RP /02060

PROGRESS REPORT 2 (PROJECT NO: GNPHYS-2)

GROUNDNUT PHYSIOLOGY

DROUGHT SCREENING OF EARLY PUNCH GENOTYPES

1982/83

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During Rabi season in 1982/83, 242 genotypes from early maturing germplasm (both fastigiata and vulgaris Hartz. of subspecies fastigiata) were screened for drought resistance in field conditions at ICRISAT centre. Due to the large number of entries involved in this experiment the early bunch germplasm was divided into two groups, each with 121 entries. Each group was sown in 11 x 11 lattice with two replications, and the results are presented for group I and II separately. In addition to this statistical design a systematic check of a commonly grown cultivar (TMV-2) was sown in every sixth plot.

Land preparation & crop management:

The field was cultivated and a basal fertilizer dose of diammoniam phosphate @ 100 kg/ha was incorporated into the soil. Rised beds with 1.2 m. width were made with an inter bed spacing of 0.3 m. The seeds of all entries were treated with Captan and Thiram to prevent seedling diseases and they were sown on 1-12-1982 by hand dibbling the seed with a spacing of 30 x 10 cm. across the beds in 2 row plots of 12 m. length. Thus each plot of 12 m. length consisted of 8 beds in parallel to the sprinkler line. This system prevented surface water running from wet to dry plots during irrigation. The crop was flood irrigated from emergence until flowering afterwhich the treatments were introduced. The crop was protected as necessary against pests and disease and gypsum was applied at the rate of 500 kg/ha at pegging stage.

Treatments:

The treatments (timing of droughts) and their duration are presented in Table 1. Eight intensities of drought were created within each treatment by applying variable amounts of water using a linesource sprinkler system of irrigation (Hanks et al 1976).

Table : 1

Treatments	Days after sowing :					
	0-50	51-97	98	99-120	121	122-140
T1	U	LS	-	LS	-	LS
T2	U	LS	*U	LS	*U	LS
T3	U	U	-	U	-	LS

U : Uniform irrigation to field capacity

*U : One uniform irrigation to release the stress.

LS : Line source sprinkler irrigation.

The treatments with continuous stress from flowering to maturity (T1) and maturity stress (T3) were similar to last year's experiment (G.Nut.Phys. Progress Report 1). In treatment 2 the drought was started at flowering but the stress was released with a uniform irrigation when the genotypes at dry end of the linesource (Bed 8) did not recover turgor at night. After uniform irrigation treatment 2 was again stressed differentially with linesource irrigation. Like this there were two breaks in drought stress (Refer Table 1).

Linesource sprinkler irrigation:

Linesource sprinklers were operated at a pressure of 275 kilo pascals (40 PSI) during the periods when the wind velocity was negligible, usually during nights. The water applied for each irrigation was collected in buckets placed perpendicularly to the sprinkler line on each of the 8 beds at 4 different locations within each replicate of each group. The volume of water collected in each of the buckets were measured and averaged over 4 locations for a given bed to estimate the amount of water applied to the bed. The crop was irrigated at 10 days interval during January and February and the irrigation frequency was increased to 7 day intervals from March to match the increased evaporative demand. For each irrigation the amount of water applied varied from 4.84 cm. $\pm$0.08 in bed 1 to 0.16 cm. $\pm$0.02 in bed 8.

The cumulative water applied during the period of each treatment is presented for each group in table 2 along with the meteorological data corresponding to the period of treatments. The cumulative water recieved by each bed have been presented only for the duration of the treatment.

In treatment 2 the two uniform irrgations applied to release the water stress were included in the cumulative irrigation applied.

Table : 2

Cumulative water (cm.) applied to different treatments in two groups.

