Propagating *Laurus nobilis*, Bay Leaves

Nina Bassuk
Shannan Sweet

I. Breaking dormancy

Plants go dormant (Fig 1) as the weather cools and days shorten. To get the plants to come out of dormancy, water plants and place them in an enclosed cooler at 2-4 degrees C. (35-38 degrees F).

We investigated how long it would take for plants to break dormancy once they were removed from the cooler. Every two weeks, for 12 weeks, we removed plants from the cooler and placed them on a greenhouse bench under approximately 50% shade at 24 degrees C (75 degrees F). The best interval of chilling to get good bud break is six weeks or later. Any sooner than six weeks chilling, bud break can be sporadic or nonexistent. After removing plants from the cooler, pinch the uppermost bud to get side shoot growth. After the shoots elongate and the cuttings are removed, plants will continue to produce new shoots (Fig.2).

After bud break, allow shoots to grow under light shade cloth (approximately 50% shade) in a 24 degrees C (75 degrees F) greenhouse. Ideally, shoots that form under shade have a yellow-red color. (Fig 3). This makes them more sensitive to rooting hormones.

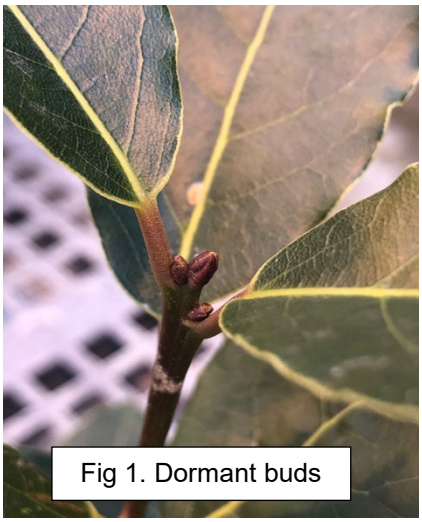

Fig 1. Dormant buds

Fig 2. Buds elongating

Fig 3. Shoots elongated

II. Rooting

When shoots are 3” to 4” long (Fig 4), sandwich stems with 1” black Velcro (Fig 5) on the base of the new shoot (Fig 6) and press firmly (Fig 7), being careful not to break the shoot (Fig 8). Velcro is used to maintain a blanched or etiolated base on the new shoots.

Do not allow the shoots to grow more than 4 inches, since this affects the viability of the cuttings. After Velcro is applied, immediately remove the plants from the shade into the full sun in the greenhouse. Allow new shoots to green up and harden for 2 to 3 weeks (no more).

Fig 4. Shoots ready for Velcro banding

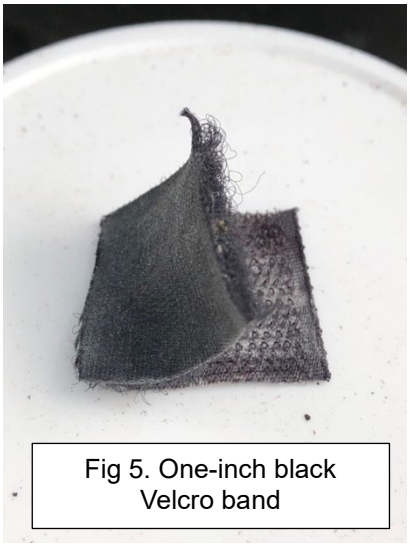

Fig 5. One-inch black Velcro band

Fig 6. Adding Velcro to shoot ready for banding

Fig 7. Lightly pinching Velcro to shoot ready for banding

Fig 8. Final look after banding

III. Propagating

After two to three weeks with Velcro bands in place (Fig 9), the shoot plus Velcro can be removed from the plant. Upon Velcro removal (Fig 10), the basal 1” of the cutting is dipped in an IBA rooting hormone, Hormodin #3, 8000 ppm IBA in talc, and excess powder is shaken off. Root initials may begin to form in the etiolated area under the Velcro (Fig 11). Cuttings are planted in 4” deep rooting trays with 3-parts perlite and 1-part Lambert (or other) potting mix (excellent drainage is important) (Fig 12).

Before cuttings are stuck, the medium should be thoroughly wetted. Cuttings are stuck by first making a narrow hole with a dowel, pencil or your finger and placing the cutting to the full depth of the rooting media and firmed in by pinching the soil around the stem. This is done so none of the rooting hormone is removed. The mist bench is generally under 50% shade cloth. Start with four seconds of mist at six-minute intervals, changing to four seconds of mist at 10-minute intervals after a week (Fig 13).

