## BIO 211 CURE DATA - Example filled-out data sheet for database submission

This is an example data sheet filled-out as if:

- 1. A group consisting of two students (John Smith and Lisa Simpson) had 8 experimental plants
  - a. The plants were of genotype COL70000 and SALK 99999C
  - b. Two of each genotype were grown in a high salt treatment and two of each genotype were grown in tap water
- 2. Three traits were measured at the first time point (1/1/13)
  - a. All sections of 211 measured rosette diameter (in millimeters)
  - b. John and Lisa's section measured number of rosette leaves as a class trait
  - c. John and Lisa chose number of flowers as their group trait to measure at the first time point
- 3. Four traits were measured at the second time point (2/15/13)
  - a. All sections of 211 measured fruit number
  - b. John and Lisa's section measured plant height as their class trait
  - c. John and Lisa chose to measure two traits as a group the length of the third fruit and the total number of branches
- 4. Looking at the metadata sheet you will see that John and Lisa studiously filled in information correctly in all yellow highlighted cells (as expected would Lisa Simpson ever not follow directions correctly?)
  - a. The traits "Number of rosette leaves," "Plant height," and "Total Number of Branches" already had codes designated (they are listed in the table on the instructions sheet).
  - b. John and Lisa had to come up with trait codes on their own for the other traits they measured ("Number of flowers," and "length of third fruit")
    - i. For both, they chose codes that were short but descriptive, didn't contain any spaces and did not begin with a number
  - c. John and Lisa also gave short but thorough descriptions of how they measured each trait in the second set of tables

<sup>\*</sup>Looking at the data sheet now you will see that each row represents a single measurement from a single plant. They measured seven traits in 8 plants and thus have 56 rows of data.

## Spring 2013 BIO 211 CURE Metadata: cells highlighted in yellow must be filled out!

**Step 1:** Fill out the table below with information about the class traits and group trait(s) you measured at each timepoint. The handout on the unPAK website explains what information to include. (Note: not all groups will have a group trait 2 and group trait 4)

MEASUREMENTS AT 1ST TIMEPOINT							
TRAIT	TRAIT TRAIT CODE UNITS DESCRIPTION UNIT CODE						
number of rosette							
leaves	rleafnum	indvidual leaves	individual leaves				
number of flowers	flower_num	individual flowers	individual flowers				

MEASUREMENTS AT 2ND TIMEPOINT								
TRAIT	TRAIT TRAIT CODE UNITS DESCRIPTION UNIT CODE							
plant height	height_snapshot	centimeters	cm					
length of third								
fruit								
total number of								
branches	totalbranch_snapshot	individual branches	individual branches					

Step 2: Fill out the tables below with information detailing how you measured each trait.

MEASUREMENTS AT 1ST TIMEPOINT					
TRAIT	TRAIT CODE	DESCRIPTION OF MEASUREMENT TECHNIQUE			
		measured the diameter at the widest point using a			
Rosette diameter	rdiam_snapshot	ruler			
Class trait 1	rleafnum	counted the number of individual rosette leaves			
Group trait 1	flower num	counted the number of flowers (including buds, excluding fruits)			
5.50p t. die 1					

MEASUREMENTS AT 2ND TIMEPOINT					
TRAIT	TRAIT CODE	DESCRIPTION OF MEASUREMENT TECHNIQUE			
		counted the number of fruits larger than 5mm in			
Fruit number	fruitnum_snapshot	length			
Class trait 2	height_snapshot	measured the height of the main branch using a ruler			
		measured the length of the third fruit (counted from			
Group trait 3	thirdfruit_length	the base of the plant up) using a ruler			
·		Counted the total number of branches (not counting			
Group trait 4	totalbranch_snapshot	the main stem)			

S13_211CURE_COPC_NOME_NOME_NOME_NOME_NOME_NOME_NOME_NOME	Experiment	Institution	Facility	Treatment	Accession	Plant_ID Trait	Value Units	Date_Measured	Name Contact
\$13,211CURE   COPC   NGH   fab	S13_211CURE	COFC	NGH	high salt	COL70000	1 rdiam_snapshot	14.2 mm	1/1/13	John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu
S13_21CURE_COTC_NOT_NOT_NOT_NOT_NOT_NOT_NOT_NOT_NOT_NOT	S13_211CURE	COFC	NGH	high salt	COL70000	2 rdiam_snapshot	13.1 mm	1/1/13	John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu
SAL 2   COPC   NOH   migh set   SALK 999999C   5   follow, anapsebot   10.2   mm   1/1/13   John Smith; Liss Simpson smithty@cdr, edu; simpsonf@cdr.edu; s	S13_211CURE	COFC	NGH	tap	COL70000	3 rdiam_snapshot	12 mm	1/1/13	John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu
S13_211CURE   OPC   NOH   up	S13_211CURE	COFC	NGH	tap	COL70000	4 rdiam_snapshot	9 mm	1/1/13	John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu
S13 211CURF   COPC   NGH   tap   SALK 999999C   Findam snapshot   4 mm   11/1/13   john Smith; Lisa Simpson mithigenic edu; simpsonificoric edu; simpsonif	S13_211CURE	COFC	NGH	high salt	SALK_999999C	5 rdiam_snapshot	10.2 mm	1/1/13	John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu
S12 21 CURE   COPC   NGH   high saft   COL70000	S13_211CURE	COFC	NGH	high salt	SALK_999999C	6 rdiam_snapshot	9.5 mm	1/1/13	John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu
S13 211CURE   COPC   NGH   high salt   COL70000   1   referrum   7   Individual leaves   11/1/13   John Smith; Liss Simpson immitigation, edu; sympsonification, as immitigation, edu; sympsonification, as immitigation, edu; sympsonification, as immitigation, edu; sympsonification, edu; sympsonifi	S13_211CURE	COFC	NGH	tap	SALK_999999C	7 rdiam_snapshot	6.8 mm	1/1/13	John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu
S13 211CURE   COPC   NGH   high salt   COL70000   1   referrum   7   Individual leaves   11/1/13   John Smith; Liss Simpson immitigation, edu; sympsonification, as immitigation, edu; sympsonification, as immitigation, edu; sympsonification, as immitigation, edu; sympsonification, edu; sympsonifi	S13_211CURE	COFC	NGH	tap	SALK_999999C	8 rdiam_snapshot	4 mm	1/1/13	John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu
