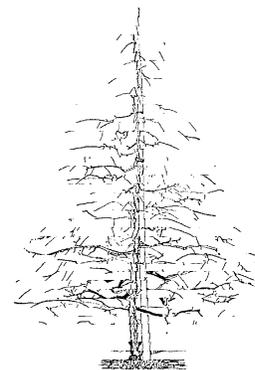


# 2002 Apple Rootstock Trial

November, 2002

**Wesley R. Autio and Terence L. Robinson**



An NC-140 Apple Rootstock Trial was established in 2002, including 11 states and provinces (Table 1) and 20 rootstocks (Table 2). The core planting of nine rootstocks (B.9 Europe, B.9 Treco, M.9 Burgmer 756, M.9 Nic 29, M.9 NAKBT337, M.26 EMLA, M.26 NAKB, P.14, and Supporter 4) was established at 10 locations (AR, BC, Chih, IL, IN, KY, MA, MI, NJ, and NY). The scion cultivar is Buckeye Gala.

Table 1. Cooperating sites in the 2002 NC-140 Apple Rootstock Trial.

Arkansas
British Columbia
Chihuahua
Illinois
Indiana
Kentucky
Massachusetts
Michigan
New Jersey
New York
Ohio

Table 2. Characteristics of the 2002 NC-140 Apple Rootstock Trial. All trees are spaced 2.5 x 4.5m, supported, and trained to a vertical axis system.

Rootstock	Number of sites
B.9 Europe	11
B.9 Treco	11
CG.3007	2
CG.3041	2
CG.5935	2
G.11	1
JM.1	3
JM.2	3
JM.7	3
M.9 Burgmer 756	10
M.9 Nic 29	10
M.9 NAKBT337	11
M.26 EMLA	10
M.26 NAKB	10
PiAu 36-2	1
PiAu 51-4	5
PiAu 51-11	5
PiAu 56-83	1
P.14	11
Supporter 4	10

## DATA COLLECTION & TRANSMISSION

Data for 2002 should include tree status, trunk circumference at planting and in October, number of root suckers, and height of the graft union above the soil. Record all data as described in Table 3, and send it on disk or via email (preferred) in spreadsheet format

by **January 15, 2003** to Wes Autio.

For 2003, please follow the protocol below for tree management and data collection. Tree data for 2003 will include bloom, root suckering, trunk circumference, and mortality.

**Send 2002 data on disk or via email (preferred) by January 15, 2003 to:**

Wesley R. Autio (autio@pssci.umass.edu)  
 Department of Plant & Soil Sciences  
 205 Bowditch Hall  
 University of Massachusetts  
 Amherst, MA 01003-9294

# Protocol for 2003

## *Tree management.*

- A. Trees must be supported and trained as vertical axes.
- B. Manage pests, nutrients, and water per local recommendations. Pay particular attention to weed control in this trial.

## *Collect the follow data for each tree in 2003.*

- A. Bloom: the number of flower clusters per tree. Remove flowers after counting.
- A. Root suckers: the number removed and counted, August.
- B. Tree size: trunk circumference 25 cm above the graft union (mm), October.
- C. Status: 0=dead, 1=alive, and 2=missing data, October.

Table 3. Protocol for the submission of data collected in 2002. Submit data on disk (Wesley Autio, Department of Plant & Soil Sciences, 205 Bowditch Hall, University of Massachusetts, Amherst, MA 01003-9294) or via email (preferred) (autio@pssci.umass.edu) by January 15, 2003.

STATE		2002 Apple Rootstock Trial			DATA FOR 2002		
ROOT	REP	STATUS 2=MISS DATA* 1=ALIVE 0=DEAD	NUMBER OF ROOT SUCKERS	TRUNK CIRC AT PLANTING (mm)	NUMBER OF USABLE FEATHERS AFTER PRUNING (mm)	HEIGHT OF THE GRAFT UNION ABOVE SOIL (mm)	FALL TRUNK CIRC (mm)
B.9Europe	1	X	X	X	X	X	X
B.9Europe	2	X	X	X	X	X	X
B.9Europe	3	X	X	X	X	X	X
.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.
Supp.4	4	X	X	X	X	X	X
Supp.4	5	X	X	X	X	X	X
Supp.4	6	X	X	X	X	X	X

\* If the initial quality of a tree was very low and it should not be considered a data tree, record a 2 in this column. Do not record a 0 in this column unless the tree dies during the year. Once a data cell is recorded as 2 or 0, continue to record a 2 or 0, respectively, in the row for the remainder of the experiment.

When a data point is missing, insert a period in that cell, but do not replace zeros with periods.

**REQUIRED DATA FORMAT:** Lotus 1-2-3, Excel, or Quatro Pro

**Appropriate Rootstock Codes:** (do not include spaces in the rootstock name)

B.9Europe	G.11	M.9Nic29	PiAu51-4
B.9Tresco	JM.1	M.9T337	PiAu51-11
CG.3007	JM.2	M.26EMLA	PiAu56-83
CG.3041	JM.7	M.26NAKB	P.14
CG.5935	M.9B756	PiAu36-2	Supp.4