

New NC-140 Apple Rootstock Trials Planted in Massachusetts and New Jersey in the Spring of 2010

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In 2010, a new apple rootstock trial was established by the NC-140 Rootstock Research Committee at 20 sites in the United States, one in Canada, and one in Mexico. Varieties include Honeycrisp in 15 northern locations and Fuji in seven southern locations. In Massachusetts (UMass Cold Spring Orchard Research and Education Center, Belchertown, MA, Figure 1) and



Figure 1. The 2010 NC-140 Apple Rootstock Trial on May 28, 2010 at the UMass Cold Spring Orchard Research & Education Center, Belchertown, Massachusetts. W.R. Autio photo.

Table 1. Rootstocks in the Massachusetts and New Jersey plantings of the 2010 NC-140 Apple Rootstock Trial.

Cornell-Geneva	Budagovsky
CG.2034	B.10
CG.3001	B.7-20-21
CG.4003	B.7-3-150
CG.4004	B.64-194
CG.4013	B.67-5-32
CG.4214	B.70-20-20
CG.4814	B.70-6-8
CG.5087	B.71-7-22
CG.5202	Controls
G.11	B.9
G.202	M.9 NAKBT337
G.41	M.9 Pajam 2
G.935	M.26 EMLA
Pillnitz	
PiAu 51-11	
PiAu 9-90	
Supporter 3	

New Jersey (Rutgers Clifford E. and Melda C. Snyder Research and Extension Farm, Pittstown, NJ, Figure 2), the trial includes Honeycrisp on 28 different rootstocks. Trees will be trained to a tall spindle and are spaced 4 x 12 feet. Trunk support is provided by a 4-wire vertical trellis.

The rootstocks in this trial (Table 1) will include nine new Cornell-Geneva rootstock selections which have commercial potential. It also will have four named Geneva rootstocks. From the Budagovsky program, B.10 has been named, and there are seven additional selections which have not yet been named. There are two un-named selections from the Pillnitz program, along with Supporter 3. Lastly, there are four con-



Figure 2. The 2010 NC-140 Apple Rootstock Trial on April 22, 2010, immediately after planting, at Rutgers Clifford E. and Melda C. Snyder Research and Extension Farm, Pittstown, New Jersey. Turf was established during the summer of 2009 with Turf Type tall fescue planted at 300 pounds per acre. In the spring of 2010, contour rows were laid out and herbicide strips were killed with Roundup. After planting, strips were sprayed Galery, Prowl H2O, and Solubor. W.P. Cowgill Photo.



Figure 3. Post installation on May 6 in the 2010 NC-140 Apple Rootstock Trial in New Jersey. Installation was performed by The Fence Company (www.thefenceco.com). W.P. Cowgill Photo.

trols, B.9 as the smallest tree, a small (NAKBT337) and a large (Pajam 2) clone of M.9, and M.26 EMLA.

This trial will end in 2019. Results will be reported through twilight meetings, summer meetings, factsheets, and in *Fruit Notes* and *Horticultural News*.

As the NC-140 Rootstock Research Committee evolves and the availability of new rootstock materials decline, establishing a trial such as this one will become progressively more difficult. This likely will be the last large-scale apple rootstock trial coordinated by NC-140. In the future, more targeted trials looking at specific physiological differences among rootstocks or at new clones will take place, but only in a handful of locations.



Figure 4. The 2010 NC-140 Apple Rootstock Trial on June 3, 2010 at Rutgers Clifford E. and Melda C. Snyder Research and Extension Farm, Pittstown, New Jersey. *W.P. Cowgill Photo.*

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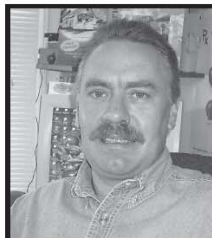
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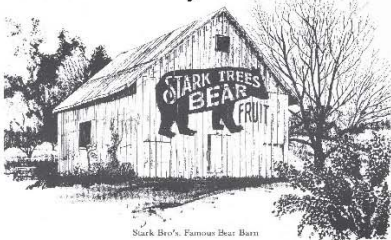
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