

SUMMARIZATION - 1965 DATA - PROJECT 5016

Donald C. Zeiger

		<u>Leaf Nitrogen (%)</u>				<u>Leaf Phosphorus (%)</u>	
		<u>R. Del.</u>	<u>G. Del.</u>			<u>R. Del.</u>	<u>G. Del.</u>
	N ₁	2.24	1.98		N ₁	0.24	0.27
	N ₂	2.17	2.09		N ₂	0.24	0.23
	N ₃	2.26	2.32		N ₃	0.21	0.17
	N ₄	2.67	2.64		N ₄	0.16	0.16
Signif. At		$2\frac{1}{2}\%$	$\frac{1}{2}\%$	Signif. At		$\frac{1}{2}\%$	$\frac{1}{2}\%$
	P ₁	2.30	2.26		P ₁	0.22	0.20
	P ₂	2.37	2.26		P ₂	0.20	0.21
Signif. At		NS	NS	Signif. At		25%	NS

		<u>Leaf Potassium (%)</u>				<u>Leaf Calcium (%)</u>	
		<u>R. Del.</u>	<u>G. Del.</u>			<u>R. Del.</u>	<u>G. Del.</u>
	N ₁	1.85	1.94		N ₁	1.03	1.03
	N ₂	1.93	1.88		N ₂	1.02	1.09
	N ₃	1.90	1.59		N ₃	1.02	1.15
	N ₄	1.73	1.53		N ₄	1.06	1.17
Signif. At		NS	$\frac{1}{2}\%$	Signif. At		NS	NS
	P ₁	1.85	1.70		P ₁	1.02	1.07
	P ₂	1.85	1.76		P ₂	1.04	1.15
Signif. At		NS	25%	Signif. At		NS	25%

		<u>Leaf Magnesium (%)</u>				<u>Leaf Boron (ppm)</u>	
		<u>R. Del.</u>	<u>G. Del.</u>			<u>R. Del.</u>	<u>G. Del.</u>
	N ₁	0.43	0.38		N ₁	30	26
	N ₂	0.42	0.37		N ₂	29	25
	N ₃	0.40	0.49		N ₃	27	22
	N ₄	0.51	0.47		N ₄	25	20
Signif. At		$2\frac{1}{2}\%$	10%	Signif. At		$2\frac{1}{2}\%$	$2\frac{1}{2}\%$
	P ₁	0.44	0.39		P ₁	29	23
	P ₂	0.44	0.46		P ₂	27	24
Signif. At		NS	10%	Signif. At		$\frac{1}{2}\%$	NS

SUMMARIZATION - 1965 DATA - PROJECT 5016 (Cont.)

	Total Yield (Picked & Picked-Up [Bus.])			Total Yield/in. 1964 Trunk Circumference	
	R. Del.	G. Del.		R. Del.	G. Del.
N ₁	19.5	14.9	N ₁	0.791	0.801
N ₂	21.6	17.3	N ₂	0.862	0.866
N ₃	23.8	18.9	N ₃	0.931	0.885
N ₄	28.3	21.9	N ₄	1.038	1.004
Signif. At	NS	5 %	Signif. At	NS	25 %
P ₁	24.2	18.3	P ₁	0.944	0.892
P ₂	22.3	18.2	P ₂	0.867	0.886
Signif. At	NS	NS	Signif. At	25 %	NS

	Fruit Size (Box Count)			Fruit Size (Fruit Thinning Gauge)	
	R. Del.	G. Del.		R. Del.	G. Del.
N ₁	220	200	N ₁	2.28	2.39
N ₂	223	191	N ₂	2.27	2.39
N ₃	217	169	N ₃	2.32	2.50
N ₄	200	155	N ₄	2.39	2.54
Signif. At	NS	2½ %	Signif. At	10 %	25 %
P ₁	224	184	P ₁	2.28	2.43
P ₂	206	173	P ₂	2.35	2.48
Signif. At	2½ %	NS	Signif. At	5 %	25 %

	No. Apples Harvested (Calculated)			No. Apples/in. 1964 Trunk Circumference	
	R. Del.	G. Del.		R. Del.	G. Del.
N ₁	4,393	2,919	N ₁	176.0	157.9
N ₂	4,823	3,312	N ₂	191.8	165.6
N ₃	5,210	3,245	N ₃	203.3	151.5
N ₄	5,792	3,399	N ₄	211.2	155.6
Signif. At	NS	NS	Signif. At	NS	NS
P ₁	5,462	3,299	P ₁	212.0	161.9
P ₂	4,647	3,139	P ₂	179.2	153.4
Signif. At	10 %	NS	Signif. At	2½ %	NS

SUMMARIZATION - 1965 DATA - PROJECT 5016 (Cont.)

