

Organizing and Utilizing a Pest and Disease Monitoring Schedule

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Spring is here and it's time to get organized and plan for the upcoming growing season. Each season brings new insects and diseases, and a monitoring schedule is an easy and effective way to stay ahead of the game. The organization and implementation of a monitoring schedule can help save time, money, cost of plant replacements, and unnecessary use of pesticides.

Degree days (DD's) and indicator plants are common tools for monitoring. Degree days offer estimates for when diseases and pests will first appear with development and management based on temperature rather than a calendar month. They are calculated based on 30 degrees Fahrenheit (for plants) to 50 degrees Fahrenheit (for insects). This proves to be an effective method, especially for those years when it snows in April. Indicator plants provide a visual reminder for timing the arrival and management of pests and diseases based on bloom time. The utilization of both of these methods is recommended.

To set up a schedule, first identify key pest and disease problems for the growing season. A good source would be last year's growing season and current horticultural publications. Second, identify key indicator plants in the area to be used as references. *Coincide*, by Don Orton, is dedicated to this method of monitoring. Using both methods helps in determining the timing for proper and effective control. Charting such information is a great way to create a quick reference.

Pest or Disease	Degree Days Base 30/Base 50	Indicator Plants
Eastern Tent Caterpillar	650-950/100-200	<i>Acer saccharum</i> (Sugar maple) beginning blooming
Apple Scab	650-950/100-200	<i>Malus</i> (crabapple) leaves expanding
Cedar-apple Rust	1400-1800/300-500	<i>Malus</i> (crabapple) blooming
Euonymus Caterpillar	1500-1800/275-500	<i>Viburnum opulus</i> (European cranberry bush) blooming
Four-Lined Plant Bug	2000-2400/500-700	<i>Syringa reticulata</i> (Japanese tree lilac) early bloom
Japanese Beetle	3000-3300/900-1200	<i>Hydrangea arborescens</i> 'Grandiflora' (Hills of Snow Hydrangea) full bloom

Organization and planning are keys to a successful garden. A beautiful garden is a healthy garden. The best way to ensure the health of the garden is to monitor early and often!