

## "Chip Budding the Fig" by M. A. Faria, 2007

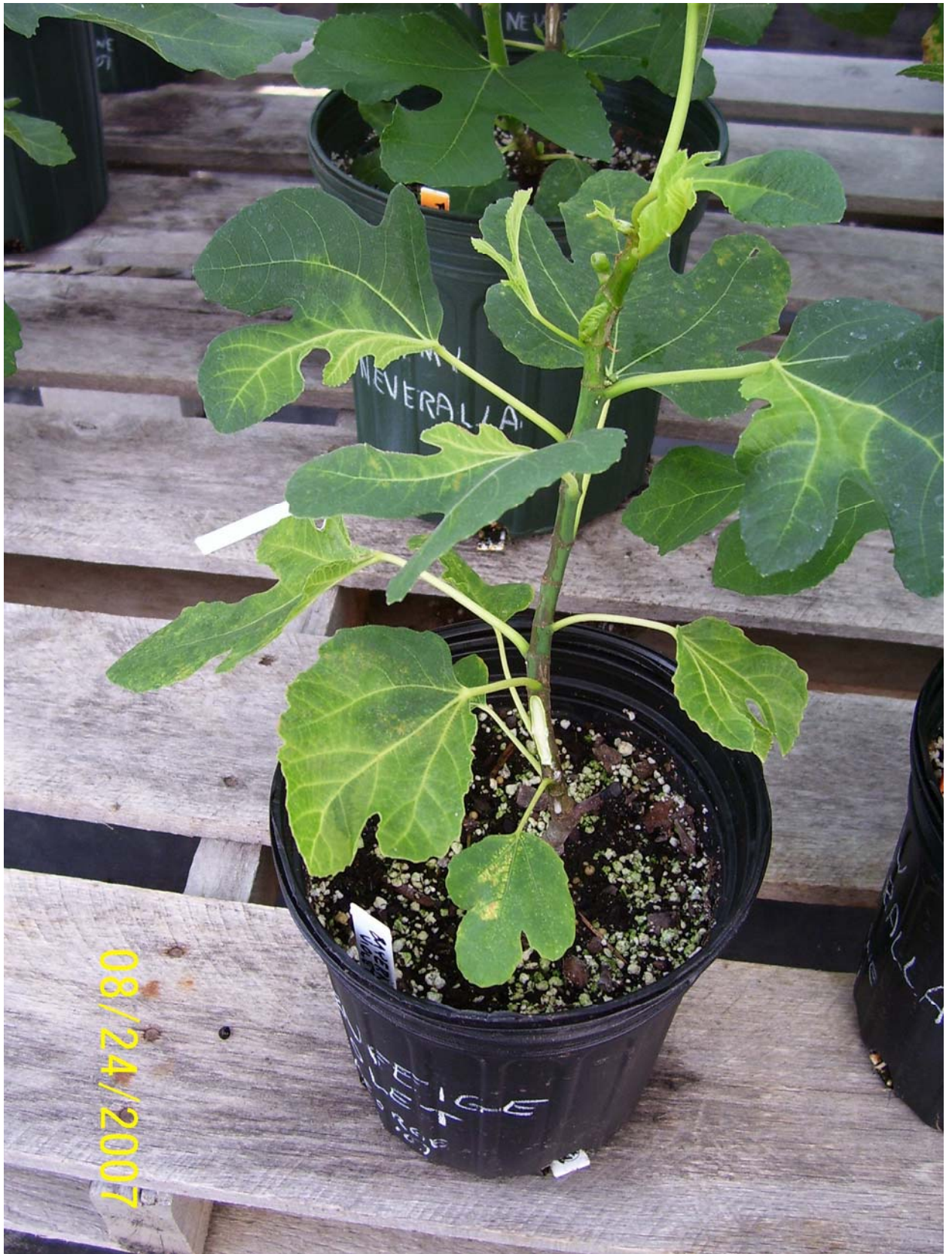
The best time to bud is when the plants are growing vigorously and will heal quickly. The pictured procedure was done in late summer – not the best time in most climates, as the fig plants are slowing down.

