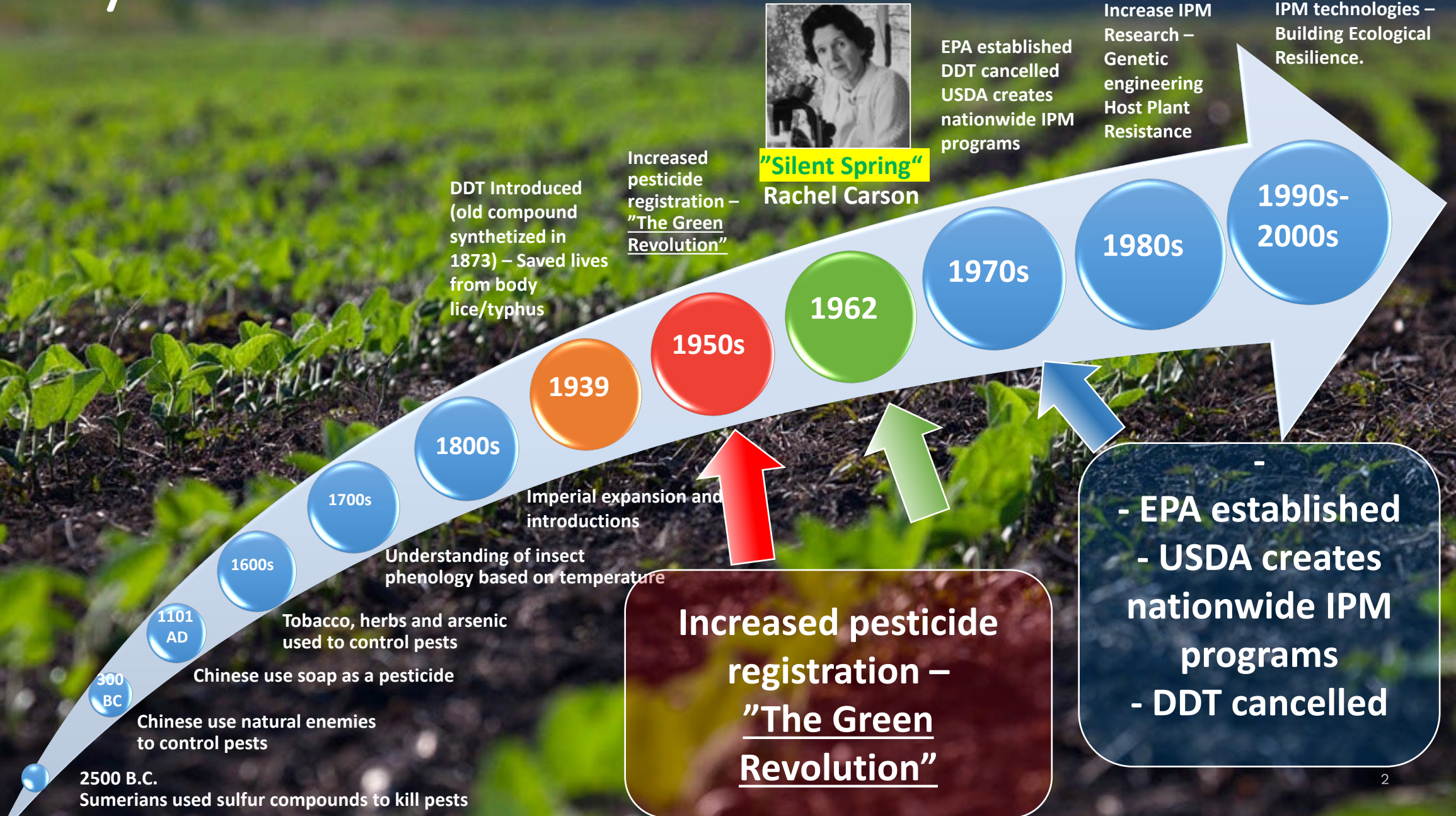


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Integrated Pest Management

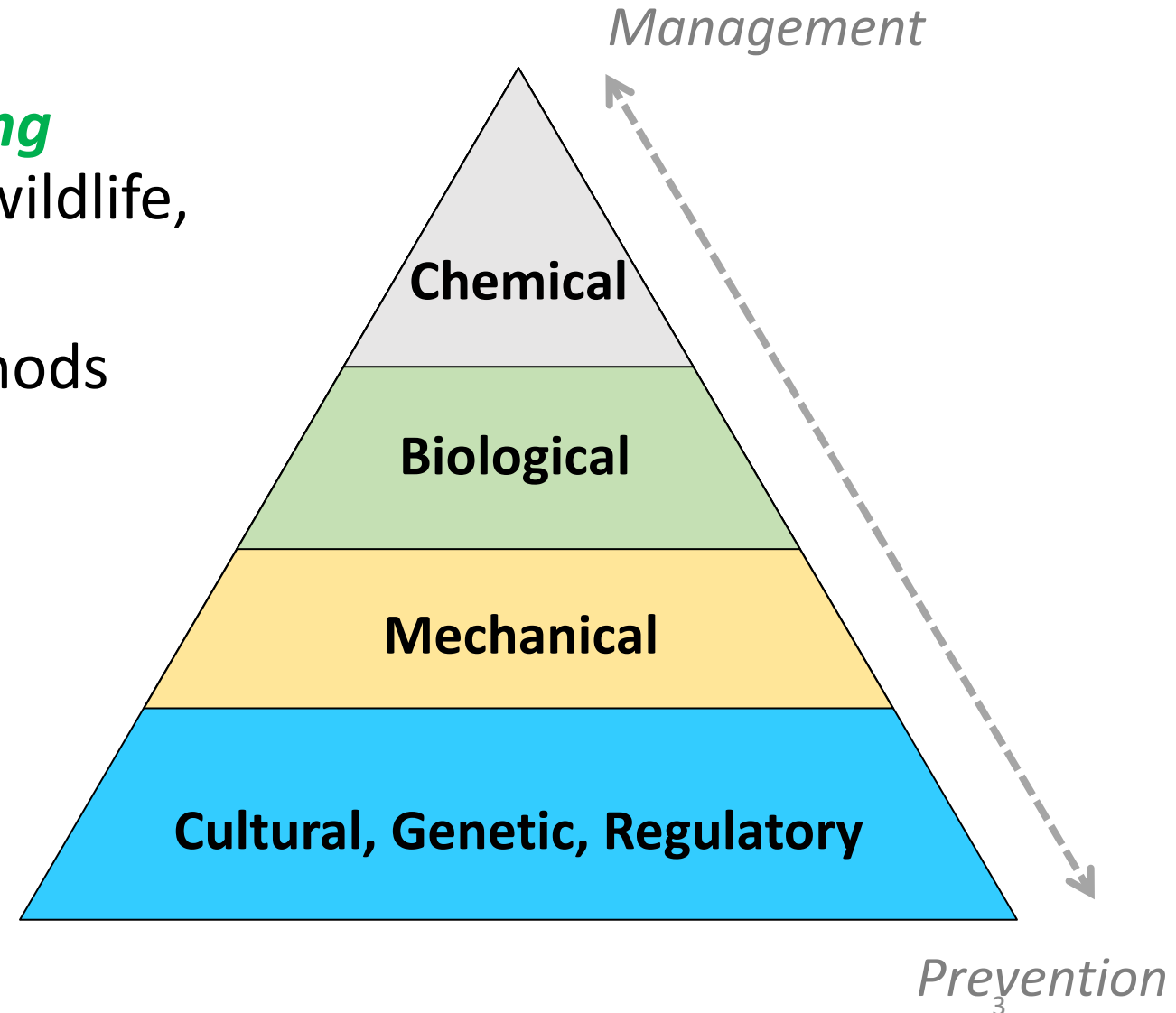
History of IPM in 60 seconds



IPM Approach to Orchard Management

IPM Approach:

- A *science-based* approach to *managing pests sustainably* (insects, diseases, wildlife, weeds)
- Uses an array of complementary methods



History of orchard IPM in NY

- **1972 – IPM being used in NY Orchards**
 - Reduced Risk Pesticide Programs
 - Farm advisors and per-acre fees for weekly scouting and recommendations
- **1981 – computer-based system**
- **1982 – private IPM cooperative formed**
- **1985 – telephone survey:
IPM being used on NY Apple Acreage**
 - 8% – Full IPM program
 - 73% - Partial IPM program



Fig. 1. Harvey Reissig (r.) instructs a grower, Ralph Brown of Waterport, NY, how to sample first generation spotted tentiform leafminer eggs.

Pest management is tied to phenology

Phenological stages in apple



Dormant



**Green
Tip**



**1/2''
Green**



**Tight
Cluster**



Pink



Bloom



**Petal
Fall**



**Fruit
Sizing**



Harvest

Growth Stages in Fruit Trees

[https://ecommons.cornell.edu/server/api/core/bitstreams/317dc529-3265-4f8c-87a2-473c2e3e790b/content#:~:text=Growth%20Stages%3A%20\(1\)%20dormant,York%20growers%20at%20this%20season](https://ecommons.cornell.edu/server/api/core/bitstreams/317dc529-3265-4f8c-87a2-473c2e3e790b/content#:~:text=Growth%20Stages%3A%20(1)%20dormant,York%20growers%20at%20this%20season)

Pest management is tied to phenology

2023 Cornell Pest Management Guidelines for Commercial Tree Fruit Production



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Additional information available at the Cornell Fruit homepage: www.fruit.cornell.edu

These guidelines are not a substitute for pesticide labeling. Always read and understand the product label before using any pesticide.