S13_211CURE   COPC   NGH   Tap   COL70000   3   rleafnum   8   individual leaves   1,1/1,3   John Smith, Liss Simpson   smithy@cofc edu; simpsoni@cofc edu; simpson	S13_211CURE	COFC	NGH	high salt	COL70000	1 rleafnum	6 individual leaves	1/1/13	John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu
S13_211CURE   COPC   NGH   high salt   SALK_99999C   6   relamm   10   individual leaves   11/13   bins mith; Liss Simpson mith@coft.edu; simpson@coft.edu   Simpson mith@coft.edu   Simpson mith@coft.edu; simpson@coft.edu   Simpson mith@coft.edu   Simpson mith@co	S13_211CURE	COFC	NGH	high salt	COL70000	2 rleafnum	7 individual leaves	1/1/13	John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu
13.2   LICURE   COPC   NGH   high salt   SALK   999999C   5   resefnum   12   Individual leves   11/13   bnh Smith; Liss Simpson smithigeofe, edu; simpsonie/ofe, edu   13.2   LICURE   COPC   NGH   tap   SALK   999999C   7   resefnum   12   Individual leves   11/13   bnh Smith; Liss Simpson smithigeofe, edu; simpsonie/ofe, edu   13.2   LICURE   COPC   NGH   tap   SALK   99999C   7   resefnum   13   Individual leves   11/13   bnh Smith; Liss Simpson smithigeofe, edu; simpsonie/ofe, edu   13.2   LICURE   COPC   NGH   high salt   COLVO000   1   fower num   0   individual leves   11/13   bnh Smith; Liss Simpson smithigeofe, edu; simpsonie/ofe, edu   13.2   LICURE   COPC   NGH   high salt   COLVO000   1   fower num   0   individual flowers   11/13   bnh Smith; Liss Simpson smithigeofe, edu; simpsonie/ofe, edu   13.2   LICURE   COPC   NGH   tap   COLVO000   4   flower num   9   individual flowers   11/13   bnh Smith; Liss Simpson smithigeofe, edu; simpsonie/ofe, edu   13.2   LICURE   COPC   NGH   tap   COLVO000   4   flower num   9   individual flowers   11/13   bnh Smith; Liss Simpson smithigeofe, edu; simpsonie/ofe, edu   13.2   LICURE   COPC   NGH   tap   SALK   999999C   6   flower num   0   individual flowers   11/13   bnh Smith; Liss Simpson smithigeofe, edu; simpsonie/ofe, edu   13.2   LICURE   COPC   NGH   tap   SALK   999999C   6   flower num   0   individual flowers   11/13   bnh Smith; Liss Simpson smithigeofe, edu; simpsonie/ofe, edu   13.2   LICURE   COPC   NGH   tap   SALK   99999PC   6   flower num   0   individual flowers   11/13   bnh Smith; Liss Simpson smithigeofe, edu; simpsonie/ofe, edu   13.2   LICURE   COPC   NGH   tap   SALK   99999PC   6   flower num   0   individual flowers   11/13   bnh Smith; Liss Simpson smithigeofe, edu; simpsonie/ofe, edu   13.2   LICURE   COPC   NGH   tap   SALK   99999PC   6   flower num   0   individual flowers   11/13   bnh Smith; Liss Simpson smithigeofe, edu; simpsonie/ofe, edu   13.2   LICURE   COPC   NGH   tap   SALK   99999PC   6   flower num   0   individual	S13_211CURE	COFC	NGH	tap	COL70000	3 rleafnum		1/1/13	John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu
513_211CURE   COPC	S13_211CURE	COFC	NGH	tap	COL70000	4 rleafnum	8 individual leaves	1/1/13	John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu
S13_211CURE_COPC_NGH_tap	S13_211CURE	COFC	NGH	high salt	SALK_999999C	5 rleafnum	10 individual leaves	1/1/13	John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu
S13_211CURE_COPE_NGH_tap	S13_211CURE	COFC	NGH	high salt	SALK_999999C	6 rleafnum	12 individual leaves	1/1/13	John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu
S13_211CURE_COPC_NOFI   tap   SALK_99999C   8   refermum   13   Individual leaves   11/13   John Smith; Liss Simpson   smith)@cofc.edu; simpsonl@cofc.edu   S13_211CURE_COPC_NOFI   high salt   COL/70000   2   flower num   1   Individual flowers   11/13   John Smith; Liss Simpson   smith)@cofc.edu; simpsonl@cofc.edu   S13_211CURE_COPC_NOFI   tap   COL/70000   2   flower num   7   Individual flowers   11/13   John Smith; Liss Simpson   smith)@cofc.edu; simpsonl@cofc.edu   S13_211CURE_COPC_NOFI   tap   COL/70000   4   flower_num   9   Individual flowers   11/13   John Smith; Liss Simpson   smith)@cofc.edu; simpsonl@cofc.edu   S13_211CURE_COPC_NOFI   tap   COL/70000   4   flower_num   9   Individual flowers   11/13   John Smith; Liss Simpson   smith)@cofc.edu; simpsonl@cofc.edu   S13_211CURE_COPC_NOFI   tap   SALK_999999C   5   flower_num   0   Individual flowers   11/13   John Smith; Liss Simpson   smith)@cofc.edu; simpsonl@cofc.edu   S13_211CURE_COPC_NOFI   tap   SALK_99999C   5   flower_num   0   Individual flowers   11/13   John Smith; Liss Simpson   smith)@cofc.edu; simpsonl@cofc.edu   S13_211CURE_COPC_NOFI   tap   SALK_99999C   5   flower_num   8   Individual flowers   11/13   John Smith; Liss Simpson   smith)@cofc.edu; simpsonl@cofc.edu   S13_211CURE_COPC_NOFI   tap   SALK_99999C   5   flower_num   8   Individual flowers   11/13   John Smith; Liss Simpson   smith)@cofc.edu; simpsonl@cofc.edu   S13_211CURE_COPC_NOFI   tap   SALK_99999C   5   flower_num   8   Individual flowers   11/13   John Smith; Liss Simpson   smith)@cofc.edu; simpsonl@cofc.edu   S13_211CURE_COPC_NOFI   tap   SALK_99999C   5   flower_num   8   Individual flowers   11/13   John Smith; Liss Simpson   smith)@cofc.edu; simpsonl@cofc.edu   S13_211CURE_COPC_NOFI   tap   SALK_99999C   5   flower_num   8   Individual flowers   11/13   John Smith; Liss Simpson   smith)@cofc.edu; simpsonl@cofc.edu   S13_211CURE_COPC_NOFI   tap   SALK_99999C   5   flower_num   8   Individual flowers   11/13   John Smith; Liss Simpson   smith)@cofc.edu; simpsonl@cofc	S13_211CURE	COFC	NGH	tap	SALK_999999C	7 rleafnum	11 individual leaves	1/1/13	John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu
S13 211URE   COPC   NGH	S13_211CURE	COFC	NGH	tap	SALK_999999C	8 rleafnum	13 individual leaves	1/1/13	