	Fruit Color	
	Photovolt	Color Chart
	R. Del.	G. Del.
N ₁	40.9	2.8
N ₂	40.2	2.8
N ₃	40.3	3.1
N ₄	35.7	4.3
Signif. At	2½ %	2½ %
P ₁	39.1	3.2
P ₂	39.5	3.3
Signif. At	NS	NS

	Fruit Firmness	
	Lbs.	
	R. Del.	G. Del.
N ₁	19.1	14.0
N ₂	19.0	13.7
N ₃	18.3	13.0
N ₄	17.4	13.0
Signif. At	5 %	2½ %
P ₁	18.7	13.5
P ₂	18.1	13.3
Signif. At	10 %	25 %

	Leaf Dry Weight (25 Lvs.-g.- 7/27-28/65)	
	R. Del.	G. Del.
	N ₁	7.4
N ₂	7.6	9.2
N ₃	7.2	11.1
N ₄	7.4	11.5
Signif. At	NS	2½ %
P ₁	7.7	10.2
P ₂	7.1	10.6
Signif. At	10 %	NS

	Soluble Solids (%)	
	R. Del.	G. Del.
	N ₁	12.0
N ₂	11.8	11.3
N ₃	11.7	11.9
N ₄	11.3	11.2
Signif. At	NS	NS
P ₁	11.5	11.3
P ₂	11.9	11.6
Signif. At	2½ %	25 %

	Trunk Circumference (in.)	
	R. Del.	G. Del.
	N ₁	24.50
N ₂	25.86	20.53
N ₃	26.49	22.01
N ₄	28.64	22.62
Signif. At	25 %	2½ %
P ₁	26.51	20.83
P ₂	26.23	21.23
Signif. At	NS	NS

	Trunk Circumference Increase (1964-1965) (In.)	
	R. Del.	G. Del.
	N ₁	1.11
N ₂	1.03	0.71
N ₃	1.17	0.92
N ₄	1.65	1.00
Signif. At	2½ %	5 %
P ₁	1.20	0.75
P ₂	1.29	0.84
Signif. At	NS	5 %

SUMMARIZATION - 1965 DATA - PROJECT 5120

Donald C. Zeiger

TOTAL GROWTH PER STION (IN.)
UPPER FIELD - FLETCHER

<u>MM101</u>	<u>MM102</u>	<u>MM104</u>	<u>MM105</u>	<u>MM106</u>	<u>MM108</u>	<u>MM109</u>	<u>MM110</u>	<u>M VII</u>	<u>SIGNIF.</u> <u>AT</u>
116.3	92.4	225.2	79.2	147.2	77.6	175.9	106.0	138.7	½%
	<u>G. DEL.</u>				<u>R. DEL.</u>			<u>SIGNIF. AT</u>	
	172.1				100.0			½%	

TREE HEIGHT (IN.)
UPPER FIELD - FLETCHER

<u>MM101</u>	<u>MM102</u>	<u>MM104</u>	<u>MM105</u>	<u>MM106</u>	<u>MM108</u>	<u>MM109</u>	<u>MM110</u>	<u>M VII</u>	<u>SIGNIF.</u> <u>AT</u>
77.3	70.5	93.7	66.5	87.7	74.5	85.2	72.3	69.0	½%
	<u>G. DEL.</u>				<u>R. DEL.</u>			<u>SIGNIF. AT</u>	
	80.6				77.9			NS	

NO. OF LATERAL SHOOTS
UPPER FIELD - FLETCHER

<u>MM101</u>	<u>MM102</u>	<u>MM104</u>	<u>MM105</u>	<u>MM106</u>	<u>MM108</u>	<u>MM109</u>	<u>MM110</u>	<u>M VII</u>	<u>SIGNIF.</u> <u>AT</u>
3.9	3.2	7.3	3.2	6.2	2.2	7.2	3.5	5.1	5%
	<u>G. DEL.</u>				<u>R. DEL.</u>			<u>SIGNIF. AT</u>	
	7.2				2.8			½%	

SUMMARIZATION - 1965 DATA - PROJECT 5120 (CONT.)