Group I

	T1		T2		T3	
	R1	R2	R1	R2	R1	R2
BED 1	50.1	48.4	45.7	48.8	20.4	19.0
2	47.2	46.1	43.6	43.6	19.3	17.7
3	42.7	39.8	42.1	40.5	17.6	14.9
4	35.8	31.4	37.4	34.0	14.4	10.5
5	26.7	20.2	30.2	25.4	8.6	6.1
6	15.1	10.5	21.5	16.3	4.7	2.9
7	6.7	3.5	14.6	11.6	1.7	1.1
8	1.5	0.8	10.5	9.3	0.4	0.2

Group II

BED 1	47.2	48.1	46.0	47.5	18.6	19.1
2	44.3	44.8	43.6	43.7	17.9	18.3
3	40.3	40.5	40.1	35.1	16.9	17.7
4	33.6	33.5	35.5	34.0	15.1	15.0
5	24.3	24.2	28.6	27.1	11.4	11.8
6	14.3	15.1	19.5	19.7	7.5	7.1
7	6.6	6.6	13.9	13.8	3.9	2.8
8	1.9	1.9	10.1	10.1	1.2	1.1

Meteorological data

Rain (mm)	12.5	12.5	12.5
Evap.(mm)	956.9	956.9	543.2
Max.Temp.(0c)	33.6	33.6	37.3
Min.Temp.(0c)	17.7	17.7	21.0
Wind Vel.(kph)	7.9	7.9	8.7
Solar Rad. (MJ/m2/day)	21.4	21.4	23.3
RH (% at 07.17)	69.7	69.7	57.6
RH (% at 14.17)	26.1	26.1	21.7

N.B. The rainfall and evaporation data are totals, not means.

VISUAL SCORING:

Genotypes were scored on a 1 to 4 point scale for their resistance to wilting in treatments 1 and 3 by comparing visually the growth of the genotype in the non-stress plot (Bed 1) to the driest plot (Bed 8). In treatment 2 genotypes were scored for their recovery in dry plots, 5 days after release of water stress on 98 DAS.

The criteria used for visual scores for drought tolerance and recovery are as follows.

Drought Tolerance Scoring:

Rating	Symptoms
1	No wilting symptoms
2	No wilting symptoms but the plants are stunted in growth
3	Showing wilting symptoms stunted growth with bottom leaves dried
4	Crop look permanently wilted

Recovery and regrowth scoring:

Rating	Symptoms
1	Showing high vegetative regrowth
2	Crop recovers but less vegetative regrowth compared to rating 1
3	Crop recovers but no new growth
4	Crop still look wilted

Harvesting:

The crop was lifted on 20-4-83 (140DAS) when 60 to 70 percent of the pods in the nonstress plots (Bed 1) were matured. Plots on each bed were harvested, the pods were picked and cured for 7 to 10 days before weighing.

Yield Measurements :

The bulk vegetative weights of each genotype across the 8 beds were weighed in the field and dry weights of these were calculated using the fresh/oven dry weight ratios of representative samples. The weights of the pods in each bed for each genotype were recorded after curing and pods from all the beds except 2nd bed were shelled and the kernals were weighed.

Results:

In this preliminary analysis the response of genotypes to variation in applied water was obtained by regressing total biomass/m2, total pod weight/m2, total kernal weight/m2 and shelling percentage of each genotype with the variable cumulative amounts of water applied in the respective treatments. In this report the regression coefficients for total biomass and total pod weight for each genotype in both groups are presented in tables (3-14). The mean of the regression coefficients of 121 genotypes in each group are presented at the bottom of every page for easy comparison. These regression equations were derived by regressing the means of 121 genotypes across each bed with the respective amount of water applied. These regression equations should not be extrapolated outside the range of water application for each treatment (table 2).

Comments relating to tolerance or susceptibility have been made on the performance of the each genotype across all water application levels relative to the regression line derived from the means of the group at the respecive water treatments within which it was tested. Comments confined to one replicate may be modified as a result of further analysis and adjustments for positional effects using the systematic check variety and/or the lattice design.

The data on regression equations for kernel weights and shelling percentage are available in Groundnut Physiology section. This data as a supplement can be made available on request for those interested.

Reference :

Hanks, R.J., J. Keller, V.P. Rasmussen, and G.D. Wilson, 1976. Line source sprinkler for continuous variable irrigation-crop production studies. Soil Sci. Soc. Am. Proc. 40:426-429.

