

2010 NC-140 Apple Rootstock Trial in Massachusetts

Wesley R. Autio, James S. Krupa, and Jon M. Clements Department of Plant, Soil, & Insect Sciences, University of Massachusetts

In 2010, a new apple rootstock trial was established by the NC-140 Rootstock Research Committee at several locations in the United States, Canada, and Mexico. Varieties include Honeycrisp in the northern locations and Fuji in southern locations. In

Cornell-Geneva	Bu dag ovsky
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	

Massachusetts, the trial hasHoneycrisp 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 include nine new Cornell-Geneva rootstock selections which have commercial potential. It also has 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 controls, B.9 as the smallest tree, a small (NAKBT337) and large (Pajam 2) clone of M.9, and M.26 EMLA.

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

Please see the map of this trial (planted on May 11, 2010) on the second page of this factsheet.

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 more and more difficult. This likely will be the last large-scale apple rootstock trial coordinated by NC-140. The future will include more targeted trials looking at specific physiological differences among rootstocks or at new clones but only in a handful of locations.

UMass Extension Factsheet F-137

2010 NC-140 Apple Rootstock Trial

Planted May 11, 2010 Spacing 4' x 12'

	NORTH	
Suncris p/B 9 Bu d 70-6-8	Rep 1	Suncrisp/B.9 M.26EMLA
Bu d 70-6-8	keh 1	M .26EMLA
Bu d 70-6-8 Geneva 935 TC		Bud 7-3-150 Bud 7-3-150
Geneva 3001		Bud 7-3-150 Bud 7-3-150
Geneva 41 N		Geneva 202 N
Geneva 41 N Geneva 41 N		Geneva 202 N Geneva 11
Geneva 41 TC		Geneva 11
Geneva 2034 M.9T337		Geneva 11 Geneva 935 N
M.9T337		Geneva 935 N
M.9T337 Bud 7 1-7-22		Geneva 4814 Geneva 4814
Bud 7 1-7-22		Geneva 4003
Geneva 4214 Geneva 4214		Geneva 4003 Supporter 3
Bud 6 7-5-32		Supporter 3
Bud 6 7-5-32		Geneva 202 TC
Bud 6 7-5-32 Bud 9		Geneva 202 TC M.9Pajam2
Bud 9		M. 9Pajam2
Bud 9 Geneva 4013		M.9Pajam2 Geneva 4004
Geneva 5087		B ud 70-20-20
Bud 64-194 Bud 64-194		B ud 70-20-20 B ud 70-20-20
Geneva 5202		PiAu 51-11
Geneva 5202		PiAu 51-11
Bud 10 Bud 10		PiAu 51-11 Bud 7-20-21
PiA u 9-90		Bud 7-20-21
PiAu 9-90 Suncris p/B 9		Bud 7-20-21 Suncris p/B.9
Geneva 3001	Rep 2	Geneva 935 N
Geneva 5087		Geneva 935 N Bud 9
Geneva 202 TC Geneva 202 TC		Bud 9
Bud 7-3-150 Bud 7-3-150		Bud 9
