

Height Notes Dry wt.

 $\frac{1}{2}$  = 1st branch  
 $\frac{1}{4}$  = 1st square (flower bud)

Sampling Technique. 6.3a Pls. cut 7.1.35.

Hts. in cms. Dry weights in cms. on 5g. Joly balance. (cm. = .168 grms)

N	Z	A	B	C	D	E	F	G	H	I	J	S
1	11.2 8 3.40 19.5	103 16.50 17.2	103 8.50 13.9	83 7.40 18.8	105 9.70 10.6	7 3.35 6.6	7 2.35 14.1	103 15.50 19.2	83 10.65 21.0	123 27.25 24.2	113 27.00	1
2	14.0 95 7.85 13.0	10 9.70 13.4	103 8.95 16.5	93 11.25 12.0	115 5.70 12.0	8 4.15 13.4	9 5.25 21.8	103 16.90 19.3	95 8.30 15.3	95 10.15 14.7	8 3.40	2
3	12.1 105 7.40 21.3	93 13.50 17.7	95 9.75 12.4	95 7.40 18.2	93 6.85 12.0	95 6.45 19.4	103 7.25 20.2	113 17.75 19.0	95 8.15	13.3	113 6.95	3
4	15.2 95 9.10 20.7	103 10.90 19.6	113 19.00 11.7	8 6.25 18.7	95 12.00 12.7	105 4.85 20.2	113 10.85 21.1	103 11.20 18.5	105 10.95 11.0	105 6.85 14.2	115 7.60	4
5	12.3 8 4.00 16.3	105 13.00 6.2T6	3.60 7.5	9 3.80 22.7	103 15.30 12.7	103 6.85 16.1	93 8.65 19.1	113 17.70 16.6	95 6.90 15.2	113 11.00 12.0	95 3.95	5
6	15.7 9 3.40 11.0	85 4.90 16.3	105 9.80 6.4	8 2.25 16.7	105 7.55 9.0	8 3.30 13.0	9 4.85 23.9	123 28.05 16.0	9 5.80 13.3	95 5.95 15.5	103 9.45	6
7	14.4 7 4.80 14.0	95 5.95 13.3	105 7.25 10.6	7 4.10	11.3	8 3.65 18.0	115 15.00 18.7	113 27.20 15.6	95 6.55	16.3	95 4.50	7
8	18.1 103 11.30 14.5	105 7.75 9.1	6 1.45	9.8	9 6.15 14.1	95 5.05 17.8	113 18.45 23.9	103 11.70 17.2	103 16.10 16.1	93 12.75	8	8
9	10.0 85 4.60 5.1T8	1.45 12.7	103 10.05 11.6	8 4.25 13.5	9 6.15 15.7	95 6.75 15.5	105 7.30 15.3	105 7.90 18.1	95 8.70 22.6	123 27.80 19.5	113 17.35	9
10	16.7 115 9.45 12.2	85 5.00 11.7	8 4.20 14.4	85 6.50 21.2	85 8.55 11.8T7	5.70 11.9	85 6.20 12.0	103 6.35 13.4	9 5.00 6.2T7	2.70 12.0	9 3.95	10
11	15.3 9 9.20 19.2	105 8.70 13.7	95 3.70 11.5	105 6.45 15.0	103 7.45 17.8	103 9.70 11.8	9 5.55 19.6	105 9.45 18.7	105 8.75 20.6	105 8.30 12.2	7 2.55	11
12	18.7 103 12.40 10.8T6	6.15 12.1	95 6.85 11.9	85 4.75 12.7	115 10.30 18.9	113 15.60 18.0	105 13.60 17.7	103 11.75 15.8	85 5.95 13.1	11 5.50 16.7	93 8.80	12
13	14.6 10 7.65 11.2	9 7.10 16.8	93 8.75 11.3	95 5.80 17.3	93 11.20 10.8	85 3.90 16.0T9	11.65 14.3	103 10.20 14.0	9 4.35 9.5	9 3.65 19.3	93 9.75	13