INDEX FOR TABLES:

ICG/GNP	=	The genotypes not listed in ICRISAT Germplasm (ICG) are numbered by Groundnut Physiology section as GNP (#).
*	=	When F ratio of the regression is not significant Mean and SE of mean of the cultivar across 8 levels of water stress (2 replications) is provided.
VS*	=	Visual scoring on 1 to 4 point scale (refer text).
%VAR	=	The difference between residual and total mean squares expressed as a percentage of the total mean square.
T	=	Selected as drought tolerant based on total biomass/total pod weight production across all water levels compared to the mean of 121 genotypes.
S	=	Selected as drought suceptible based on total biomass/total pod weight production across all water levels compared to the mean of 121 genotypes.
1R	=	Genotype showed tolerance for suceptibility in one replicate only.

LE:3 Regression coefficients of total biomass(g/m2) on water applied from flowering to maturity.(T1) in Group 1 genotypes.

L#	CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
1	35#	205.7	43.8	12.99	1.32	87		T
2	64#	166.0	57.5	9.95	1.68	72		
3	389#	127.0	66.2	9.92	2.00	63		
4	402#	208.1	80.5	10.44	2.26	63		
5	403#	194.3	59.5	13.08	1.73	81		
6	404#	191.6	51.9	9.25	1.47	76		
7	405#	179.0	34.7	13.02	1.08	91	2	
8	406#	245.9	30.1	10.24	0.90	90		
9	408#	150.5	51.4	11.58	1.64	78		
10	409#	215.9	58.8	11.99	1.66	81		
11	410#	219.0	57.3	12.91	1.67	82	1	T1R
12	411#	175.7	54.8	9.86	1.60	74		
13	412#	77.9	29.2	10.95	0.91	91		S
14	413#	130.9	27.4	6.08	0.85	77		
15	14	210.2	55.5	11.61	1.73	75		
16	27	226.7	58.0	10.78	1.69	75		
17	30	300.2	40.4	8.93	1.18	81		T
18	43	135.6	51.5	14.19	1.55	85		
19	273	149.1	50.4	13.60	1.52	85		
20	296	110.3	44.5	11.73	1.30	86	4	
21	366	104.8	76.3	12.33	2.22	70		
22	405	198.4	63.4	13.86	1.91	79		
23	1104	157.9	51.2	13.40	1.49	86		T1R
24	1141	142.9	56.6	7.87	1.65	63		S
25	1204	133.2	64.3	10.56	1.87	70	2	
26	1311	176.9	37.5	11.05	1.13	87		
27	1346	50.3	70.6	11.95	2.13	68		S
28	1660	212.2	45.3	14.80	1.32	91		T
29	1697	130.9	82.7	18.38	2.41	81	2	T
30	1708	84.3	54.8	14.05	1.54	87		
31	1783	281.3	51.1	9.02	1.49	73	2	
32	1878	185.3	31.2	10.57	0.94	90		
33	1905	238.6	83.1	9.94	2.37	58		
34	1933	163.3	39.2	13.38	1.14	91	2	
35	2716	278.6	60.7	10.53	1.70	76		T1R
36	2738	236.5	94.8	11.25	2.76	54	2	
37	2960	141.1	41.8	12.90	1.22	90		
38	2967	128.9	55.2	11.63	1.61	80		
39	3073	142.7	41.7	12.96	1.21	90		
40	3092	152.1	35.7	8.48	1.11	79		
41	3157	190.1	49.3	8.51	1.51	69		
42	3215	226.3	70.8	11.34	2.06	69	4	
43	3222	215.1	50.1	7.95	1.56	62		
44	3225	198.9	50.3	11.24	1.52	79	4	
45	3280	132.8	63.4	11.27	1.85	74		
MEAN(121Cv)		171.7	18.3	11.09	0.57	96		