Bud 7-3-150 Bu d 70-6-8		Geneva 4814 Geneva 4814
Bu d 70-6-8		Geneva 4004
Bu d 70-6-8 Geneva 41 TC		Supporter 3 Bud 7-20-21
Bud 10		Bud 7-20-21
Bud 10 Bud 67-5-32		Bud 7-20-21 Geneva 11
Bud 6 7-5-32		Geneva 11
Geneva 935 TC Geneva 2034		Geneva 11
Bud 64-194		M. 9Pajam2 M. 9Pajam2
Bud 64-194		M. 9Pajam2
PiAu 9-90 PiAu 9-90		M.9T337 M.9T337
Geneva 4214		M.9T337
Geneva 4214 Pi Au 51-11		Bud 71-7-22 Bud 71-7-22
Pi Au 51-11		M.26EMLA
Pi Au 51-11 Geneva 4003		M .26EMLA Geneva 202 N
Bud 70-20-20		Geneva 202 N
Bud 70-20-20 Bud 70-20-20		Geneva 5202 Geneva 5202
Watermelon/B.9		Geneva 41 N
Watermelon/B.9		Geneva 41 N
W atermelo n/B 9 Suncris p/B 9		Geneva 41 N Suncris p/B.9
Bud 64-194	Rep 3	M.9T337
Geneva 4814		M.9T337
Geneva 4814		M. 9T337
Geneva 4814 Geneva 11		M.9T337 Geneva 5087
Geneva 11 Geneva 11		Geneva 5087 Geneva 4214
Geneva 11		Geneva 5087
Geneva 11 Geneva 11 Geneva 202 TC Bud 7 1:7-22 Pi Au 51-11		Geneva 5087 Geneva 4214 Geneva 4214 B ud 70-6-8 B ud 70-6-8
Geneva 11 Geneva 11 Geneva 202 TC Bud 7 1-7-22 Pi Au 51-11 Pi Au 51-11		Geneva 5087 Geneva 4214 Geneva 4214 B ud 70-6-8 B ud 70-6-8 B ud 70-6-8
Geneva 11 Geneva 11 Geneva 202 TC Bud 7 1-7-22 Pi Au 51-11 Pi Au 51-11 Bud 70-20-20 Bud 70-20-20		Geneva 5087 Geneva 4214 Geneva 4214 B ud 70-6-8 B ud 70-6-8 B ud 70-6-8 M .Z6EMLA Geneva 4004
Geneva 11 Geneva 11 Geneva 202 TC Bud 7 1.7-22 PiAu 51-11 PiAu 51-11 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20		Geneva 5087 Geneva 4214 Geneva 4214 B ud 70-6-8 B ud 70-6-8 B ud 70-6-8 M _26EMLA Geneva 4004 Bud 67-5-32
Geneva 11 Geneva 11 Geneva 202 TC Bud 7 1-7-22 PiAu 51-11 PiAu 51-11 Bud 70-20-20 Bud 70-20-20 MyPajam2 MyPajam2		Geneva 5087 Geneva 4214 Geneva 4214 B ud 70-6-8 B ud 70-6-8 B ud 70-6-8 M .Z6EMLA Geneva 4004 Bud 67-5-32 B ud 67-5-32 Geneva 5202
Geneva 11 Geneva 202 TC Bud 7 1-7-22 PiAu 51-11 PiAu 51-11 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 MJPajam2 MJPajam2 MJPajam2		Geneva 5087 Geneva 4214 Geneva 4214 B ud 70-6-8 B ud 70-6-8 M ZGEMLA Geneva 4004 Bud 67-5-32 Bud 67-5-32 Geneva 5202 Geneva 5202
Geneva 11 Geneva 202 TC Bud 7 1-7-22 PiAu 51-11 PiAu 51-11 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 MJPajam2 MJPajam2 MJPajam2 Geneva 41 N Geneva 41 N		Geneva 5087 Geneva 4214 Geneva 4214 B ud 70-6-8 B ud 70-6-8 M JGEMLA Geneva 4004 Bud 67-5-32 Bud 67-5-32 Geneva 5202 Geneva 5202 Bud 9 Bud 9