14	19.7 93 12.05 13.7	103 10.70 18.7	93 9.95 13.3	113 12.95 8.5	7 2.10 17.0	103 11.25 22.0	115 15.30 21.2	105 8.85 17.6	105 10.80 14.4	95 5.55 17.2	103 8.90	14
15	9.7 7 3.70 17.2	103 9.15 19.0	93 10.00 15.3	115 15.20 3.3	6 0.75 10.5	85 5.00 23.2	103 20.55 16.0	113 13.20 16.1	95 8.30 13.3	95 6.25 16.9	9 6.50	15
16	12.8 9 4.45 14.8	85 6.50 13.7	95 7.95 8.5	9 3.45 14.9	105 11.65 11.3	113 10.25 18.4	115 15.85 10.5	85 6.00 8.7	8 3.45 14.8	95 7.00 12.8	115 5.65	16
17	20.5 103 16.30 12.6	85 4.55 12.1	103 6.50 12.6	95 6.00 15.8	105 6.65 15.0	105 12.65 17.3	93 10.25 14.0	105 9.65 12.5	10 4.00 13.6	10 5.60 13.5T10	13.00	17
18	9.7 7 3.30	10.6	9 3.35 13.3	95 6.90 8.5	7 2.05 11.1	95 4.70 10.4	10 4.80 15.1	9 8.35 18.2	113 11.00 12.2	95 5.50 14.1	9 4.00	18
19	15.9 93 10.00 13.2T85	7.00 15.4	93 8.90 11.3	95 3.75 14.1	105 5.65 12.6	105 7.40 17.4	125 9.30 19.4	103 14.25 18.3	103 14.40 17.3	93 12.00 20.0	123 27.30	19
20	15.6 93 8.70 7.2	7 1.95 11.3	85 7.55 9.6	8 3.35	16.5	95 6.10 16.5	85 5.50 16.8	105 10.65 6.3	8 2.05 13.7	103 10.75 12.0	105 6.75	20
21	9.5 95 5.90 8.0	7 2.40 9.7	8 4.30 8.9	7 1.60 11.1	7 1.50 11.2	95 6.00 7.6	7 2.10 5.8	7 3.50 8.8	7 1.80 11.0	9 6.40 17.7	85 4.15	21
22	10.1 7 2.35 14.4	9 5.20 12.4	9 6.40 7.5	6 1.95 12.4	7 2.70 16	105 10.30 16.6	95 6.85 17.4	105 10.75 9.3	9 6.45 9.0T6	3.15 10.1	8 4.10	22
23	7.7 7 2.35 6.0T7	3.10 13.4	95 5.70 11.7	7 2.50 6.3	7 1.80 8.0	9 2.35 10.7	9 4.05 17.0	95 6.90 16.6	103 11.10 14.7	103 12.50 16.8	103 8.10	23
24	12.6 9 3.20 8.0	7 2.00 8.5	7 1.65 9.3	7 2.10 7.5	6 1.75	16.2	103 8.50 18.2	103 10.80 13.0	8 6.50 10.8	9 4.65 19.1	113 21.85	24
25	12.7 8 5.30 11.4	85 4.90 9.5	8 3.20 9.2	8 2.80 8.2	8 3.90 4.8	5 1.00 18.3	93 6.80 14.1	105 6.55 17.0	115 10.75 15.8	95 7.85 16.0	113 16.85	25
26	14.0 93 5.90 10.3	8 2.60 12.7	7 2.85 9.5	95 4.40 9.3	9 3.10 10.4	9 5.25 16.6	115 7.60	12.2	9 2.90 16.0	105 7.90 18.2	105 12.40	26
27	18.3 85 7.85 9.0	8 2.90 12.5	85 5.75 10.5T6	2.50 9.7	8 3.75 9.0	9 4.85	11.7	85 5.25 5.3	7 1.95	16.5	113 18.00	27
28	15.5 105 7.40 12.0	9 4.55 8.5	8 4.95 16.9	105 5.65 10.1	85 4.00 16.7	93 6.70	9.2	8 3.20 12.6	9 4.90 11.6	85 7.15 17.2	105 8.80	28