% OF LATERALS OVER 24" LONG
UPPER FIELD - FLETCHER

<u>MM101</u>	<u>MM102</u>	<u>MM104</u>	<u>MM105</u>	<u>MM106</u>	<u>MM108</u>	<u>MM109</u>	<u>MM110</u>	<u>M VII</u>	<u>SIGNIF. AT</u>
23.2	16.0	59.3	4.0	15.2	12.6	43.4	30.7	21.9	1%
<u>G. DEL.</u>			<u>R. DEL.</u>			<u>SIGNIF. AT</u>			
16.6			38.1			1/2%			

% OF LATERALS 12" TO 24" LONG
UPPER FIELD - FLETCHER

<u>MM101</u>	<u>MM102</u>	<u>MM104</u>	<u>MM105</u>	<u>MM106</u>	<u>MM108</u>	<u>MM109</u>	<u>MM110</u>	<u>M VII</u>	<u>SIGNIF. AT</u>
58.4	36.4	33.8	41.9	62.2	75.1	49.2	47.2	78.3	25%
<u>G. DEL.</u>			<u>R. DEL.</u>			<u>SIGNIF. AT</u>			
59.1			41.0			2 1/2%			

% OF LATERALS 6" TO 12" LONG*
UPPER FIELD - FLETCHER

<u>MM101</u>	<u>MM102</u>	<u>MM104</u>	<u>MM105</u>	<u>MM106</u>	<u>MM108</u>	<u>MM109</u>	<u>MM110</u>	<u>M VII</u>	<u>SIGNIF. AT</u>
6.2	25.6	3.0	19.0	10.4	12.5	8.8	5.7	0.0	1%
10.7	49.4	5.9	5.5	<u>G. DELICIOUS</u>		17.6	11.4	0.0	} 1/2%
1.7	1.9	0.0	32.5	5.8	0.0				
<u>G. DEL.</u>			<u>R. DEL.</u>			<u>SIGNIF. AT</u>			
16.9			4.4			1/2%			

* SHOOTS 6" AND UNDER COUNTED AS SPURS

SUMMARIZATION - 1965 DATA - PROJECT 5120 (CONT.)LENGTH OF TERMINAL SHOOT (IN.)
UPPER FIELD - FLETCHER

<u>MM101</u>	<u>MM102</u>	<u>MM104</u>	<u>MM105</u>	<u>MM106</u>	<u>MM108</u>	<u>MM109</u>	<u>MM110</u>	<u>M VII</u>	<u>SIGNIF. AT</u>
39.7	35.9	43.4	30.5	37.4	33.4	38.6	35.6	34.0	5%
<u>G. DEL.</u>			<u>R. DEL.</u>			<u>SIGNIF. AT</u>			
38.0			36.7			NS			

NO. OF SPURS (BEGINNING 18" ABOVE GROUND)
UPPER FIELD - FLETCHER

<u>MM101</u>	<u>MM102</u>	<u>MM104</u>	<u>MM105</u>	<u>MM106</u>	<u>MM108</u>	<u>MM109</u>	<u>MM110</u>	<u>M VII</u>	<u>SIGNIF. AT</u>
8.9	9.2	13.5	7.7	15.1	7.5	12.2	9.7	6.6	5%
<u>G. DEL.</u>			<u>R. DEL.</u>			<u>SIGNIF. AT</u>			
10.9			10.5			NS			

NO. OF SPURS/FT. OF 2ND. YR. TRUNK GROWTH (BEGINNING 18" ABOVE GROUND)
UPPER FIELD - FLETCHER

<u>MM101</u>	<u>MM102</u>	<u>MM104</u>	<u>MM105</u>	<u>MM106</u>	<u>MM108</u>	<u>MM109</u>	<u>MM110</u>	<u>M VII</u>	<u>SIGNIF. AT</u>
1.7	1.9	2.1	1.6	2.6	1.6	2.0	2.2	1.5	NS
<u>G. DEL.</u>			<u>R. DEL.</u>			<u>SIGNIF. AT</u>			
2.0			2.0			NS			

SUMMARIZATION - 1965 DATA - PROJECT 5120 (CONT.)TOTAL GROWTH PER STION (IN.)
LOWER FIELD - FLETCHER

<u>MM111</u>	<u>MM113</u>	<u>MM114</u>	<u>MM105</u>	<u>SDLG.</u>	<u>M II</u>	<u>SIGNIF.</u> <u>AT</u>	<u>G. DEL.</u>	<u>R. DEL.</u>	<u>SIGNIF.</u> <u>AT</u>
185.6	198.7	134.4	183.6	219.4	158.1	NS	220.7	123.6	$\frac{1}{2}\%$