Geneva 11 Geneva 11 Geneva 202 TC Bud 7 1-7-22 PiAu 51-11 PiAu 51-11 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 Mu9Pajam2 Mu9Pajam2 Geneva 41 N Geneva 41 N Geneva 403		Geneva 5087 Geneva 4214 Geneva 4214 B ud 70-6-8 B ud 70-6-8 M .26EMLA Geneva 4004 Bud 67-5-32 Bud 67-5-32 Geneva 5202 Geneva 5202 Bud 9 Bud 9 Bud 9
Geneva 11 Geneva 202 TC Bud 7 1-7-22 PiAu 51-11 PiAu 51-11 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 MJPajam2 MJPajam2 MJPajam2 Geneva 41 N Geneva 41 N		Geneva 5087 Geneva 4214 Geneva 4214 B ud 70-6-8 B ud 70-6-8 M JGEMLA Geneva 4004 Bud 67-5-32 Bud 67-5-32 Geneva 5202 Geneva 5202 Bud 9 Bud 9
Geneva 11 Geneva 202 TC Bud 71-7-22 PiAu 51-11 PiAu 51-11 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 Mu9Pajam2 Mu9Pajam2 Geneva 41 N Geneva 4003 Bud 7-20-21 Bud 7-20-21		Geneva 5087 Geneva 4214 Geneva 4214 B ud 70-6-8 B ud 70-6-8 B ud 70-6-8 M .26EMLA Geneva 4004 Bud 67-5-32 Bud 67-5-32 Geneva 5202 Geneva 5202 Geneva 5202 Bud 9 Bud 9 Bud 9 Bud 9 Bud 9 Bud 7-3-150 Bud 7-3-150 Bud 7-3-150
Geneva 11 Geneva 202 TC Bud 7 1-7-22 PiAu 51-11 PiAu 51-11 PiAu 51-11 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 MJSPajam2 MJSPajam2 MJSPajam2 Geneva 41 N Geneva 4003 Bud 7-20-21 Bud 7-20-21 Bud 7-20-21 Bud 7-20-21 Bud 7-20-21 Geneva 41 TC		Geneva 5087 Geneva 4214 Geneva 4214 B ud 70-6-8 B ud 70-6-8 B ud 70-6-8 M 26EMLA Geneva 4004 Bud 67-5-32 Bud 67-5-32 Geneva 5202 Geneva 5202 Bud 9 Bud 9 Bud 9 Bud 9 Bud 7-3-3150 Supporter 3 Bud 10
Geneva 11 Geneva 202 TC Bud 7 1-7-22 PiAu 51-11 PiAu 51-11 PiAu 51-11 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 M.9Pajam2 M.9Pajam2 M.9Pajam2 Geneva 41 N Geneva 4003 Bud 7-20-21 Bud 7-20-21 Bud 7-20-21 Geneva 41 TC Geneva 935 N Geneva 935 N		Geneva 5087 Geneva 4214 Geneva 4214 Bud70-6-8 Bud70-6-8 Bud70-6-8 M_56EMLA Geneva 4004 Bud 67-5-32 Bud 67-5-32 Geneva 5202 Geneva 5202 Bud 9 Bud 7-3-4150 Supporter 3 Bud 10 Bud 10 Geneva 2034
Geneva 11 Geneva 202 TC Bud 7-17-22 PiAu 51-11 PiAu 51-11 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 MJSPajam2 MJSPajam2 MJSPajam2 Geneva 41 N Geneva 4003 Bud 7-20-21 Bud 7-20-21 Bud 7-20-21 Geneva 407 Geneva 407 Geneva 408 Geneva 408 Bud 7-20-21 Bud 7-20-21 Geneva 305 N Geneva 305 N		Geneva 5087 Geneva 4214 Geneva 4214 B ud 70-6-8 B ud 70-6-8 B ud 70-6-8 M 26EMLA Geneva 4004 Bud 67-5-32 Bud 67-5-32 Geneva 5202 Geneva 5203