Fig 9. Shoots with Velcro matured over 2 weeks

Fig 10. Shoot about to root with etiolation from Velcro

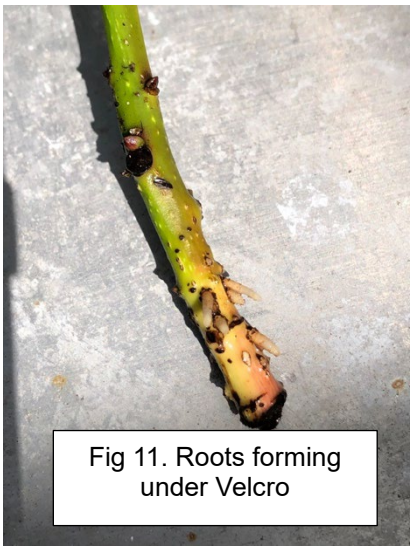

Fig 11. Roots forming under Velcro

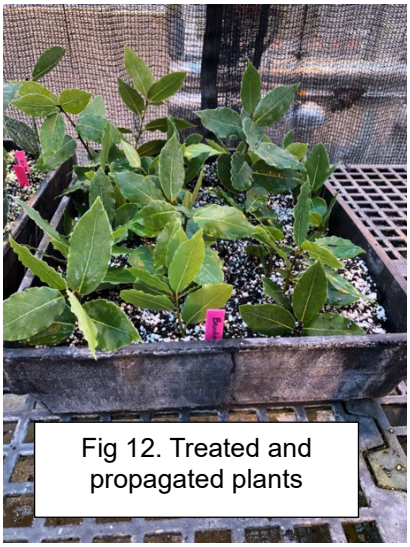

Fig 12. Treated and propagated plants

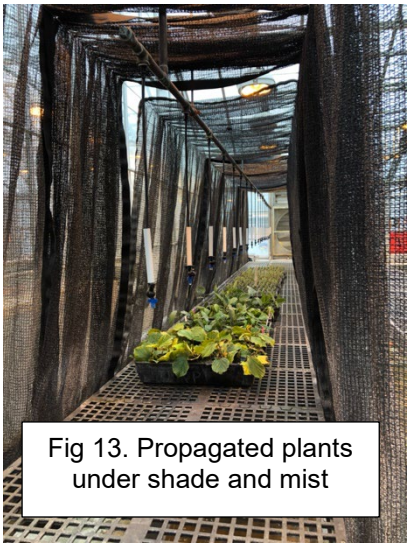

Fig 13. Propagated plants under shade and mist

IV. Transplanting

Cuttings should root in four to five weeks (Figs 14 & 15). They should be promptly potted up into 4.5” diameter pots with Lamberts (or other peat-based) potting mix (Fig 16). Plants will make new shoots for several months and the rooting process can continue until the plants naturally go dormant. Many of these newly rooted cuttings will make new shoot growth and can be used to propagate more shoots if desired. After a few months plants are up-potted into #1 containers (Fig 17) and the up-potting process can continue as long as desired.

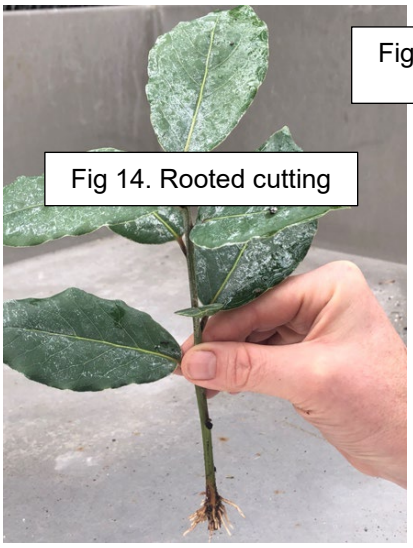

Fig 14. Rooted cutting

Fig 12. Roots growing from the etiolated base

Fig 15. Rooted cutting

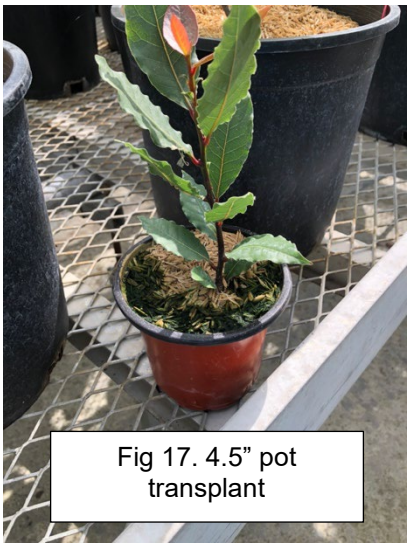

Fig 17. 4.5” pot transplant

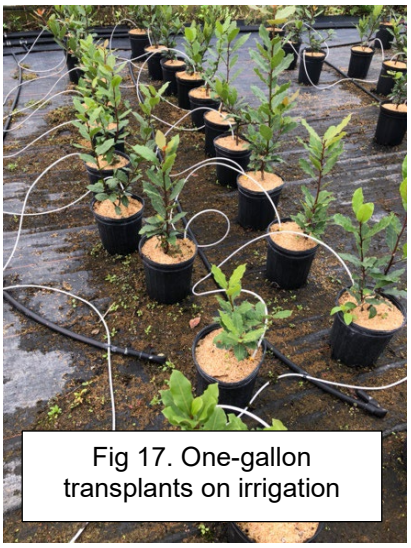

Fig 17. One-gallon transplants on irrigation