LENGTH OF TERMINAL (IN.)
LOWER FIELD - FLETCHER

<u>MM111</u>	<u>MM113</u>	<u>MM114</u>	<u>MM105</u>	<u>SDLG.</u>	<u>M II</u>	<u>SIGNIF.</u> <u>AT</u>	<u>G. DEL.</u>	<u>R. DEL.</u>	<u>SIGNIF.</u> <u>AT</u>
43.5	47.6	44.4	46.2	44.6	53.2	NS	46.9	44.8	NS

NO. OF LATERALS
LOWER FIELD - FLETCHER

<u>MM111</u>	<u>MM113</u>	<u>MM114</u>	<u>MM105</u>	<u>SDLG.</u>	<u>M II</u>	<u>SIGNIF.</u> <u>AT</u>	<u>G. DEL.</u>	<u>R. DEL.</u>	<u>SIGNIF.</u> <u>AT</u>
5.1	6.0	3.3	4.7	6.0	3.4	NS	6.4	2.7	$\frac{1}{2}\%$

SUMMARIZATION - 1965 DATA - PROJECT 5120 (CONT.)% OF LATERALS OVER 24"
LOWER FIELD - FLETCHER

<u>MM111</u>	<u>MM113</u>	<u>MM114</u>	<u>MM105</u>	<u>SDLG.</u>	<u>M II</u>	<u>SIGNIF.</u> <u>AT</u>	<u>G. DEL.</u>	<u>R. DEL.</u>	<u>SIGNIF.</u> <u>AT</u>
57.7	52.1	56.3	64.0	69.2	61.1	NS	64.6	51.9	NS

% OF LATERALS 12" TO 24" LONG
LOWER FIELD - FLETCHER

<u>MM111</u>	<u>MM113</u>	<u>MM114</u>	<u>MM105</u>	<u>SDLG.</u>	<u>M II</u>	<u>SIGNIF.</u> <u>AT</u>	<u>G. DEL.</u>	<u>R. DEL.</u>	<u>SIGNIF.</u> <u>AT</u>
22.2	27.8	43.7	15.2	14.2	11.1	NS	24.4	24.5	NS

% OF LATERALS 6½" TO 12" LONG*
LOWER FIELD - FLETCHER

<u>MM111</u>	<u>MM113</u>	<u>MM114</u>	<u>MM105</u>	<u>SDLG.</u>	<u>M II</u>	<u>SIGNIF.</u> <u>AT</u>	<u>G. DEL.</u>	<u>R. DEL.</u>	<u>SIGNIF.</u> <u>AT</u>
3.5	3.4	0.0	2.8	0.0	2.8	NS	2.8	1.6	NS

* LATERALS 6" AND UNDER COUNTED AS SPURS

SUMMARIZATION - PREVIOUSLY UNREPORTED 1963 DATA - PROJECT 5120LEAF CALCIUM (%) 6/21 TO 24/1963 UNWORKED ROOTSTOCKS
UPPER FIELD

<u>MM101</u>	<u>MM102</u>	<u>MM104</u>	<u>MM105</u>	<u>MM106</u>	<u>MM108</u>	<u>MM109</u>	<u>MM110</u>	<u>M VII</u>	<u>SIGNIF. AT</u>
0.70	0.59	0.56	0.56	0.77	0.90	0.71	0.60	0.62	10%

Mgms. Ca/24 LVS. 6/21 TO 24/1963 UNWORKED ROOTSTOCKS
UPPER FIELD

<u>MM101</u>	<u>MM102</u>	<u>MM104</u>	<u>MM105</u>	<u>MM106</u>	<u>MM108</u>	<u>MM109</u>	<u>MM110</u>	<u>M VII</u>	<u>SIGNIF. AT</u>
16.6	13.0	15.5	13.8	26.0	15.3	17.4	18.0	9.3	½%

LEAF CALCIUM (%) 6/21 TO 24/1963 UNWORKED ROOTSTOCKS
LOWER FIELD

<u>MM111</u>	<u>MM113</u>	<u>MM114</u>	<u>MM105</u>	<u>SDLG.</u>	<u>M II</u>	<u>SIGNIF. AT</u>
0.54	0.87	0.78	0.75	0.66	0.82	10%

Mgms. Ca/24 LVS. 6/21 TO 24/1963 UNWORKED ROOTSTOCKSLOWER FIELD

<u>MM111</u>	<u>MM113</u>	<u>MM114</u>	<u>MM105</u>	<u>SDLG.</u>	<u>M II</u>	<u>SIGNIF. AT</u>
9.2	20.9	21.4	16.4	15.2	15.6	25%