Geneva 11 Geneva 202 TC Bud 7-17-22 PiAu 51-11 PiAu 51-11 PiAu 51-11 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 MJPPajam2 MJPPajam2 MJPPajam2 Geneva 41 N Geneva 4003 Bud 7-20-21 Bud 7-20-21 Bud 7-20-21 Bud 7-20-21 Geneva 41TC Geneva 935 N Geneva 935 N Geneva 935 N Watermelon/R 9		Geneva 5087 Geneva 4214 Geneva 4214 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 M. 26EMLA Geneva 4004 Bud 67-5-32 Bud 67-5-32 Geneva 5202 Geneva 5202 Bud 9 Bud 9 Bud 9 Bud 7-3-150 Supporter 3 Bud 10 Bud 10 Geneva 2034 PiAu 9-90 Watermel on / B. 9 Watermel on / B. 9
Geneva 11 Geneva 202 TC Bud 7 1-7-22 PiAu 51-11 PiAu 51-11 PiAu 51-11 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 MuSPajam2 MuSPajam2 MuSPajam2 Geneva 41 N Geneva 41 N Geneva 4003 Bud 7 20-21 Bud 7 20-21 Bud 7 20-21 Geneva 3 1 TC Geneva 3 202 N Geneva 3 5 N Watermelon //6 9 Watermelon //6 9 Geneva 2034	Rep 4	Geneva 5087 Geneva 4214 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 M. 26EMLA Geneva 4004 Bud 67-5-32 Bud 67-5-32 Geneva 5202 Geneva 5202 Geneva 5202 Geneva 5205 Bud 9 Bud 9 Bud 9 Bud 9 Bud 9 Bud 9 Bud 9-3-150 Supporter 3 Bud 10 Geneva 2034 PiAug-9-90 Watermel on / B. 9 Watermel on / B. 9 PiAug-9-90
Geneva 11 Geneva 202 TC Bud 7 1-7-22 PiAu 51-11 PiAu 51-11 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 MyPajam2 MyPajam2 MyPajam2 Geneva 41 N Geneva 4003 Bud 7-20-21 Bud 7-20-21 Bud 7-20-21 Bud 7-20-21 Geneva 202 N Geneva 355 N Watermehon //8 9 Watermehon //8 9 Geneva 2034 Bud 7-1-22 Bud 7-1-22 Bud 70-6-8	Rep 4	Geneva 5087 Geneva 4214 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 M. 26EMLA Geneva 4004 Bud 67-5-32 Bud 67-5-32 Geneva 5202 Bud 9
Geneva 11 Geneva 202 TC Bud 7 1-7-22 PiAu 51-11 PiAu 51-11 PiAu 51-11 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 M.9Pajam2 M.9Pajam2 M.9Pajam2 Geneva 41 N Geneva 4003 Bud 7 20-21 Bud 7 20-21 Bud 7 20-21 Geneva 41 TC Geneva 935 N Geneva 935 N Geneva 935 N Watermebn //B 9 Watermebn //B 9 Watermebn //B 9 Bud 7 1-7-22 Bud 7 10-6-8 Bud 7 10-6-8	Rep 4	Geneva 5087 Geneva 4214 Geneva 4214 Bud70-6-8 Bud70-6-8 Bud70-6-8 M_56EMLA Geneva 4004 Bud 67-5-32 Bud 67-5-32 Geneva 5202 Geneva 5202 Geneva 5202 Bud 9 Bud 10 Bud 41 Supporter 3 Geneva 2034 Supporter 3 Geneva 935 N
Geneva 11 Geneva 202 TC Bud 7 1-7-22 PiAu 51-11 PiAu 51-11 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 MyPajam2 MyPajam2 MyPajam2 Geneva 41 N Geneva 4003 Bud 7-20-21 Bud 7-20-21 Bud 7-20-21 Bud 7-20-21 Geneva 202 N Geneva 355 N Watermehon //8 9 Watermehon //8 9 Geneva 2034 Bud 7-1-22 Bud 7-1-22 Bud 70-6-8	Rep 4	Geneva 5087 Geneva 4214 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 M. 26EMLA Geneva 4004 Bud 67-5-32 Bud 67-5-32 Geneva 5202 Bud 9