### Equipment and bud with leaf still attached



1. Get a sharp, thin, short knife. There are budding knives available, but something like a paring knife or jack knife will do.
2. Have something to secure the bud. I use parafilm, which is made for budding. It breathes, stretches, and falls off on it's own after a while. But a wide elastic band that has been snipped open to form an elastic strip will also work.
3. Disinfect the knife with 70% alcohol, or 10% chlorine bleach solution.
4. Choose a bud from your donor plant. You want a nice fat bud, preferably without a fig embryo. Starting well above the bud, carefully slice into the branch removing the bud and its attached leaf. You don't have to make a deep cut – just deep enough to get under the bud. Remove the leaf leaving the stem to use as a handle







5. Choose a location on your rootstock fig for the bud "chip". Use the side or top of a branch or trunk. Don't use the bottom of a branch or let the chip face down toward the ground.
6. Using the leaf stalk as a handle position the bud where you want it to grow on the rootstock fig. Push the blade of your knife deeply into the bark of the rootstock precisely above and below the bud chip. (I like to slice off a little on the bottom of the chip at this time, as this will give exact contact - for some reason the cuts on the top usually match pretty well.) This will mark the exact size of the bud on the rootstock, and also keep you from over-cutting at the bottom. If you need more of a guide, you can mark either side of the chip with a marker.
7. Put the chip down and with your knife cut out and discard the piece of bark between the cuts on the rootstock. It should be the same size as the bud chip. It can be a little tricky getting the width exactly right. Differences in branch diameter can result in width variations between the two chips. If the donor fig branch is thin the chip will be narrower than one from a thicker branch. To counter this using the tip of the knife on a larger rootstock will give a narrower width. And conversely using the base of the knife near the handle will give a wider chip. With a little practice you'll get good size matches.
8. Wipe the cut surfaces with a paper towel to remove any sap.
9. Take the parafilm (or other wrapping material) and hold it above the cut on the rootstock. With your other hand wrap a loop over this piece pinning it tight. Wrap again.
10. Position the top of the bud chip against the cut in the rootstock. Make sure there is contact bark to bark. Look at the rest of the chip to make sure there will be bark-to-bark contact on at least one side. Do NOT center it. For it to heal the green inner layers of the bark have to be touching.
11. Start wrapping as if bandaging an arm with an ace bandage, with enough pressure to stretch the elastic or parafilm slightly. When you've covered the bud chip you can put the end into the last loop and snug it tight, or just pull the parafilm tightly and it will adhere to itself.
12. Gently slice through the leaf stalk "handle" leaving a small stub. Do not try to remove the stalk completely - it will drop off by itself.

**Two wrapped buds - one with "handle" still attached**



13. Mark the bud well with a marker or paint. I've also put the name of the bud chip on the rootstock.





14. The bud might start growing on it's own once it's healed. Or it can be forced by cutting off the branch above it, or chipping out some bark below it. Don't be impatient; the bud becomes part of the plant – like any other bud. It doesn't have to be forced the same season it is put on the plant.
15. Put on a permanent, hard to miss marker of some sort. Painting the resulting branch and putting on a tag is a good idea. It is very easy to snip off your budded branch when pruning, if it isn't obviously marked. Grafting often leaves a scar that you can see for years after the procedure. Evidence of budding on the other hand, disappears very quickly.

**Healed chip bud sending out a shoot. This was taken on August 31, roughly three weeks after budding. Note how difficult it is to see the bud chip. Make sure to mark well!**



**The same bud with a little more growth**



It should be noted that Fig Mosaic Virus can be spread by budding. Variety reaction to the virus seems to vary; some plants show severe distortion and heavy mottling, while others barely spot. So when budding an infected variety onto a rootstock, other varieties on that rootstock may be affected differently.