131 211 CURE   COPC   NGH   high salt   COL70000   2   flower num   1   individual flowers   1/1/13   John Smith; Liss Simpson ismthigeofic.edu; simpsoni@cofi.edu   131 211 CURE   COPC   NGH   tap   COL70000   4   flower num   9   individual flowers   1/1/13   John Smith; Liss Simpson ismthigeofic.edu; simpsoni@cofi.edu   131 211 CURE   COPC   NGH   high salt   SALK 999999C   5   flower num   0   individual flowers   1/1/13   John Smith; Liss Simpson   smithy@cofi.edu; simpsoni@cofi.edu   131 211 CURE   COPC   NGH   high salt   SALK 999999C   5   flower num   0   individual flowers   1/1/13   John Smith; Liss Simpson   smithy@cofi.edu; simpsoni@cofi.edu   131 211 CURE   COPC   NGH   tap   SALK 999999C   7   flower num   0   individual flowers   1/1/13   John Smith; Liss Simpson   smithy@cofi.edu; simpsoni@cofi.edu   131 211 CURE   COPC   NGH   tap   SALK 999999C   7   flower num   8   individual flowers   1/1/13   John Smith; Liss Simpson   smithy@cofi.edu; simpsoni@cofi.edu   131 211 CURE   COPC   NGH   high salt   COL700000   2   fruitnum.snapshot   2   individual fruits   2/15/13   John Smith; Liss Simpson   smithy@cofi.edu; simpsoni@cofi.edu   131 211 CURE   COPC   NGH   high salt   COL700000   2   fruitnum.snapshot   2   individual fruits   2/15/13   John Smith; Liss Simpson   smithy@cofi.edu; simpsoni@cofi.edu   131 211 CURE   COPC   NGH   tap   COL700000   3   fruitnum.snapshot   2   individual fruits   2/15/13   John Smith; Liss Simpson   smithy@cofi.edu; simpsoni@cofi.edu   131 211 CURE   COPC   NGH   tap   COL700000   3   fruitnum.snapshot   3   individual fruits   2/15/13   John Smith; Liss Simpson   smithy@cofi.edu; simpsoni@cofi.edu   131 211 CURE   COPC   NGH   tap   COL700000   3   fruitnum.snapshot   4   individual fruits   2/15/13   John Smith; Liss Simpson   smithy@cofi.edu; simpsoni@cofi.edu   131 211 CURE   COPC   NGH   tap   COL70000   4   individual fruits   2/15/13   John Smith; Liss Simpson   smithy@cofi.edu; simpsoni@cofi.edu   131 211 CURE   COPC   NGH   tap   COL70000   5   individu	S13_211CURE	COFC	NGH	high salt	COL70000	1 flower_num	0 individual flowers	1/1/13	John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu
S13_211CURE   COPC   NGH   tap   COL70000   3   flower_num   7   individual flowers   1/1/13   John Smith; Lisa Simpson   smith@cofc.edu; simpsonlecofc.edu   S13_211CURE   COPC   NGH   high salt   SALK   999999C   5   flower_num   0   individual flowers   1/1/13   John Smith; Lisa Simpson   smith@cofc.edu; simpsonlecofc.edu   S13_211CURE   COPC   NGH   high salt   SALK   999999C   7   flower_num   0   individual flowers   1/1/13   John Smith; Lisa Simpson   smith@cofc.edu; simpsonlecofc.edu   S13_211CURE   COPC   NGH   tap   SALK   999999C   7   flower_num   5   individual flowers   1/1/13   John Smith; Lisa Simpson   smith@cofc.edu; simpsonlecofc.edu   S13_211CURE   COPC   NGH   tap   SALK   99999C   7   flower_num   5   individual flowers   1/1/13   John Smith; Lisa Simpson   smith@cofc.edu; simpsonlecofc.edu   S13_211CURE   COPC   NGH   high salt   COL70000   1   fruitnum_snapshot   0   individual flowers   1/1/13   John Smith; Lisa Simpson   smith@cofc.edu; simpsonlecofc.edu   S13_211CURE   COPC   NGH   high salt   COL70000   2   fruitnum_snapshot   0   individual flowers   1/1/13   John Smith; Lisa Simpson   smith@cofc.edu; simpsonlecofc.edu   S13_211CURE   COPC   NGH   high salt   SALK   999999C   3   fruitnum_snapshot   7   individual flowers   1/1/13   John Smith; Lisa Simpson   smith@cofc.edu; simpsonlecofc.edu   smith@cofc.edu;	S13_211CURE	COFC	NGH	high salt	COL70000	2 flower_num	1 individual flowers	1/1/13	
S13 211CURE   COFC   NGH   holp salt   SALK 999999C   5   flower num   0   Individual flowers   1/1/13   John Smith; Lisa Simpson   smith@cofc.edu; simpsonle@cfc.edu; simpsonle@cfc.e	S13_211CURE	COFC	NGH			3 flower_num	7 individual flowers		
S13_211CURE   COPC   NGH   high salt   SALK, 999999C   6   flower num   0   Individual flowers   11/113   John Smith; Liss Simpson   smith@coft.edu; simpsonl@coft.edu   S13_211CURE   COPC   NGH   tap   SALK, 999999C   6   flower num   0   Individual flowers   11/113   John Smith; Liss Simpson   smith@coft.edu; simpsonl@coft.edu   S13_211CURE   COPC   NGH   tap   SALK, 99999C   8   flower num   8   Individual flowers   11/113   John Smith; Liss Simpson   smith@coft.edu; simpsonl@coft.edu   S13_211CURE   COPC   NGH   high salt   COL70000   1   fruitnum snapshot   0   Individual fruits   21/51/3   John Smith; Liss Simpson   smith@coft.edu; simpsonl@coft.edu   S13_211CURE   COPC   NGH   high salt   COL70000   2   fruitnum snapshot   2   Individual fruits   21/51/3   John Smith; Liss Simpson   smith@coft.edu; simpsonl@coft.edu   S13_211CURE   COPC   NGH   tap   COL70000   4   fruitnum snapshot   9   Individual fruits   21/51/3   John Smith; Liss Simpson   smith@coft.edu; simpsonl@coft.edu   S13_211CURE   COPC   NGH   tap   COL70000   4   fruitnum snapshot   9   Individual fruits   21/51/3   John Smith; Liss Simpson   smith@coft.edu; simpsonl@coft.edu   S13_211CURE   COPC   NGH   high salt   SALK   S99999C   6   fruitnum snapshot   5   Individual fruits   21/51/3   John Smith; Liss Simpson   smith@coft.edu; simpsonl@coft.edu   S13_211CURE   COPC   NGH   high salt   SALK   S99999C   6   fruitnum snapshot   5   Individual fruits   21/51/3   John Smith; Liss Simpson   smith@coft.edu; simpsonl@coft.edu   S13_211CURE   COPC   NGH   high salt   SALK   S99999C   6   fruitnum snapshot   5   Individual fruits   21/51/3   John Smith; Liss Simpson   smith@coft.edu; simpsonl@coft.edu   S13_211CURE   COPC   NGH   high salt   COL70000   1   height snapshot   10   Individual fruits   21/51/3   John Smith; Liss Simpson   smith@coft.edu; simpsonl@coft.edu   S13_211CURE   COPC   NGH   high salt   COL70000   2   height snapshot   10   Individual fruits   21/51/3   John Smith; Liss Simpson   smith@coft.edu; simpsonl@coft.edu   S13_211	S13_211CURE	COFC	NGH	tap		4 flower_num	9 individual flowers	1/1/13	John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu
S13_211CURE   COPF		COFC	NGH	high salt	SALK_999999C	5 flower_num	0 individual flowers	1/1/13	John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu
S12 211CURE COFC   NGH   ap	S13_211CURE	COFC	NGH	high salt	SALK_999999C		0 individual flowers	1/1/13	
S13 211CURE COPC   NGH   high salt   COL70000   1 fruitnum snapshot   Col70000   2 fruitnum snapshot   Col70000   3 fruitnum snapshot   Col70000   4 fruitnum snapshot   Col70000   Col70	S13_211CURE	COFC	NGH	tap	SALK_999999C	7 flower_num	5 individual flowers	1/1/13	John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu
S13 211CURE COPC NGH high salt CO/70000   2 fruitnum. snapshot   2 individual fruits   2/15/13 John Smith; Lisa Simpson smith@cofc.edu; simpson@cofc.edu   S13 211CURE COPC NGH tap CO/70000   4 fruitnum. snapshot   9 individual fruits   2/15/13 John Smith; Lisa Simpson smith@cofc.edu; simpson@cofc.edu   S13 211CURE COPC NGH high salt SALK 99999C   5 fruitnum. snapshot   9 individual fruits   2/15/13 John Smith; Lisa Simpson smith@cofc.edu; simpson@cofc.edu   S13 211CURE COPC NGH high salt SALK 99999C   6 fruitnum. snapshot   6 individual fruits   2/15/13 John Smith; Lisa Simpson smith@cofc.edu; simpson@cofc.edu   S13 211CURE COPC NGH high salt SALK 99999C   7 fruitnum. snapshot   10 individual fruits   2/15/13 John Smith; Lisa Simpson smith@cofc.edu; simpson@cofc.edu   S13 211CURE COPC NGH high salt SALK 99999C   7 fruitnum. snapshot   10 individual fruits   2/15/13 John Smith; Lisa Simpson smith@cofc.edu; simpson@cofc.edu   S13 211CURE COPC NGH high salt COL/70000   1 height snapshot   10 cm   2/15/13 John Smith; Lisa Simpson smith@cofc.edu; simpson@cofc.edu   S13 211CURE COPC NGH high salt COL/70000   1 height snapshot   10 cm   2/15/13 John Smith; Lisa Simpson smith@cofc.edu; simpson@cofc.edu   S13 211CURE COPC NGH high salt COL/70000   3 height, snapshot   10 cm   2/15/13 John Smith; Lisa Simpson smith@cofc.edu; simpson@cofc.edu   S13 211CURE COPC NGH high salt COL/70000   3 height, snapshot   16.8 cm   2/15/13 John Smith; Lisa Simpson smith@cofc.edu; simpson@cofc.edu   S13 211CURE COPC NGH high salt COL/70000   4 height, snapshot   16.8 cm   2/15/13 John Smith; Lisa Simpson smith@cofc.edu; simpson@cofc.edu   S13 211CURE COPC NGH high salt SALK 999999C   5 height, snapshot   9.1 cm   2/15/13 John Smith; Lisa Simpson smith@cofc.edu; simpson@cofc.edu   S13 211CURE COPC NGH high salt SALK 999999C   5 height, snapshot   9.1 cm   2/15/13 John Smith; Lisa Simpson smith@cofc.edu; simpson@cofc.edu   S13 211CURE COPC NGH high salt SALK 999999C   5 height, snapshot   12.7 cm   2/15/13 John Smith; Lisa Simpson smith@	S13_211CURE	COFC	NGH	tap	SALK_999999C	8 flower_num	8 individual flowers	1/1/13	John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu
\$13 211CURE COPC NGH	S13_211CURE	COFC	NGH	high salt	COL70000	1 fruitnum_snapshot	0 individual fruits	2/15/13	John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu
\$13 211CURE COPC NGH	S13 211CURE	COFC	NGH	high salt	COL70000	2 fruitnum snapshot	2 individual fruits	2/15/13	John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu
S13_211CURE   COPC   NGH   Iap   COL70000   4   Iruturum_snapshot   9   Individual fruits   2/15/13   John Smith; Lisa Simpson   smith)@cofe.edu; simpsonl@cofe.edu   S13_211CURE   COPC   NGH   NGH   Nigh salt   SALK 99999C   6   Iruturum_snapshot   6   Individual fruits   2/15/13   John Smith; Lisa Simpson   Smith)@cofe.edu; simpsonl@cofe.edu   S13_211CURE   COPC   NGH   NGH   Lap   SALK 99999C   7   Iruturum_snapshot   10   Individual fruits   2/15/13   John Smith; Lisa Simpson   Smith)@cofe.edu; simpsonl@cofe.edu   S13_211CURE   COPC   NGH   NGH   SALK 99999C   7   Iruturum_snapshot   10   Individual fruits   2/15/13   John Smith; Lisa Simpson   Smith)@cofe.edu; simpsonl@cofe.edu   S13_211CURE   COPC   NGH	S13 211CURE	COFC	NGH	tap	COL70000	3 fruitnum snapshot		2/15/13	John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu
S13 211CURE   COFC   NGH   high salt   SALK 999999C   5   Fruithum snapshot   5   individual fruits   2/15/13   John Smith; Lisa Simpson   smith@cofc.edu; simpson@cofc.edu   Simpson@	S13_211CURE	COFC	NGH	tap	COL70000				
S13 211CURE COFC NGH tap SALK 99999C	S13 211CURE	COFC	NGH	high salt	SALK 999999C	5 fruitnum snapshot		2/15/13	
S13 211CURE   COFC   NGH   tap   SALK 999999C   B   fruitnum_snapshot   12   individual fruits   2/15/13   John Smith; Lisa Simpson   smithi@cofc.edu; simpsoni@cofc.edu   S13 211CURE   COFC   NGH   high salt   COL70000   1   height_snapshot   12.2   cm   2/15/13   John Smith; Lisa Simpson   smithi@cofe.edu; simpsoni@cofc.edu   S13 211CURE   COFC   NGH   tap   COL70000   3   height_snapshot   12.2   cm   2/15/13   John Smith; Lisa Simpson   smithi@cofe.edu; simpsoni@cofe.edu   S13 211CURE   COFC   NGH   tap   COL70000   3   height_snapshot   16.8   cm   2/15/13   John Smith; Lisa Simpson   smithi@cofe.edu; simpsoni@cofe.edu   S13 211CURE   COFC   NGH   tap   COL70000   4   height_snapshot   18   cm   2/15/13   John Smith; Lisa Simpson   smithi@cofe.edu; simpsoni@cofe.edu   S13 211CURE   COFC   NGH   high salt   SALK 999999C   5   height_snapshot   5   cm   2/15/13   John Smith; Lisa Simpson   smithi@cofe.edu; simpsoni@cofe.edu   S13 211CURE   COFC   NGH   high salt   SALK 999999C   7   height_snapshot   12.7   cm   2/15/13   John Smith; Lisa Simpson   smithi@cofe.edu; simpsoni@cofe.edu   S13 211CURE   COFC   NGH   high salt   SALK 999999C   7   height_snapshot   14   cm   2/15/13   John Smith; Lisa Simpson   smithi@cofe.edu; simpsoni@cofe.edu   S13 211CURE   COFC   NGH   high salt   COL70000   1   thirdfruit length   6   mm   2/15/13   John Smith; Lisa Simpson   smithi@cofe.edu; simpsoni@cofe.edu   S13 211CURE   COFC   NGH   high salt   COL70000   2   thirdfruit length   7.2   mm   2/15/13   John Smith; Lisa Simpson   smithi@cofe.edu; simpsoni@cofe.edu   S13 211CURE   COFC   NGH   high salt   COL70000   3   thirdfruit length   8.9   mm   2/15/13   John Smith; Lisa Simpson   smithi@cofe.edu; simpsoni@cofe.edu   S13 211CURE   COFC   NGH   high salt   SALK 999999C   5   thirdfruit length   8.9   mm   2/15/13   John Smith; Lisa Simpson   smithi@cofe.edu; simpsoni@cofe.edu   S13 211CURE   COFC   NGH   high salt   SALK 999999C   5   thirdfruit length   5.8   mm   2/15/13   John Smith; Lisa Simpson   smithi@cofe.edu;	S13_211CURE	COFC	NGH	high salt	SALK_999999C	6 fruitnum_snapshot	6 individual fruits	2/15/13	
S13 211CURE COFC NGH	S13 211CURE	COFC	NGH	tap	SALK 999999C	7 fruitnum snapshot	10 individual fruits	2/15/13	John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu
S13 211CURE   COFC   NGH   high salt   COL70000   2   height snapshot   12.2 cm   2/15/13   John Smith; Lisa Simpson   smith]@cofc.edu; simpsonl@cofc.edu   S13 211CURE   COFC   NGH   tap   COL70000   4   height snapshot   16.8 cm   2/15/13   John Smith; Lisa Simpson   smith]@cofc.edu; simpsonl@cofc.edu   S13 211CURE   COFC   NGH   tap   COL70000   4   height snapshot   18 cm   2/15/13   John Smith; Lisa Simpson   smith]@cofc.edu; simpsonl@cofc.edu   S13 211CURE   COFC   NGH   high salt   SALK 999999C   5   height snapshot   9.1 cm   2/15/13   John Smith; Lisa Simpson   smith]@cofc.edu; simpsonl@cofc.edu   S13 211CURE   COFC   NGH   tap   SALK 999999C   7   height snapshot   12.7 cm   2/15/13   John Smith; Lisa Simpson   smith]@cofc.edu; simpsonl@cofc.edu   S13 211CURE   COFC   NGH   tap   SALK 999999C   7   height snapshot   12.7 cm   2/15/13   John Smith; Lisa Simpson   smith]@cofc.edu; simpsonl@cofc.edu   S13 211CURE   COFC   NGH   tap   SALK 999999C   8   height snapshot   12.7 cm   2/15/13   John Smith; Lisa Simpson   smith]@cofc.edu; simpsonl@cofc.edu   S13 211CURE   COFC   NGH   high salt   COL70000   1   thirdfruit length   6   mm   2/15/13   John Smith; Lisa Simpson   smith]@cofc.edu; simpsonl@cofc.edu   S13 211CURE   COFC   NGH   high salt   COL70000   2   thirdfruit length   7.2 mm   2/15/13   John Smith; Lisa Simpson   smith]@cofc.edu; simpsonl@cofc.edu   S13 211CURE   COFC   NGH   high salt   COL70000   3   thirdfruit length   8.9 mm   2/15/13   John Smith; Lisa Simpson   smith]@cofc.edu; simpsonl@cofc.edu   S13 211CURE   COFC   NGH   high salt   SALK 999999C   5   thirdfruit length   8.9 mm   2/15/13   John Smith; Lisa Simpson   smith]@cofc.edu; simpsonl@cofc.edu   S13 211CURE   COFC   NGH   high salt   SALK 999999C   5   thirdfruit length   8.9 mm   2/15/13   John Smith; Lisa Simpson   smith]@cofc.edu; simpsonl@cofc.edu   S13 211CURE   COFC   NGH   high salt   SALK 999999C   5   thirdfruit length   6.7 mm   2/15/13   John Smith; Lisa Simpson   smith]@cofc.edu; simpsonl@cofc.edu   S13 211CURE   C	S13_211CURE	COFC	NGH	tap	SALK_999999C	8 fruitnum_snapshot	12 individual fruits	2/15/13	John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu
S13 211CURE   COFC   NGH   high salt   COL70000   2   height snapshot   12.2   cm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13 211CURE   COFC   NGH   tap   COL70000   4   height snapshot   18   cm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13 211CURE   COFC   NGH   high salt   SALK   999999C   5   height snapshot   9.1   cm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13 211CURE   COFC   NGH   high salt   SALK   999999C   6   height snapshot   5   cm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13 211CURE   COFC   NGH   tap   SALK   999999C   7   height snapshot   12.7   cm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13 211CURE   COFC   NGH   tap   SALK   999999C   7   height snapshot   12.7   cm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13 211CURE   COFC   NGH   tap   SALK   999999C   8   height snapshot   12.7   cm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13 211CURE   COFC   NGH   high salt   COL70000   1   thirdfruit length   6   mm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13 211CURE   COFC   NGH   high salt   COL70000   2   thirdfruit length   7.2   mm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13 211CURE   COFC   NGH   tap   COL70000   3   thirdfruit length   8.9   mm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13 211CURE   COFC   NGH   tap   COL70000   4   thirdfruit length   8.9   mm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13 211CURE   COFC   NGH   high salt   SALK   999999C   5   thirdfruit length   6.7   mm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13 211CURE   COFC   NGH   high salt   SALK   999999C   5   thirdfruit length   9.3   mm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpso	S13_211CURE	COFC	NGH	high salt	COL70000	1 height_snapshot	10 cm	2/15/13	John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu
S13 211CURE	S13_211CURE	COFC	NGH	high salt	COL70000	2 height_snapshot	12.2 cm	2/15/13	
S13 211CURE   COFC   NGH   high salt   SALK 999999C   SALK 99999C   SA	S13_211CURE	COFC	NGH	tap	COL70000	3 height_snapshot	16.8 cm	2/15/13	John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu
S13_211CURE   COFC   NGH   high salt   SALK   999999C   6   height snapshot   12.7   cm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13_211CURE   COFC   NGH   tap   SALK   999999C   7   height snapshot   12.7   cm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13_211CURE   COFC   NGH   high salt   COL70000   1   thirdfruit, length   6   mm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13_211CURE   COFC   NGH   high salt   COL70000   2   thirdfruit, length   7.2   mm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13_211CURE   COFC   NGH   high salt   COL70000   3   thirdfruit, length   8.9   mm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13_211CURE   COFC   NGH   tap   COL70000   3   thirdfruit, length   8.9   mm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13_211CURE   COFC   NGH   high salt   SALK   999999C   5   thirdfruit, length   6.7   mm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13_211CURE   COFC   NGH   high salt   SALK   999999C   5   thirdfruit, length   5.8   mm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13_211CURE   COFC   NGH   high salt   SALK   999999C   6   thirdfruit, length   5.8   mm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13_211CURE   COFC   NGH   high salt   SALK   999999C   8   thirdfruit, length   5.8   mm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13_211CURE   COFC   NGH   high salt   COL70000   1   totalbranch   snapshot   1   individual branches   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13_211CURE   COFC   NGH   high salt   COL70000   2   totalbranch   snapshot   1   individual branches   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13_211CURE   COFC   NGH   high salt   SALK   999999C   5   totalbra	S13 211CURE	COFC	NGH	tap	COL70000		18 cm		