Geneva 11 Geneva 202 TC Bud 7 1-7-22 PiAu 51-11 PiAu 51-11 PiAu 51-11 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 M 5Pajam2 M 5Pajam2 M 5Pajam2 M 5Pajam2 Geneva 41 N Geneva 4003 Bud 7-20-21 Bud 7-20-6-8	Rep 4	Geneva 5087 Geneva 4214 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 M 26EMLA Geneva 4004 Bud 67-5-32 Geneva 5202 Geneva 5202 Geneva 5202 Bud 9 Bud 10 Bud 10 Geneva 6204 Geneva 6204 Fi August 10 Bud 10 Geneva 7-3-150 Supporter 3 Bud 10 Bud 10 Geneva 10 Geneva 2034 Fi August 10 Fi August 10 Fi August 10 Geneva 4035 Geneva 41 N Geneva 41 N Geneva 410
Geneva 11 Geneva 202 TC Bud 7 1-7-22 PiAu 51-11 PiAu 51-11 PiAu 51-11 PiAu 51-11 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 M.9Pajam2 M.9Pajam2 M.9Pajam2 M.9Pajam2 Geneva 41 N Geneva 4003 Bud 7 20-21 Bud 7 3-20-21 Bud 7 3-20-21 Bud 7 3-20-21 Bud 7 20-21 Bud 7 3-20-21 B	Rep 4	Geneva 5087 Geneva 4214 Geneva 4214 Bud70-6-8 Bud70-6-8 Bud70-6-8 Bud70-6-8 M_56EMLA Geneva 4004 Bud 67-5-32 Bud 67-5-32 Geneva 5202 Geneva 5202 Geneva 5202 Bud 9 Bud 7-3-150 Supporter 3 Bud 10 Geneva 2034 PiAu 9-90 Bud 641 94 Supporter 3 Geneva 935 N Geneva 41 N Geneva 41 N
Geneva 11 Geneva 202 TC Bud 7-17-22 PiAu 51-11 PiAu 51-11 Bud 70-20-20 Bud 70-20-21 Bud 70-20-21 Bud 70-20-21 Bud 70-20-21 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 Geneva 11 Geneva 11 Bud 70-20-20 Bud 70-20-2	Rep 4	Geneva 5087 Geneva 4214 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 M_2EM/LA Geneva 4004 Bud 67-5-32 Bud 67-5-32 Geneva 5202 Bud 9 Bud 10 Geneva 2034 PiAu 9-90 Watermelon/B. 9 PiAu 9-90 Bud 64-1 94 Supporter 3 Geneva 935 N Geneva 41 N Geneva 41 N Geneva 4103 M. 97337 M. 97337
Geneva 11 Geneva 202 TC Bud 7 1-7-22 PiAu 51-11 PiAu 51-11 PiAu 51-11 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 M.9Pajam2 M.9Pajam2 M.9Pajam2 Geneva 41 N Geneva 4003 Bud 7-20-21 Bud 7-20-21 Bud 7-20-21 Bud 7-20-21 Bud 7-20-22 Bud 7-20-22 Bud 7-20-22 Bud 7-20-22 Bud 7-20-21 Geneva 935 N Geneva 935 N Geneva 935 N Geneva 936 N Geneva 936 S Watermebn //8 9 Watermebn //8 9 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 Geneva 11 Geneva 11 Bud 70-20-20 Geneva 9004	Rep 4	Geneva 5087 Geneva 4214 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 M. Z6EMLA Geneva 4004 Bud 67-5-32 Geneva 5202 Geneva 5202 Geneva 5202 Bud 9 Bud 64-3-450 Supporter 3 Geneva 2034 PiAu 9-90 Bud 64-1 94 Supporter 3 Geneva 935 N Geneva 41 N