TOTAL BIOMASS(G/M2) IN TREATMENT 1 GROUP 1

SL#	CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
46	3287	141.0	58.6	11.09	1.77	73		
47	3301	189.9	43.8	11.18	1.36	82	2	
48	3386	238.2	57.2	12.80	1.61	84	4	T
49	3478	215.4	51.6	10.68	1.50	79		
50	3536	125.1	31.2	12.25	0.91	93		
51	3537	181.9	51.0	10.97	1.43	83		
52	3569	163.4	119.4	12.33	3.36	51		
53	3587	215.2	26.6	10.58	0.80	93	4	
54	3605	202.9	63.4	10.83	1.85	72		
55	3657	169.2	38.9	12.30	1.17	89		
56	3680	207.1	74.1	11.20	2.24	63		T1R
57	3704	229.6	25.8	11.58	0.78	94		
58	3730	162.4	32.2	10.66	1.00	88		
59	3736	75.3	63.8	14.33	1.72	86		
60	3774	174.6	54.5	11.32	1.64	77		
61	4073	132.6	67.1	14.71	1.96	81		
62	4099	136.3	79.6	13.73	2.24	75		
63	4544	183.4	57.6	12.97	1.79	77		
64	4546	157.0	38.6	11.54	1.12	89		
65	4558	242.8	56.5	11.00	1.65	77		
66	4631	241.0	76.4	10.35	2.23	61		
67	4728	196.9	40.7	11.35	1.27	84	4	
68	4747	66.8	161.9	16.54	4.21	59		
69	4790	185.1	32.0	13.78	0.93	94		T1R
70	4863	206.5	32.0	13.62	0.99	93		
71	4888	137.0	73.6	11.91	2.15	70		
72	4908	178.8	63.1	16.60	1.84	86		T1R
73	4912	240.1	31.5	10.71	1.01	89	2	
74	5036	141.0	46.5	9.93	1.31	82		
75	5066	156.2	51.0	10.68	1.49	80		
76	5074	168.0	55.7	10.10	1.68	71		
77	5094	187.0	41.1	14.39	1.20	92		T1R
78	5099	99.8	42.0	9.92	1.23	83		
79	5154	187.0	46.8	7.38	1.32	72	4	
80	5155	178.4	84.9	10.60	2.30	65	2	
81	5156	179.9	33.8	10.54	1.05	87	2	
82	5197	247.0	51.8	10.82	1.51	79		T1R
83	5212	308.2	36.4	6.92	1.06	76	2	
84	5266	273.5	71.8	9.75	2.10	61	2	T1R
85	5274	115.1	137.8	12.69	3.58	54		
86	5278	217.4	49.6	7.44	1.55	60	2	
87	5305	168.1	41.5	14.14	1.29	89		T1R
88	5535	207.0	64.1	12.33	1.87	77	2	
89	5964	174.9	40.7	11.51	1.16	90		
90	5967	148.1	56.1	12.73	1.64	82		
MEAN(121Cv)		171.7	18.3	11.09	0.57	96		

TOTAL BIOMASS(G/M2) IN TREATMENT 1 GROUP 1

L#	CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
91	6027	440.4	43.5	*	*	*		
92	6028	159.2	57.4	12.92	1.63	84		
93	6030	256.1	51.4	9.47	1.50	75		
94	6035	164.1	71.9	15.40	2.10	80		
95	6038	123.7	28.4	9.96	0.88	89		S
96	6039	-78.1	90.3	18.02	2.35	85	4	
97	6040	162.6	72.3	10.90	2.03	70		
98	6058	133.3	28.5	11.04	0.83	93	2	
99	6165	229.8	53.8	8.61	1.57	69		
100	6166	179.8	35.2	10.20	1.06	87	2	
101	6168	219.3	57.8	8.58	1.80	59	2	
102	6171	87.2	81.3	11.79	2.28	68		
103	6172	188.6	52.8	12.09	1.64	78		
104	6175	119.6	31.3	10.70	0.94	90		
105	6256	123.7	41.0	8.24	1.20	78	2	S
106	6321	106.8	72.8	13.53	2.12	75		
107	6374	210.8	61.4	11.77	1.79	76		
108	6903	197.9	46.4	12.48	1.35	87		
109	6926	145.1	51.7	7.28	1.56	60	2	
110	6948	457.3	48.8	*	*	*	2	T1R
111	6976	111.3	54.6	10.93	1.65	75		
112	6997	140.2	53.5	14.72	1.61	87	2	
113	7193	230.1	59.4	10.23	1.73	72	2	
114	7197	108.5	72.4	9.46	2.26	52		S
115	7199	227.4	40.2	10.96	1.17	87	2	
116	7200	153.2	39.9	12.71	1.20	89	2	
117	7201	173.1	36.1	6.98	1.06	77	4	S
118	7202	177.7	57.0	12.44	1.66	81		
119	7249	158.8	27.0	12.63	0.81	95		
120	7331	85.2	69.4	14.18	2.03	79		S
121	9333	132.8	43.9	13.31	1.23	91		
MEAN(121Cv)		171.7	18.3	11.09	0.57	96		

