# 2002 Apple Rootstock Trial

November, 2007 -- Grand Junction, Colorado

**Wesley R. Autio**

## Data Collection & Transmission

Data were submitted for nine sites this year (Table 1). All were sent via email, and all were translated easily. There are increasing numbers of problems, however, with the format of the data. All cooperators are strongly encouraged to follow the printed protocol for data format and submission (Table 3). See below for additional information on submission of 2007 data. Characteristics of this trial are given in Table 2.

Data submitted for 2007 should include the number of root sucker per tree, trunk circumference, tree status in October, yield per tree, and average fruit weight. Please see Table 3 for the protocol for data submission. Record all data as described in this table, and send it to Wes Autio via email in spreadsheet format by **January 1, 2008**.

To avoid problems during the compilation of the data, please pay paticular attention to the following points: **1) Collect the data requested -- additional data should not be submitted; 2) Use the correct units; 3) Makes sure that all data make sense -- proofread your data set; 4) For rootstock and replication designations, follow the protocol exactly -- rootstock names should appear as they are listed in Table 2 and in the protocol (the bottom of Table 3) -- please note that there are no spaces in these names.**

For 2008, please follow the protocol on page 2 for management and data.

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

Arkansas
British Columbia
Chihuahua
Illinois
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 code (no spaces) | Rootstock name | Number of sites |
|---|---|---|
| B.9Europe | B.9 Europe | 10 |
| B.9Treco | B.9 Treco | 10 |
| CG.3007 | CG.3007 | 2 |
| CG.3041 | G.41 | 2 |
| CG.5935 | G.935 | 2 |
| G.11 | G.11 | 1 |
| JM.1 | JM.1 | 3 |
| JM.2 | JM.2 | 3 |
| JM.7 | JM.7 | 3 |
| M.9B756 | M.9 Burgmer 756 | 9 |
| M.9Nic29 | M.9 Nic 29 | 9 |
| M.9T337 | M.9 NAKBT337 | 9 |
| M.26EMLA | M.26 EMLA | 9 |
| M.26NAKB | M.26 NAKB | 9 |
| PiAu36-2 | PiAu 36-2 | 1 |
| PiAu51-4 | PiAu 51-4 | 4 |
| PiAu51-11 | PiAu 51-11 | 4 |
| PiAu56-83 | PiAu 56-83 | 1 |
| P.14 | P.14 | 9 |
| Supp.4 | Supporter 4 | 9 |

**Send 2006 data via email by January 1, 2008 to:**

Wesley R. Autio (autio@pssci.umass.edu)

# Protocol for 2008

*Tree management.*

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

*Collect the follow data for each tree in 2008.*

A. Root suckers: the number removed and counted, August.
B. Yield: weight (0.1 kg) of all fruit per tree at harvest.
C. Fruit weight: estimate average fruit weight (g) with a sample of at least 50 fruit (if available).
D. Trunk size: trunk circumference 25 cm above the graft union (mm), October.
E. Status: 0=dead, 1=alive, and 2=missing data, October.

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Table 3. Protocol for the submission of data collected in 2007. Submit data via email (autio@pssci.umass.edu) by January 1, 2008.

| STATE | | 2002 Apple Rootstock Trial | | | DATA FOR 2007 | |
|---|---|---|---|---|---|---|
| ROOT | REP | STATUS 2=MISS DATA* 1=ALIVE 0=DEAD | NUMBER OF ROOT SUCKERS | YIELD PER TREE (kg) | AVERAGE FRUIT WEIGHT (g) | FALL TRUNK CIRC (mm) |
| B.9Europe | 1 | X | X | X | X | X |
| B.9Europe | 2 | X | X | X | X | X |
| B.9Europe | 3 | X | X | X | X | X |
| . | . | . | . | . | . | . |
| . | . | . | . | . | . | . |
| . | . | . | . | . | . | . |
| Supp.4 | 4 | X | X | X | X | X |
| Supp.4 | 5 | X | X | X | X | X |
| Supp.4 | 6 | 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.

Compare 2007 data with previous years to make sure that status is consistent and tree data are correct, i.e. trees have not shrunk appreciably from 2006 to 2007.

## 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.9Treco | 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 |