Geneva 11 Geneva 202 TC Bud 7 1-7-22 PiAu 51-11 PiAu 51-11 Bud 70-20-20 MJSPajam2 MJSPajam2 MJSPajam2 MJSPajam2 Geneva 41 N Geneva 4003 Bud 7-20-21 Bud 7-20-21 Bud 7-20-21 Bud 7-20-21 Bud 7-20-21 Bud 7-20-22 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 Geneva 11 Geneva 11 Geneva 11 Bud 70-20-20	Rep 4	Geneva 5087 Geneva 4214 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 M_2EM/LA Geneva 4004 Bud 67-5-32 Bud 67-5-32 Geneva 5202 Bud 9 Bud 10 Geneva 2034 PiAu 9-90 Watermelon/B. 9 PiAu 9-90 Bud 64-1 94 Supporter 3 Geneva 935 N Geneva 41 N Geneva 41 N Geneva 4103 M. 97337 M. 97337
Geneva 11 Geneva 202 TC Bud 7 1-7-22 PiAu 51-11 PiAu 51-11 PiAu 51-11 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 M 5Pajam2 M 5Pajam2 M 5Pajam2 M 5Pajam2 Geneva 41 N Geneva 4003 Bud 7-20-21 Geneva 935 N Geneva 935 N Watermehon B 9 Watermehon B 9 Watermehon B 9 Geneva 11 Geneva 10-6-8 Bud 70-6-8 Geneva 11 Geneva 11 Geneva 10-6 Bud 70-20-20 Bud 70-20-20 Geneva 202 N Bud 9 Bud 9	Rep 4	Geneva 5087 Geneva 4214 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 M. 26EMLA Geneva 4004 Bud 67-5-32 Geneva 5202 Geneva 5202 Geneva 5202 Bud 9 Bud 9 Bud 9 Bud 9 Bud 7-3-150 Supporter 3 Bud 10 Bud 10 Geneva 2034 PiAu9-90 Watermelon/B.9 PiAu9-90 Bud 64-194 Supporter 3 Geneva 350 Geneva 41 N Geneva 41 N Geneva 41 N Geneva 41 N Geneva 4103 M. 97337 M. 97337 M. 97337 Bud 7-3-150 Bud 10
Geneva 11 Geneva 202 TC Bud 7 1-7-22 PiAu 51-11 PiAu 51-11 PiAu 51-11 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 M.9Pajam2 M.9Pajam2 M.9Pajam2 M.9Pajam2 Geneva 41 N Geneva 4003 Bud 7-20-21 Bud 7-20-21 Bud 7-20-21 Bud 7-20-21 Bud 7-20-21 Bud 7-20-21 Bud 7-20-22 Bud 7-20-22 Geneva 935 N Geneva 935 N Watermelon //B 9 Watermelon //B 9 Watermelon //B 9 Geneva 2034 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 Geneva 11 Geneva 11 Bud 70-20-20 Bud 70-20-20 Geneva 4004 Geneva 2020 Bud 90-2020 Geneva 4004 Geneva 2020 Bud 90-2020	Rep 4	Geneva 5087 Geneva 4214 Geneva 4214 Bud70-6-8 Bud70-6-8 Bud70-6-8 Bud70-6-8 M.26EMLA Geneva 4004 Bud 67-5-32 Geneva 5202 Geneva 5202 Geneva 5202 Geneva 5202 Bud 9 Bud 10 Bud 10 Bud 10 Bud 10 Geneva 2034 PiAu 9-90 Bud 641 94 Supporter 3 Geneva 935 N Geneva 41 N Gen