)LE:4 Regression coefficients of Total pod weights(g/m2) on water applied from flowering to maturity (T1)in Group 1 genotypes

L#	CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
1	35#	-23.2	19.2	5.83	0.58	88		
2	64#	-8.6	27.3	5.38	0.80	77		
3	389#	7.2	42.9	6.47	1.30	63		
4	402#	-42.3	53.3	7.03	1.50	64		
5	403#	-43.0	47.5	8.60	1.39	74		
6	404#	-24.5	25.4	6.21	0.72	86		
7	405#	-20.7	22.1	9.36	0.69	92		
8	406#	35.3	22.4	6.91	0.68	88		T
9	408#	-12.4	22.6	6.74	0.71	86		
10	409#	24.0	38.4	8.08	1.08	82		T
11	410#	-4.1	41.6	8.77	1.21	80		T
12	411#	-27.1	31.2	6.57	0.91	80		
13	412#	-9.2	7.6	6.92	0.24	98		T
14	413#	42.3	14.4	3.63	0.45	81		
15	14	18.0	25.1	5.18	0.78	74		
16	27	-1.7	30.9	6.05	0.90	77		
17	30	16.7	22.8	5.70	0.67	85		T
18	43	-24.3	17.4	6.34	0.53	91		
19	273	-4.0	30.9	6.33	0.93	76		
20	296	-14.5	25.7	5.17	0.75	78		
21	366	-30.6	35.1	5.85	1.02	71		
22	405	-20.0	28.1	7.46	0.85	85		
23	1104	-17.5	28.6	7.61	0.83	86		
24	1141	-28.0	19.7	4.95	0.57	85		S
25	1204	-33.0	50.6	6.89	1.48	62		
26	1311	-24.3	31.3	6.96	0.95	79		
27	1346	-48.3	28.7	6.61	0.87	80		
28	1660	-19.6	28.4	6.55	0.83	83		
29	1697	-34.5	27.1	7.77	0.79	88		
30	1708	-37.1	27.6	6.90	0.78	87		
31	1783	53.4	42.4	4.32	1.24	46		T
32	1878	-9.8	18.0	6.83	0.54	92		
33	1905	-31.3	38.6	7.24	1.13	76		
34	1933	-16.4	27.7	6.70	0.81	84		
35	2716	-22.4	26.8	6.91	0.75	87		
36	2738	12.5	48.1	5.80	1.40	55		
37	2960	-38.3	26.0	8.21	0.76	90		
38	2967	-21.2	29.8	7.57	0.87	85		T1R
39	3073	-44.5	25.7	6.78	0.75	86	.	
40	3092	29.1	23.7	3.63	0.74	61		
41	3157	9.7	22.3	5.42	0.69	80		
42	3215	5.8	33.8	5.02	0.99	66		
43	3222	56.1	31.7	3.00	0.99	35		
44	3225	5.2	28.8	4.93	0.87	69		
45	3280	14.3	40.7	5.25	1.19	59		
MEAN(121Cv)		-11.4	6.2	5.92	0.19	98		