29	11.0 95 4.55 15.5	105 13.05 14.7	113 11.90 10.9	9 3.95 12.1	85 4.30 13.8	103 9.80 14.7	93 8.45 7.1	9 3.10 10.4	9 3.50 11.1	8 4.05	29	
30	8.2 7 1.80 14.7	103 8.60 12.7	95 7.15 10.2	8 2.75 12.3	9 4.45	15.7	103 9.20 9.8	9 2.60	19.0	113 13.75 23.2	103 17.15	30
31	13.3 9 2.40 17.5	103 13.75 12.9	95 7.20 13.7	85 5.50 12.7	95 4.85 9.0	9 3.70 12.6T7	4.50 11.2	105 6.15 10.3	95 5.35 16.1	105 8.30 14.7	103 9.55	31
32	13.4 95 6.40 2.6T1	0.65 6.5	7 1.35 15.5	95 6.40 14.2	105 6.85 8.7	8 2.75 16.6	103 12.75 12.1	10 4.45 12.0	95 7.75 12.4	85 5.10 18.7	113 14.55	32
33	18.6 103 12.40 6.0T6	3.65 14.6	95 5.25 14.9	95 5.65 18.2	115 10.40 13.7	93 4.85 20.2	105 7.50 11.4	8 2.70 16.7	105 9.15 9.9	8 3.00 13.3	105 9.20	33
34	17.0 115 8.70 12.0T7	5.20 20.5	113 16.70 15.3	105 9.05 10.1	8 2.90 10.1	9 3.90 17.5	93 9.80 13.5	85 5.20 5.7	5 1.85	13.0	103 8.05	34
35	18.0 103 6.85 14.2	95 5.75 10.9	9 3.30 10.4	7 3.10 10.5	7 3.15 12.0	95 5.65 11.7	9 5.00 13.2	105 7.55	13.4	8 5.55 14.3	103 9.00	35
36	16.0T75 7.45 11.1	95 6.20 9.0	7 2.70 11.1	9 2.65 15.2	105 7.50 9.1	9 3.65 13.3	10 4.60 20.0	93 14.00 17.0T93	10.40 8.3	7 5.70 12.7	105 10.95	36
37	12.7 8 3.20 13.0	9 4.85 17.8	95 7.50 6.0	6 0.40 10.4	8 2.70 7.8	8 3.70 12.7	105 7.10 15.8	103 8.90 8.4	9 3.10 9.8	7 6.85 15.8	103 6.65	37
38	9.5 85 5.25 13.0	85 6.65 12.2	95 7.05 13.2	105 8.30 12.4	9 5.50 13.3	95 6.60 12.2	9 3.90 23.2	103 16.50	18.6	93 7.60 15.3	105 9.25	38
39	12.2 9 5.20 17.7	10 6.75 13.1	8 5.30 8.5	9 6.20 7.2	7 2.95 10.3	105 5.40 10.5	105 5.30 17.0	85 8.50 14.3	103 11.15 20.2	105 11.70 12.0	115 7.00	39
40	9.2 8 4.05 10.7	9 4.05	11.5	105 7.75 9.3	10 4.90 6.5	7 0.65	11.7	105 8.45 16.0	113 12.40 5.3	5 1.60 12.5	95 8.40	40
41	10.2 7 3.40 14.6	95 6.35 11.3	85 6.45 12.8	8 3.80 7.6	8 2.35 17.5	93 10.05 17.0T105	13.15 9.8	9 3.90 11.8T8	12.85 16.7	105 9.00 14.3	9 6.30	41
42	10.9 85 6.80 11.6	9 6.55 10.0	9 4.10 9.7	8 3.00 8.6	5 1.15 10.3	8 3.15 18.3	113 10.85 17.3	95 8.45 2.8	5 0.55 9.0T7	3.15	42	
43	11.0 10 3.25 13.7	10 6.75 13.0	93 6.90 11.0	9 5.85 8.4	9 3.70 8.5	8 3.55 19.6	113 15.80 17.4	103 14.05 8.5	6 3.00 11.7	8 3.25 10.2	85 6.30	43
44	11.0 9 3.70 9.7	105 4.30 15.7	103 11.50 12.0	85 4.55 9.3	95 4.00 12.3	8 2.25 15.9	95 8.50 19.2	103 12.25 18.7	113 14.45	13.4	113 5.50	44