Geneva 11 Geneva 202 TC Bud 7-17-22 PiAu 51-11 PiAu 51-11 PiAu 51-11 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 M/SPajam2 M/SPajam2 M/SPajam2 M/SPajam2 Geneva 41 N Geneva 4003 Bud 7-20-21 Bud 7-20-20 Geneva 935 N Watermehon /B 9 Watermehon /B 9 Geneva 11 Geneva 11 Geneva 11 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 Geneva 11 Geneva 11 Bud 70-20-20 Bud 9 Bud 9 Bud 9 Bud 9 Geneva 202 N	Rep 4	Geneva 5087 Geneva 4214 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 M 26EMLA Geneva 4004 Bud 67-5-32 Bud 67-5-32 Geneva 5202 Geneva 5202 Geneva 5202 Bud 9 Bud 10 Geneva 5202 Geneva 2034 PiAu 9-90 Watermel on // B. 9 PiAu 9-90 Bud 64-1 94 Supporter 3 Geneva 935 N Geneva 41 N Geneva 41 N Geneva 41 N Geneva 4003 M .9T337 M .9T337 M .9T337 Bud 7-3-450 Bud 7-3-450 Bud 7-3-450 Bud 7-3-450 Bud 7-3-450 Bud 7-20-21 Bud 10 Geneva 202 TC Bud 7-20-21
Geneva 11 Geneva 202 TC Bud 7 1-7-22 PiAu 51-11 PiAu 51-11 PiAu 51-11 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 M.9Pajam2 M.9Pajam2 M.9Pajam2 Geneva 41 N Geneva 4003 Bud 7 20-21 Bud 7 20-22 Bud 7 20-21 Geneva 935 N Geneva 935 N Geneva 935 N Geneva 936 N Geneva 936 N Geneva 937 N Geneva 937 N Geneva 938 N Geneva 2034 Bud 7 1-7-22 Bud 7 10-6-8 Bud 7 10-6-8 Bud 7 10-6-8 Bud 7 10-6-8 Geneva 11 Geneva 11 Bud 7 20-20 Bud 7 20-20 Bud 7 20-20 Bud 7 20-20 Geneva 4014 M.9Pajam2 M.9Pajam2 M.9Pajam2	Rep 4	Geneva 5087 Geneva 4214 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 M_5EMLA Geneva 4004 Bud 67-5-32 Geneva 5202 Geneva 5202 Geneva 5202 Bud 9 Bud 10 Bud 110 Geneva 41 N Geneva 4003 M.97337 M.97337 M.97337 Bud 7-3-150 Bud 7-3-150 Bud 7-3-150 Bud 7-3-150 Bud 7-3-150 Bud 10 Geneva 202 TC Bud 7-20-21 Bud 7-20-21
Geneva 11 Geneva 202 TC Bud 7 1-7-22 PiAu 51-11 PiAu 51-11 PiAu 51-11 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 M.9Pajam2 M.9Pajam2 M.9Pajam2 Geneva 41 N Geneva 4003 Bud 7-20-21 Bud 7-20-21 Bud 7-20-21 Bud 7-20-21 Geneva 41 TC Geneva 935 N Geneva 935 N Geneva 935 N Watermebn //B 9 Watermebn //B 9 Geneva 2024 Bud 70-6-8 Geneva 11 Bud 70-20-20 Bud 9 Geneva 4214 M.9Pajam2 M.9Pajam2 M.9Pajam2 M.9Pajam2 Geneva 41 TC	Rep 4	Geneva 5087 Geneva 4214 Geneva 4214 Bud70-6-8 Bud70-6-8 Bud70-6-8 Bud70-6-8 Bud70-6-8 M_5EMMLA Geneva 4004 Bud 67-5-32 Geneva 5202 Geneva 5202 Geneva 5202 Bud 9 Bud 10 Bud 10 Geneva 2034 PiAu 9-90 Bud 64-1 94 Supporter 3 Geneva 935 N Geneva 41 N Geneva