TOTAL POD WEIGHT (G/M2) FOR TREATMENT 1 IN GROUP 1

SL#	CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
46	3287	-16.6	36.0	6.71	1.09	73		
47	3301	-0.5	23.3	5.97	0.73	82		
48	3386	-23.2	32.7	6.88	0.92	82		T
49	3478	-21.5	30.5	6.93	0.89	82		
50	3536	-7.2	17.7	4.84	0.52	87		
51	3537	-52.3	22.3	5.78	0.63	87		
52	3569	-17.2	36.2	5.82	1.02	73		
53	3587	-17.7	18.4	7.29	0.55	93		
54	3605	3.0	30.5	5.01	0.89	70		
55	3657	-33.8	22.2	8.11	0.67	91		
56	3680	21.2	38.1	4.68	1.15	53		T1R
57	3704	-7.1	20.8	8.05	0.63	92		
58	3730	2.2	13.5	5.63	0.42	92		
59	3736	-93.1	35.3	9.10	0.96	89		
60	3774	-21.3	23.7	6.62	0.72	86		
61	4073	-30.8	35.4	6.69	1.03	76		
62	4099	-59.8	28.6	7.83	0.80	89		
63	4544	3.2	22.5	5.89	0.70	82		
64	4546	-10.9	18.1	4.73	0.53	86		
65	4558	18.0	28.5	5.19	0.83	74		
66	4631	30.4	53.2	5.29	1.55	45		
67	4728	-11.1	23.1	6.13	0.72	83		
68	4747	-81.2	90.9	8.57	2.36	55		
69	4790	-27.8	17.9	7.70	0.52	94		T1R
70	4863	8.9	10.1	3.60	0.31	90		
71	4888	-50.3	21.9	6.08	0.64	87		
72	4908	-28.7	22.8	6.17	0.67	87		
73	4912	18.1	35.4	6.37	1.15	68		T
74	5036	-18.4	28.0	5.30	0.79	79		
75	5066	-17.0	24.3	5.77	0.71	83		
76	5074	11.0	26.3	5.16	0.79	75		
77	5094	-23.7	23.1	7.18	0.68	90		T1R
78	5099	-20.7	14.4	4.26	0.42	89		
79	5154	12.9	30.9	3.75	0.87	59		
80	5155	-72.4	68.4	7.49	1.86	58		
81	5156	9.1	24.1	5.58	0.75	78		
82	5197	-28.0	35.2	7.98	1.03	82		
83	5212	20.0	27.0	4.08	0.79	67		
84	5266	38.9	32.6	4.32	0.95	60		
85	5274	107.0	13.9	*	*	*		
86	5278	30.7	34.9	3.62	1.09	40		
87	5305	3.6	16.4	6.52	0.51	92		
88	5535	9.2	20.0	6.15	0.59	89		
89	5964	-28.3	19.2	5.27	0.55	89		
90	5967	-48.6	29.3	5.94	0.86	78		
MEAN(121Cv)		-11.4	6.2	5.92	0.19	98		

TOTAL POD WEIGHT (G/M2) FOR TREATMENT 1 IN GROUP 1

SL#	CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
91	6027	1.8	33.8	2.68	0.92	41		
92	6028	-7.3	19.6	3.67	0.56	78		
93	6030	5.8	25.5	5.87	0.74	82		
94	6035	-38.1	39.0	7.74	1.14	78		
95	6038	-13.6	17.7	5.59	0.55	87		S
96	6039	-123.9	47.2	8.06	1.23	81		
97	6040	-78.6	42.4	7.82	1.19	78		
98	6058	-36.0	24.1	5.88	0.70	84		
99	6165	-20.0	24.4	5.47	0.71	82		
100	6166	-16.3	25.8	5.53	0.78	78		
101	6168	-3.9	28.0	5.47	0.87	72		
102	6171	-20.2	25.4	4.40	0.71	76		
103	6172	-8.1	27.7	7.73	0.86	84		
104	6175	-35.5	25.3	6.58	0.76	84		
105	6256	29.6	15.7	2.46	0.46	68		S
106	6321	-50.0	36.4	7.75	1.06	80		
107	6374	31.4	31.9	4.67	0.93	65		
108	6903	-18.9	28.9	7.38	0.84	85		
109	6926	12.9	28.3	3.49	0.85	53		S
110	6948	18.5	34.3	5.03	1.07	58		
111	6976	-25.7	27.0	5.91	0.82	79		
112	6997	-29.6	23.9	4.83	0.72	79		
113	7193	6.7	16.2	4.68	0.47	88		
114	7197	-3.3	33.3	3.87	1.04	46		S
115	7199	-32.8	34.1	5.81	1.00	72		
116	7200	9.4	35.1	5.89	1.06	68		
117	7201	0.9	18.0	3.60	0.53	78		
118	7202	-33.9	23.4	7.78	0.68	91		
119	7249	-33.2	17.9	8.09	0.54	94		
120	7331	-34.2	33.7	7.16	0.98	80		S
121	9333	-11.1	26.1	4.72	0.74	77		
MEAN(121Cv)		-11.4	6.2	5.92	0.19	98		

TABLE:5 Regression coefficients of Total biomass(g/m2) on water applied from flowering to maturity (T1) in Group 2 genotypes.

