



## **Plant Propagation Workshop Series**

### **Learn basics of sexual propagation, vegetative propagation, and micropropagation via Zoom**

**Presenter:** Dr. Mark Bridgen, *Professor of Horticulture, Cornell University*  
Teacher of plant propagation & micropropagation for over 30 years.

**Dates/Times:** Wednesdays, January 22-March 19, 2025  
2-4pm (EST)  
3 modules, with 3 two-hour sessions within each module  
Participants can attend all modules or register for individual modules.

**Fee:** \$150 per person/per module. All three modules: \$400. **Save \$50!**

Participants must have access to Zoom to participate in real time. Lectures will be recorded and available to participants after live sessions.

#### **Module #1 – Sexual Plant Propagation: January 22, 29 & February 5**

**Description:** Introduction to plant propagation, biology of plant propagation, terminology, and the propagation environment including microclimatic conditions (relative humidity, temperature, light, & gases), edaphic factors (propagation media, nutrients, and water), and biotic factors. Also, basics of seed propagation and seed dormancy including exogenous dormancy, physical dormancy, seed scarification, chemical dormancy, endogenous dormancy, physiological dormancy, seed stratification, morphological dormancy, and double dormancy.

#### **Module #2 – Vegetative/Asexual Plant Propagation: February 12, 19 & 26**

**Description:** Introduction to vegetative propagation, terminology, rooting hormones, cutting propagation, management of stock plants, treatment of cuttings, environmental manipulations of cuttings, propagation media, stem cuttings, (hardwood, semi-hardwood, softwood, herbaceous), grafting (types of grafts), propagation by specialized stems & roots (bulbs, corms, tubers, tuberous roots, rhizomes, etc.), layering, division, and separation.

#### **Module #3 – Plant Micropropagation: March 5, 12 & 19**

**Description:** What is plant tissue culture, uses of plant tissue culture, what is plant micropropagation, history of micropropagation, media components and preparation, laboratory supplies, equipment and design, stages of micropropagation: Stage 0 (stock plant selection and preparation), Stage 1 (initiation & establishment *in vitro*), Stage 2 (multiplication), Stage 3 (*in vitro* rooting and conditioning), and Stage 4 (acclimating & hardening off).

Online registration at: <https://plantpropagation.securepayments.cardpointe.com/pay>

For more information contact Mark Bridgen at [mpb27@cornell.edu](mailto:mpb27@cornell.edu) or 631-921-4941