Geneva 11 Geneva 202 TC Bud 7 1-7-22 PiAu 51-11 PiAu 51-11 PiAu 51-11 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 MSPajam2 MSPajam2 MSPajam2 MSPajam2 Geneva 41 N Geneva 4003 Bud 7-20-21 Geneva 935 N Watermelon /B 9 Watermelon /B 9 Geneva 935 N Watermelon /B 9 Geneva 935 N Watermelon /B 9 Geneva 935 N Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 Geneva 11 Geneva 11 Geneva 11 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 Geneva 4004 Geneva 202 N Bud 9 Bud 9 Bud 9 Bud 9 Bud 9 Geneva 4214 MSPajam2 MSPajam2 Geneva 41TC Bud 67-5-32	Rep 4	Geneva 5087 Geneva 4214 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 M. 26EMLA Geneva 4004 Bud 67-5-32 Geneva 5202 Geneva 5202 Geneva 5202 Bud 9 Bud 9 Bud 9 Bud 9 Bud 7-3-150 Supporter 3 Bud 10 Bud 10 Geneva 2034 PiAu9-90 Watermelon/B.9 PiAu9-90 Bud 64-194 Supporter 3 Geneva 350 Geneva 41 N Geneva 4003 M. 97337 M. 97337 M. 97337 Bud 7-3-150 Bud 7-3-150 Bud 7-3-150 Bud 7-20-21 Bud 7-20-21 Bud 7-20-21 Bud 7-20-21 Geneva 5202 PiAu 51-11
Geneva 11 Geneva 202 TC Bud 7 1-7-22 PiAu 51-11 PiAu 51-11 PiAu 51-11 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 M.9Pajam2 M.9Pajam2 M.9Pajam2 Geneva 41 N Geneva 4003 Bud 7 20-21 Bud 7 20-21 Bud 7 20-21 Bud 7 20-21 Bud 7 20-22 Bud 7 20-22 Bud 7 20-22 Bud 7 20-22 Bud 7 20-21 Geneva 41 TC Geneva 935 N Geneva 935 N Geneva 935 N Geneva 936 N Geneva 941 TC Geneva 11 Geneva 11 Bud 70-6-8 Bud 70-0-20 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 Bud 9 Bud 9 Bud 9 Bud 9 Bud 9 Geneva 4214 M.9Pajam2 M.9Pajam2 M.9Pajam2 M.9Pajam2 Geneva 41 TC	Rep 4	Geneva 5087 Geneva 4214 Geneva 4214 Bud70-6-8 Bud70-6-8 Bud70-6-8 Bud70-6-8 Bud70-6-8 M_5EMMLA Geneva 4004 Bud 67-5-32 Geneva 5202 Geneva 5202 Geneva 5202 Bud 9 Bud 10 Bud 10 Geneva 2034 PiAu 9-90 Bud 64-1 94 Supporter 3 Geneva 935 N Geneva 41 N Geneva
Geneva 11 Geneva 202 TC Bud 7 1-7-22 PiAu 51-11 PiAu 51-11 PiAu 51-11 PiAu 51-11 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 Bud 70-20-20 M.9Pajam2 M.9Pajam2 M.9Pajam2 Geneva 41 N Geneva 4003 Bud 7-20-21 Bud 7-20-21 Bud 7-20-21 Bud 7-20-21 Geneva 41 TC Geneva 202 N Geneva 935 N Geneva 936 N Geneva 937 N Geneva 938 N Geneva 11 Geneva 11 Geneva 11 Geneva 11 Geneva 11 Geneva 11 Geneva 12 Geneva 4004 Geneva 4014 Geneva 4014 Geneva 417 Genev	Rep 4	Geneva 5087 Geneva 4214 Geneva 4214 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 Bud 70-6-8 M_26EMLA Geneva 4004 Bud 67-5-32 Geneva 5202 Geneva 5202 Geneva 5202 Bud 9 Bud 10 Bud 10 Bud 110 Geneva 5202 Full 9-90 Full 9-90 Full 9-90 Full 9-90 Bud 64-194 Supporter 3 Geneva 935 N Geneva 41 N Geneva 41 N Geneva 4003 M_9T337 M_9T337 M_9T337 M_9T337 M_9T337 M_9T337 Bud 7-3-150 Bud 7-3-150 Bud 7-3-150 Bud 7-3-150 Bud 7-3-150 Bud 7-20-21 Bud 7-20-21 Bud 7-20-21 Bud 7-20-21 Bud 7-20-21 Fulu 51-11 Fulu 51-11