

**Jim Revell, Extension Master Gardener, Bedford, VA**

Thursday, 08-14-2025, Goochland Powhatan MG Association (monthly meeting)

## **Program Title & Description**

### **Utilizing Degree Days and Plant Phenology to Help Mitigate Problematic Insects**

*(and a month-by-month look at Central Virginia's most "problematic" insects)*

by Jim Revell

How do temperature and moisture levels impact insect populations? What are Degree Days (aka Growing Degree Days) and are they important in relation to insect activity? How are Degree Days calculated? Can Degree Days be effectively incorporated into Integrated Pest Management strategies for the home vegetable gardener (would you like to be able to implement IPM controls to help target insects at their most susceptible life stage)? What is Plant Phenology and its correlation to determining crop planting dates and best times to initiate IPM strategies? Learn about these valuable tools for the home gardener and how these methods can help mitigate problematic insects in your vegetable garden!

### **Jim Revell – BIO 2025**

Jim has logged over 12,000 volunteer hours since his certification as a Master Gardener in 2002. He served multiple terms as President and Training Coordinator for BAMGA and 19 years as a member of the MG College Advisory Team. Jim is honored to have taught concurrent classes at MG College, and MG training classes for numerous Virginia MG units. He has also presented for VMGA, Virginia Federation of Garden Clubs, and various regional gardening organizations.

Jim has dedicated the past 25+ years to growing fruits and vegetables to organic standards. His expertise spans the full "scope" of vegetable gardening management from seed-starting under grow lights to garden transplants and crop rotation; from construction and maintenance of various growing venues (raised beds, straw bales, hoopouses, alternative gardening) to composting bins; from insect identification to implementation of appropriate IPM controls; and more! He is a strong proponent of cultivating beneficial insects and protecting pollinators and has had up to seven beehives.

Jim is fascinated by spiders and insects and is the "go-to" resource for many fellow Master Gardeners to research and identify their garden specimens. He additionally is contacted by many for guidance on organic growing principles, the beekeeping process, and many more organic vegetable gardening-related topics.

Jim supports his community as a founding Board member and the Garden Manager of Bedford Urban Gardens (BUG), an organic-focused community rental and "giving" garden established in 2013. Over the past two years (2023-2024), BUG donated 3,500-5,100 pounds of fresh organic produce to local organizations representing underserved populations in the Bedford region.

Jim considers himself a "lifelong" learner and thoroughly enjoys delving into advanced methodologies such as the "Utilization of Degree Days and Plant Phenology to Help Mitigate Problematic Insects." He is looking forward to sharing strategic details on how knowledge of the correlation between crop planting dates and Integrated Pest Management controls can have positive benefits for the home vegetable gardener.