45	15.4	110	12.65	12.7	98	4.15	13.5	105	7.55	20.3	115	15.90	16.8	95	6.20	15.5	95	9.55	15.5	108	10.50	19.5	110	16.40	11.9	95	6.70	16.7	105	6.30	13.4	105	7.30	45
46	12.2	10	8.70	4.5	8	0.65	16.2	108	12.85	11.1	8	5.00	13.0	9	4.20	18.0	88	7.50	15.3	8	6.35			16.0	118	13.25	7.0	7	2.90	11.2	9	5.25	46	
47	12.2	9	4.40	19.0	98	8.30			8.0	8	2.75	11.3	105	5.60				15.7	108	10.20	17.5	108	13.25	13.5	95	6.60	6.7	8	2.80	16.2	95	8.80	47	
48	10.3	9	4.50	11.8	8	3.60	9.5	85	5.00	15.2	95	7.55	10.5	95	4.20	14.0	8	4.65	15.8	108	7.45						14.2	9	5.20	13.2	95	6.40	48	
49	8.9	8	2.70	15.6	108	8.60	9.5	9	4.90	15.0	105	12.05	2.1	6	0.40	13.3	8	4.20	16.2	105	9.50	8.7	8	2.25	2.5T1	2.25	4.0T1	0.70	12.7	95	5.15	49		
50	11.2	85	5.50	9.2	9	3.90	10.5	95	7.45	13.1	95	4.70	7.5	8	3.00	11.2	85	3.90	18.3	118	11.85	14.5	108	12.45			11.9	95	7.40	14.8	85	7.70	50	
51	5.6T6	2.65	12.0	9	3.00	14.2	85	5.70	10.0	8	2.35	8.4	8	1.75	12.1	85	4.90	15.8	108	10.85	11.2	105	7.80	14.2	95	6.70	7.3	7	2.90	13.5	98	5.90	51	
52	12.9	8	5.65	13.8	8	4.60	10.0	8	6.50	10.7	95	5.80	7.7	7	1.95	11.7	8	3.20	12.3	9	5.20	8.1	7	2.20	16.7	105	7.60	11.3	105	4.95	13.2	95	5.70	52
53	13.4	8	5.75	16.5	108	11.55	6.8	8	3.30	12.7	105	4.65	10.6	9	3.00	6.3	7	2.70	12.6	98	6.20	19.6	110	16.30	8.7	85	3.90	14.2	9	5.90	16.8	98	10.10	53
54	16.5	85	6.00	6.3	8	2.55	9.5	6	2.30	12.7	85	4.80	8.3	9	3.05	8.2	9	2.55	12.2	9	4.50				6.8	8	2.55	11.7	105	6.10	9.2	9	4.35	54
55	11.0	105	4.40	11.8	115	8.20	7.3	8	2.05	11.8	8	3.45	9.3	9	3.75				13.7	108	7.70	14.7	115	15.95	21.4	108	11.00	10.2	9	5.15	15.0	118	11.70	55
56	13.0	95	10.65	13.7	95	7.15	16.5	105	6.40	11.9	115	6.40	4.9	9	4.20	15.0	95	5.30	20.4	108	13.75	21.5	118	15.25	15.5T98	13.90	14.8	118	10.50	9.0T7	4.70		56	
57	7.8	9	3.80	11.5	108	6.10	9.3	8	3.65	6.5	7	1.60	6.8	8	3.15	15.2	105	8.85	15.4	108	9.85	18.7	115	11.25	20.0	98	12.45	10.2	8	3.20	11.3	105	7.60	57
58	6.5	7	1.82	6.8	7	2.05	13.2	85	4.25	12.2	8	4.55	14.2	95	7.95	12.3	98	8.95	19.7	108	13.50	9.9	95	4.55	15.5	85	6.75	15.1	105	10.40	16.1	98	7.05	58
59	10.2	7	2.65			10.1	8	4.15	8.8	6	3.80	9.6	8	3.35					14.8	108	8.20	17.2	115	7.20	18.2	95	11.30	8.0	8	2.55	9.3	9	3.25	59