S13_211CURE   COFC   NGH   high salt   SALK   999999C   6   height snapshot   12.7   cm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13_211CURE   COFC   NGH   tap   SALK   999999C   7   height snapshot   12.7   cm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13_211CURE   COFC   NGH   high salt   COL70000   1   thirdfruit, length   6   mm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13_211CURE   COFC   NGH   high salt   COL70000   2   thirdfruit, length   7.2   mm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13_211CURE   COFC   NGH   high salt   COL70000   3   thirdfruit, length   8.9   mm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13_211CURE   COFC   NGH   tap   COL70000   3   thirdfruit, length   8.9   mm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13_211CURE   COFC   NGH   high salt   SALK   999999C   5   thirdfruit, length   6.7   mm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13_211CURE   COFC   NGH   high salt   SALK   999999C   5   thirdfruit, length   5.8   mm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13_211CURE   COFC   NGH   high salt   SALK   999999C   6   thirdfruit, length   5.8   mm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13_211CURE   COFC   NGH   high salt   SALK   999999C   8   thirdfruit, length   5.8   mm   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13_211CURE   COFC   NGH   high salt   COL70000   1   totalbranch   snapshot   1   individual branches   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13_211CURE   COFC   NGH   high salt   COL70000   2   totalbranch   snapshot   1   individual branches   2/15/13   John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu   S13_211CURE   COFC   NGH   high salt   SALK   999999C   5   totalbra	S13 211CURE	COFC	NGH	high salt	SALK 999999C	5 height snapshot	9.1 cm	2/15/13	John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu
S13_211CURE COFC NGH tap SALK_99999C 8 height_snapshot 14 cm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt COL70000 1 thirdfruit length 6 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt COL70000 2 thirdfruit length 7.2 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH tap COL70000 3 thirdfruit length 8.9 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH tap COL70000 4 thirdfruit length 8.8 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt SALK_99999C 5 thirdfruit length 6.7 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt SALK_99999C 6 thirdfruit length 6.1 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH tap SALK_99999C 7 thirdfruit length 6.1 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH tap SALK_99999C 8 thirdfruit length 9.3 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH tap SALK_99999C 8 thirdfruit length 9.3 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt COL70000 1 totalbranch_snapshot 1 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt COL70000 2 totalbranch_snapshot 6 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt SALK_99999C 5 totalbranch_snapshot 7 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt SALK_99999C 7 totalbranch_snapshot 5 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt SALK_99999C 7 totalbranch_snapshot 5 individual branches 2/15/13 John	S13_211CURE	COFC	NGH	high salt	SALK_999999C	6 height_snapshot	5 cm	2/15/13	John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu
\$\frac{\text{S13}}{\text{211CURE}}\$ COFC NGH high salt COL70000 1 thirdfruit length 6 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 313 211CURE COFC NGH tap COL70000 3 thirdfruit length 8.8 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513 211CURE COFC NGH tap COL70000 4 thirdfruit length 8.8 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513 211CURE COFC NGH high salt SALK_99999C 5 thirdfruit length 6.7 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513 211CURE COFC NGH high salt SALK_99999C 6 thirdfruit length 6.1 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513 211CURE COFC NGH tap SALK_99999C 7 thirdfruit length 5.8 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513 211CURE COFC NGH tap SALK_99999C 7 thirdfruit length 5.8 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513 211CURE COFC NGH tap SALK_99999C 8 thirdfruit length 5.8 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513 211CURE COFC NGH high salt COL70000 1 totalbranch snapshot 1 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513 211CURE COFC NGH high salt COL70000 2 totalbranch_snapshot 0 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513 211CURE COFC NGH high salt COL70000 3 totalbranch_snapshot 6 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513 211CURE COFC NGH high salt SALK_999999C 5 totalbranch_snapshot 2 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513 211CURE COFC NGH high salt SALK_999999C 5 totalbranch_snapshot 5 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513 211CURE COFC NGH high salt SALK_999999C 7 totalbranch_snapshot 5 individual branches 2/15/13 John Smith; Lisa Simp	S13_211CURE	COFC	NGH	tap	SALK_999999C	7 height_snapshot	12.7 cm	2/15/13	John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu
S13_211CURE COFC NGH high salt COL70000 1 thirdfruit length 6 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 3/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 3/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 5/13_211CURE COFC NGH tap COL70000 4 thirdfruit length 8.8 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 5/13_211CURE COFC NGH high salt SALK_99999C 5 thirdfruit length 6.7 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 5/13_211CURE COFC NGH high salt SALK_99999C 6 thirdfruit length 6.1 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 5/13_211CURE COFC NGH tap SALK_99999C 7 thirdfruit length 5.8 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 5/13_211CURE COFC NGH tap SALK_99999C 8 thirdfruit length 5.8 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 5/13_211CURE COFC NGH high salt COL70000 1 totalbranch snapshot 1 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 5/13_211CURE COFC NGH high salt COL70000 1 totalbranch_snapshot 0 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 5/13_211CURE COFC NGH high salt COL70000 3 totalbranch_snapshot 6 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 5/13_211CURE COFC NGH high salt COL70000 4 totalbranch_snapshot 7 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 5/13_211CURE COFC NGH high salt SALK_999999C 5 totalbranch_snapshot 2 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 5/13_211CURE COFC NGH high salt SALK_999999C 5 totalbranch_snapshot 5 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 5/13_211CURE COFC NGH high salt SAL	S13_211CURE	COFC	NGH	tap	SALK_999999C		14 cm		