Table 7.1.4. Degree-day accumulations (from Jan. 1) corresponding to selected fruit phenology and arthropod pest events.

Pest/Phenology Event	DD Base 43°F		DD Base 50°F		Approx. Date	
	<i>mean</i>	<i>std dev</i>	<i>mean</i>	<i>std dev</i>	<i>mean</i>	<i>std dev</i>
STLM Traps set out	1-April					
Pear psylla – egg laying	84	44	33	21	4-Apr	11 days
Redbanded leafroller – 1 st catch	145	32	62	20	16-Apr	9 days
Rosy apple aphid – 1 st nymphs present	189	55	86	30	25-Apr	7 days
STLM – 1 st adult catch	166	49	73	29	19-Apr	9 days
STLM – 1 st egg observed	208	65	94	36	27-Apr	5 days
Tight cluster (McIntosh)	232	26	108	17	27-Apr	8 days
Tarnished plant bug – 1 st observed	222	105	105	62	25-Apr	15 days
OBLR – 1 st overwintered larvae observed	236	78	112	48	29-Apr	7 days
European red mite – egg hatch observed	284	53	134	34	6-May	4 days
STLM Egg Sample	Pink					
OFM Traps set out	Pink					
Pink (McIntosh)	291	25	140	18	3-May	7 days
Oriental fruit moth – 1 st adult catch	273	51	129	33	2-May	8 days
STLM – 1 st flight peak	338	70	168	45	7-May	8 days
OBLR Overwintered Gen. Sample	Bloom					
CM Traps set out	Bloom					
Full bloom (McIntosh)	380	36	194	25	10-May	6 days
Lesser appleworm – 1 st catch	420	144	217	88	13-May	12 days
American plum borer – 1 st catch	457	64	240	45	16-May	7 days
Oriental fruit moth – 1 st flight peak	432	102	225	60	14-May	11 days
Codling moth – 1 st adult catch	481	85	254	54	18-May	7 days
San Jose scale – 1 st adult catch	526	88	279	60	21-May	8 days

1972: Simplified Monitoring Program

Goals:

1. Teach growers and consultants to use **simple, formalized, sampling procedures & action thresholds**, to evaluate need for treatment
2. When necessary to treat, **select least destructive** management
3. Minimize the amount of **time** spent monitoring
4. Teach **relatively untrained participants** quickly

In 2024: We have the same goals

5. Stay on top of new information & strategies, and train new people in industry

BF224: Tree Fruit Scouting



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BF 224: Tree Fruit Scouting

Integrated Pest Management (IPM) for Orchards

 [Enroll in Course](#)

<https://smallfarmcourses.com/>

BF224: Tree Fruit Scouting

Training for tree fruit growers, orchard employees, other industry professionals, and interested students on the **biology**, **identification**, and **monitoring** of major economically significant **orchard pests**.

Wednesdays 6:30-8:00 PM, Feb. 28 – Mar. 27

- Week 1 (2/28): IPM Fundamentals + Tools
- Week 2 (3/6): Insects: Part 1
- Week 3 (3/13): Insects: Part 2
- Week 4 (3/20): Diseases
- Week 5 (3/27): Weeds, Wildlife, + Wrap-Up



2024 Apple Scouting Cohorts

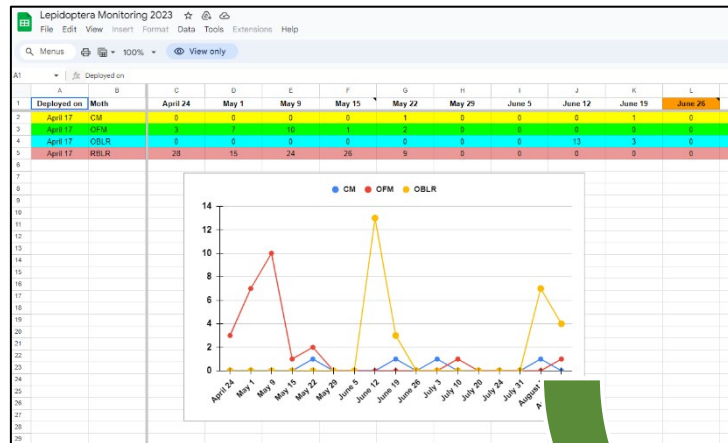
NOW RECRUITING!

- Pre-/Post-bloom trainings regionally
- Weekly monitoring and data sharing



**Cohort
Training**

**Data
Collection**



**Reporting
Information**

Thank you!

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NYS IPM Program

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Cornell
AgriTech

New York State Agricultural
Experiment Station



Please complete the 2024 IPM Tactics Survey:



<http://tinyurl.com/4bhma4jh>