60	12.0	8	4.85	8.3	7	3.80	12.2	8	2.95	8.5	7	2.80	9.0	8	3.70	8.7	9	4.50	15.6	95	5.00	14.0	108	6.15	6.2	7	1.15	8.4	9	4.35				60
61	11.9	95	10.80	9.0	9	2.20	10.9	8	4.30	15.2	85	7.05	11.6	85	5.30	14.3	105	6.40	14.4	98	6.45	10.7	95	5.00	14.0	98	8.40	13.7	8	4.85	11.6	8	2.30	61
62	15.8	95	5.25	9.5	7	4.05			12.7	85	3.90	12.2	9	5.50	8.8	9	3.80	12.0	95	6.90	14.3	9	6.25	17.2	95	8.80	8.5	8	2.80	12.6	95	5.15	62	
63	14.2	115	8.70	6.4	9	1.85	8.1	9	1.95	12.1	8	4.00	14.0	115	11.65	14.2	105	10.15	12.0	85	6.00	12.5	105	6.30	12.7	105	7.90	17.0	118	10.35	14.1	95	5.00	63
64	18.7	98	8.40	9.5	8	3.00	9.2	8	3.70	8.5	7	2.60			222	118	15.75	14.2	9	6.20	10.5	95	4.00	9.3	9	3.40	11.0	8	3.85	10.7	9	4.60		64
65	8.3	9	6.05	17.2	98	9.10	12.4	105	7.80	11.1	95	5.50	16.4	108	11.50	20.7	98	15.90	17.8	98	10.75	16.8	98	7.90	6.2	8	1.85	9.6	8	3.25	14.3	105	8.55	65
66	13.0	95	7.30	12.6	8	4.10	13.1	95	8.00	8.4	8	2.75	17.0	118	12.75	20.0	108	14.30	14.2	105	6.90	18.4	108	12.25	14.6	95	5.90	10.8	9	4.15	12.8	7	3.65	66
67	16.3	85	6.50	12.5	7	4.40			8.7	8	3.00	9.7	7	3.00	11	8	3.30	10.3	8	4.00	16.3	105	8.40	14.6	98	4.45	11.1	9	4.75	14.3	95	7.95	67	
68	9.2	9	4.35	10.1	85	3.55	8.7	7	3.20	12.8	8	4.35	7.4	7	1.80	12.2	95	5.35	14.5	95	5.45	17.6	85	8.30	13.0	98	7.80			13.2	95	7.50	68	
69	9.5	7	3.70	14.3	85	4.55	12.0	85	6.20	12.3	6	1.80	8.3	9	4.48	95	6.80	16.7	95	8.00	12.0	95	5.75	12.3	95	5.90	9.3	95	3.00	13.2	9	5.10	69	
70	10.8	105	7.95	12.5	105	5.15	7.3	8	2.25	6.7	7	1.75	11.6	105	6.10	9.6	95	5.30	10.3	85	5.85	14.2	8	4.90	18.4	108	12.20	14.8	105	5.60	10.7	85	5.20	70
71	11.8	7	4.00	14.7	95	8.75	5.8	7	2.55	14.5	10	4.90			12.3	105	8.45	10.8	8	3.20	12.7	9	4.20	16.0	10	9.20	15.7	105	5.65	7.2	8	3.10	71	
72	16.3	108	9.45	9.0	9	4.70	10.7	8	3.30	11.6	7	4.15	8.7	7	2.65	13.4	105	6.95	12.0	7	3.35	12.8	95	8.95	17.3	108	9.60	12.5	9	4.40	11.4	105	5.40	72
73	8.8	9	4.45	9.8	105	4.05	12.7	9	3.60			10.4	7	2.35				12.3	98	7.30	11.3	8	2.60	11.7	9	6.10	11.5	8	2.75	16.6	108	10.15	73	
74	12.0	95	5.45	15.7	9	7.15	7.6	7	1.95	11.1	8	2.95	9.3	9	3.90	13.7	95	5.85	8.6	7	2.20	8.1T7	2.95	11.6	9	4.70	16.3	105	7.60	16.8	95	6.25	74	
75	11.3	8	4.40	16.7	9	5.60			9.9	9	4.20																							