SL#	CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
1	660#	213.0	71.2	11.77	2.12	70		
2	661#	217.6	85.8	11.20	2.65	55		
3	666#	255.2	76.9	9.42	2.30	55	2	
4	667#	177.5	70.1	14.70	2.16	76		
5	695#	310.2	33.8	*	*	*	2	S
6	699#	270.1	47.6	12.23	1.51	81	2	
7	702#	205.2	48.3	11.24	1.49	80		
8	703#	272.5	75.3	9.07	2.17	58		
9	706#	200.7	70.8	7.42	2.12	47		
10	707#	82.4	36.4	6.14	1.13	67		S
11	708#	216.4	37.7	11.40	1.20	86	2	
12	709#	124.9	44.8	5.11	1.39	47		S
13	710#	107.4	57.6	5.17	1.78	35		S
14	713#	262.4	72.9	7.45	2.11	49		
15	714#	80.5	54.7	13.46	1.68	82		S
16	715#	180.6	54.3	13.38	1.67	82		
17	716#	164.1	38.8	9.01	1.20	80		
18	717#	351.5	40.5	*	*	*		
19	718#	145.5	45.9	11.23	1.42	81	4	
20	719#	171.3	69.6	8.41	2.15	51	4	
21	721#	150.5	50.4	12.05	1.55	81		
22	722#	206.0	68.4	10.49	2.04	66		
23	723#	136.2	49.6	10.80	1.58	75	4	
24	724#	142.3	66.8	7.35	2.07	46	4	S
25	725#	224.5	71.5	8.40	2.14	53	2	T
26	726#	208.7	36.2	14.51	1.08	93	2	T
27	727#	220.0	67.3	15.24	2.08	79	2	T
28	735#	236.1	39.2	11.13	1.24	84	2	T1R
29	736#	254.0	33.1	11.83	1.05	89	2	T
30	740#	255.0	46.2	15.03	1.47	87		T
31	741#	140.5	149.6	16.70	4.30	54		
32	742#	257.8	45.3	10.96	1.39	81		
33	743#	176.5	83.9	14.98	2.50	73		
34	744#	225.4	69.2	13.55	2.00	79		
35	745#	243.6	53.4	13.22	1.70	80	2	T
36	746#	226.0	49.1	10.63	1.56	75		
37	747#	314.1	69.6	11.99	2.21	65		T
38	748#	241.3	52.7	13.22	1.68	80		
39	749#	155.1	46.9	11.41	1.35	85		
40	750#	225.8	52.8	10.28	1.63	74		
41	751#	210.9	42.4	13.67	1.31	89		
42	752#	241.9	63.3	10.19	1.89	68		
43	753#	232.3	47.8	10.95	1.52	77		
44	754#	159.1	57.3	13.99	1.70	84		
45	755#	144.8	38.3	13.83	1.14	92		
MEAN(121Cv)		177.4	32.3	11.57	1.03	89		