S13_211CURE COFC NGH high salt COL70000 2 thirdfruit length 7.2 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu sim	S13_211CURE	COFC	NGH	high salt	COL70000	1 thirdfruit_length		2/15/13	
S13_211CURE COFC NGH high salt SALK_999999C 5 thirdfruit_length 6.7 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt SALK_999999C 5 thirdfruit_length 6.7 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt SALK_999999C 6 thirdfruit_length 6.1 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH tap SALK_999999C 7 thirdfruit_length 5.8 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH tap SALK_99999C 8 thirdfruit_length 9.3 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt COL70000 1 totalbranch_snapshot 1 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt COL70000 2 totalbranch_snapshot 0 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH tap COL70000 3 totalbranch_snapshot 6 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH tap COL70000 4 totalbranch_snapshot 7 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt SALK_99999C 5 totalbranch_snapshot 2 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt SALK_99999C 6 totalbranch_snapshot 3 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt SALK_99999C 7 totalbranch_snapshot 5 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt SALK_99999C 7 totalbranch_snapshot 5 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt SALK_99999C 7 totalbranch_snapshot 5 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; si	S13_211CURE	COFC	NGH		COL70000		7.2 mm		
S13_211CURE COFC NGH high salt SALK_99999C 5 thirdfruit_length 6.7 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt SALK_99999C 5 thirdfruit_length 6.7 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt SALK_99999C 6 thirdfruit_length 6.1 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH tap SALK_99999C 8 thirdfruit_length 5.8 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH tap SALK_99999C 8 thirdfruit_length 9.3 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt COL70000 1 totalbranch_snapshot 1 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt COL70000 2 totalbranch_snapshot 0 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH tap COL70000 3 totalbranch_snapshot 6 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH tap COL70000 4 totalbranch_snapshot 7 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt SALK_99999C 5 totalbranch_snapshot 2 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt SALK_99999C 6 totalbranch_snapshot 3 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt SALK_99999C 7 totalbranch_snapshot 5 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt SALK_99999C 7 totalbranch_snapshot 5 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt SALK_99999C 7 totalbranch_snapshot 5 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpso	S13_211CURE	COFC	NGH	tap	COL70000	3 thirdfruit_length	8.9 mm	2/15/13	John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu
S13_211CURE COFC NGH high salt SALK_99999C 6 thirdfruit_length 5.8 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513_211CURE COFC NGH tap SALK_99999C 7 thirdfruit_length 5.8 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513_211CURE COFC NGH tap SALK_99999C 8 thirdfruit_length 9.3 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513_211CURE COFC NGH high salt COL70000 1 totalbranch snapshot 1 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513_211CURE COFC NGH high salt COL70000 2 totalbranch_snapshot 0 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513_211CURE COFC NGH tap COL70000 3 totalbranch_snapshot 6 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513_211CURE COFC NGH tap COL70000 4 totalbranch snapshot 7 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513_211CURE COFC NGH high salt SALK_99999C 5 totalbranch snapshot 2 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513_211CURE COFC NGH high salt SALK_99999C 6 totalbranch_snapshot 3 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513_211CURE COFC NGH high salt SALK_99999C 7 totalbranch_snapshot 5 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513_211CURE COFC NGH high salt SALK_99999C 7 totalbranch_snapshot 5 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513_211CURE COFC NGH high salt SALK_99999C 7 totalbranch_snapshot 5 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513_211CURE COFC NGH high salt SALK_99999C 7 totalbranch_snapshot 5 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513_211CURE COFC NGH high salt SALK_99999C 7 totalbranch_snapshot 5 individual branches 2/15/13 John Smith;	S13_211CURE	COFC			COL70000	4 thirdfruit_length	8.8 mm		
S13_211CURE COFC NGH tap SALK_99999C 7 thirdfruit_length 5.8 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH tap SALK_99999C 8 thirdfruit_length 9.3 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt COL70000 1 totalbranch_snapshot 1 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt COL70000 2 totalbranch_snapshot 0 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH tap COL70000 3 totalbranch_snapshot 6 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH tap COL70000 4 totalbranch_snapshot 7 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt SALK_99999C 5 totalbranch_snapshot 2 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt SALK_99999C 6 totalbranch_snapshot 3 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt SALK_99999C 7 totalbranch_snapshot 5 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt SALK_99999C 7 totalbranch_snapshot 5 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu	S13_211CURE	COFC	NGH	high salt	SALK_999999C	5 thirdfruit_length	6.7 mm	2/15/13	John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu
