

# Time Line for Back Cross Breeding

Year 0: Fall: Stake rows and establish Deer Fence. Or at least establish corners of site. If possible, establish rows with Glyphosate.

Year 1:

March: Flag rows at 6 or 7 ft. interval, spray again with RoundUp.

April: Layout BlueXs and Bamboo stakes. Plant two lines in alternating rows 1, 2, 4, 5, 7. Plant controls, if available. Reserve rows 3, 6, 8 for Third line. Place permanent tags for sites planted.

May 15: Treat with Roundup, establish drip irrigation lines, fertilize with Osmocote, and mulch with composted bark. Assess germination.

June: Reassess germination. Consider mefenoxam soil drench (for *Phytophthora cinnamoni*) and Agri-Fos monthly x 3 treatments.

July-August: Treat with Glyphosate for weed control approximately monthly and mow as needed. Hand weed BlueXs as needed.

September: Measure height and mortality.

Year 2:

March: Flag, stake and tag rows 3, 6, 8 for Line 3.

April: Plant third line and fill in with controls. Prune existing rows for basal sprouts.

May: Treat with RoundUp, establish irrigation in three new rows. Fertilize all rows with Osmocote. Assess germination. Mulch new rows. Mefenoxam soil drench in May and September, with Agri-Fos foliar spray, June, July, August.

July-August: Continue Weed Control and Mowing.

September: Measure heights and mortality.

November (Dormancy): Corrective pruning.

Year 3:

March-April: Begin monitoring for Asian Ambrosia Beetle: degree days and traps.

May 1: Assess bud flush and leafing out times weekly. RoundUp for weed control. Apply Osmocote. Remove BlueXs, if necessary and replace with alternative vole protection.

June 1-15: Assess catkin blooming in rows 1, 2, 4, 5, 7.

May-August: Weed maintenance: Apply RoundUp and mow.

September: Measure Heights & Mortality, add DBH to data.

Dormancy: Corrective and Structural pruning

Year 4: Continue fertilizer, maintenance, weed control and assessments. Add DBH measurement to data.

Year 5: Continue fertilizer, maintenance, weed control and assessment. Evaluate trees for possible inoculation.

Year 6 & 7: Maintenance. Inoculation and Selection for resistance (1 in 8 trees). Collect any open pollinated "mutt" nuts.

Year 8 & 9: Remove non-selected trees. Intercross selected trees (4-6 per line) and move seeds to the seed orchard.