S13_211CURE COFC NGH tap SALK_99999C 7 thirdfruit_length 5.8 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH tap SALK_99999C 8 thirdfruit_length 9.3 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt COL70000 1 totalbranch_snapshot 1 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt COL70000 2 totalbranch_snapshot 0 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH tap COL70000 3 totalbranch_snapshot 6 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH tap COL70000 4 totalbranch_snapshot 7 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt SALK_99999C 5 totalbranch_snapshot 2 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt SALK_99999C 6 totalbranch_snapshot 3 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt SALK_99999C 7 totalbranch_snapshot 5 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt SALK_99999C 7 totalbranch_snapshot 5 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu	S13_211CURE	COFC	NGH	high salt	SALK_999999C	6 thirdfruit_length	6.1 mm	2/15/13	John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu
S13_211CURE COFC NGH tap SALK_99999C 8 thirdfruit_length 9.3 mm 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt COL70000 1 totalbranch snapshot 1 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt COL70000 2 totalbranch snapshot 0 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH tap COL70000 3 totalbranch snapshot 6 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH tap COL70000 4 totalbranch snapshot 7 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt SALK_99999C 5 totalbranch snapshot 2 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt SALK_99999C 6 totalbranch snapshot 3 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH tap SALK_99999C 7 totalbranch_snapshot 5 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH tap SALK_99999C 7 totalbranch_snapshot 5 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu	S13_211CURE	COFC	NGH	tap	SALK_999999C	7 thirdfruit_length	5.8 mm	2/15/13	
S13_211CURE COFC NGH high salt COL70000 2 totalbranch_snapshot 0 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513_211CURE COFC NGH tap COL70000 3 totalbranch_snapshot 6 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513_211CURE COFC NGH tap COL70000 4 totalbranch_snapshot 7 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513_211CURE COFC NGH high salt SALK_99999C 5 totalbranch_snapshot 2 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513_211CURE COFC NGH high salt SALK_99999C 6 totalbranch_snapshot 3 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513_211CURE COFC NGH tap SALK_99999C 7 totalbranch_snapshot 5 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513_211CURE COFC NGH tap SALK_99999C 7 totalbranch_snapshot 5 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu	S13_211CURE	COFC	NGH		SALK_999999C	8 thirdfruit_length	9.3 mm		
S13_211CURE COFC NGH tap COL70000 3 totalbranch snapshot 6 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH tap COL70000 4 totalbranch snapshot 7 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt SALK_99999C 5 totalbranch_snapshot 2 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt SALK_99999C 6 totalbranch_snapshot 3 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH tap SALK_99999C 7 totalbranch_snapshot 5 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH tap SALK_99999C 7 totalbranch_snapshot 5 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu	S13_211CURE	COFC	NGH	high salt	COL70000	1 totalbranch_snapshot	1 individual branches	2/15/13	John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu
S13_211CURE COFC NGH tap COL70000 4 totalbranch snapshot 7 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513_211CURE COFC NGH high salt SALK_99999C 5 totalbranch_snapshot 2 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513_211CURE COFC NGH high salt SALK_99999C 6 totalbranch_snapshot 3 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513_211CURE COFC NGH tap SALK_99999C 7 totalbranch_snapshot 5 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513_211CURE COFC NGH tap SALK_99999C 7 totalbranch_snapshot 5 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu	S13_211CURE	COFC	NGH	high salt	COL70000	2 totalbranch_snapshot	0 individual branches	2/15/13	John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu
S13_211CURE COFC NGH high salt SALK_999999C 5 totalbranch_snapshot 2 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH high salt SALK_99999C 6 totalbranch_snapshot 3 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH tap SALK_99999C 7 totalbranch_snapshot 5 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu S13_211CURE COFC NGH tap SALK_99999C 7 totalbranch_snapshot 5 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu	S13_211CURE	COFC	NGH	tap	COL70000	3 totalbranch_snapshot	6 individual branches	2/15/13	John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu
S13_211CURE COFC NGH high salt SALK_999999C 6 totalbranch_snapshot 3 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu 513_211CURE COFC NGH tap SALK_999999C 7 totalbranch_snapshot 5 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu	S13_211CURE	COFC	NGH	tap	COL70000	4 totalbranch_snapshot	7 individual branches	2/15/13	John Smith; Lisa Simpson   smithj@cofc.edu; simpsonl@cofc.edu
S13_211CURE COFC NGH tap SALK_999999C 7 totalbranch_snapshot 5 individual branches 2/15/13 John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu	S13_211CURE	COFC	NGH	high salt	SALK_999999C	5 totalbranch_snapshot	2 individual branches	2/15/13	John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu
	S13_211CURE	COFC	NGH		SALK_999999C		3 individual branches		
S13_211CURE COFC NGH tap SALK_999999C 8 totalbranch_snapshot 8 individual branches 2/15/13 John Smith; Lisa Simpson smithi@cofc.edu; simpsonl@cofc.edu	S13_211CURE	COFC	NGH	tap	SALK_999999C	7 totalbranch_snapshot	5 individual branches	2/15/13	John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu
	S13_211CURE	COFC	NGH	tap	SALK_999999C	8 totalbranch_snapshot	8 individual branches	2/15/13	John Smith; Lisa Simpson smithj@cofc.edu; simpsonl@cofc.edu