TOTAL BIOMASS (G/M2) IN TRATMENT 1 GROUP 2

SL#	CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
46	756#	191.8	37.2	11.65	1.11	89		
47	757#	239.8	91.6	16.57	2.73	73	2	T
48	758#	233.5	61.0	12.24	1.88	75	2	SlR
49	759#	196.4	34.6	8.94	1.07	83		
50	760#	109.8	81.3	14.10	2.26	78		
51	761#	263.1	66.4	8.77	1.98	59		
52	762#	248.6	60.0	12.40	1.85	76	2	T
53	763#	243.3	81.7	9.50	2.44	52		
54	764#	198.0	44.8	9.94	1.43	76		
55	765#	166.1	48.6	12.21	1.51	82		
56	766#	243.6	56.9	11.43	1.73	77		
57	767#	170.2	64.9	11.03	1.93	71		
58	768#	272.6	78.7	11.23	2.42	59	2	
59	769#	249.9	63.0	9.95	2.01	61		
60	770#	243.9	71.7	9.07	2.26	52	2	
61	771#	218.4	26.7	6.69	0.85	80		
62	772#	222.2	47.4	11.44	1.41	83		
63	773#	186.3	81.4	13.38	2.43	69		
64	20	143.9	70.5	13.19	2.04	77		
65	58	161.8	52.9	9.00	1.64	68	4	S
66	190	153.0	60.8	10.24	1.87	67		
67	191	135.6	69.6	13.02	2.07	75	4	
68	214	203.8	51.9	13.28	1.60	83		
69	222	193.2	59.4	13.31	1.77	81		
70	224	234.3	70.4	12.68	2.04	76		
71	232	208.6	38.8	10.32	1.23	82		
72	323	273.9	61.3	8.23	1.83	60		
73	391	174.6	74.8	12.08	2.30	65		
74	476	231.4	26.6	*	*	*		S
75	1326	234.7	54.1	11.73	1.70	77		
76	1712	114.8	40.6	10.96	1.21	86		
77	1789	80.2	30.3	11.81	0.90	93	4	
78	3580	227.9	100.3	11.92	3.09	50	2	T
79	4580	140.7	55.7	9.72	1.72	69		S
80	4751	156.8	68.6	10.32	2.12	62		
81	5327	100.1	56.2	18.14	1.67	90		
82	5433	185.8	51.1	12.89	1.57	82		
83	5435	75.5	84.2	16.22	2.51	76		
84	5465	160.7	60.2	14.17	1.80	82		
85	5588	173.2	92.4	9.70	2.85	43		
86	5711	168.9	40.7	11.64	1.29	84		
87	6968	175.7	43.3	10.43	1.31	83		
88	7220	203.2	69.1	10.90	2.06	67		
89	7250	201.9	48.9	12.04	1.50	82		
90	7251	195.4	77.1	9.72	2.30	56	4	
MEAN(121Cv)		177.4	32.3	11.57	1.03	89		

TOTAL BIOMASS (G/M2) IN TRATMENT 1 GROUP 2

SL#	CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
91	7268	219.4	88.1	10.83	2.63	55		
92	7269	92.7	69.4	10.56	2.07	66		S
93	7297	264.2	72.9	7.42	2.19	45		
94	7306	196.6	67.7	13.95	2.02	78		
95	7308	185.8	83.5	11.52	2.40	65		
96	7337	135.7	48.6	11.26	1.50	80		
97	7471	198.3	56.8	11.60	1.81	73		
98	7881	173.8	82.6	14.30	2.46	72		
99	7882	107.3	55.1	16.21	1.70	87		T
100	7886	240.9	51.4	13.62	1.63	82		
101	7887	218.4	125.1	12.78	3.34	58		
102	7896	220.9	68.2	11.17	2.03	69		
103	7898	167.2	69.7	17.12	2.08	84		T
104	8456	137.9	57.8	9.89	1.84	65		
105	8460	201.9	44.9	9.69	1.39	77		
106	8472	161.9	60.1	11.42	1.79	75		
107	8472	219.9	66.4	11.85	1.98	73		
108	8796	211.5	64.7	10.61	1.99	66		
109	9167	190.6	96.4	10.10	2.88	47		
110	9175	189.3	51.6	13.70	1.48	88		
111	9193	75.9	45.7	10.44	1.41	79	4	
112	9213	232.5	57.9	9.53	1.73	69		
113	9317	194.0	75.0	8.43	2.18	54	4	
114	9329	122.9	102.1	13.26	2.94	62		
115	9335	196.0	44.8	12.29	1.42	83		
116	9394	116.4	60.5	11.63	1.87	73	4	
117	9395	169.0	52.7	12.78	1.52	85		
118	9422	191.5	64.8	10.24	1.93	68		
119	9430	60.2	57.4	5.23	1.71	39	4	
120	9934	301.5	82.4	9.80	2.55	50	1	T
121	9935	207.3	54.9	12.65	1.75	77		
MEAN(121Cv)		177.4	32.3	11.57	1.03	89		

:6 Regression coefficients of total pod weights(g/m2)on water applied from flowering to maturity(T1) in group 2 genotypes.

L#	CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
1	660#	-65.1	51.4	9.51	1.54	74		
2	661#	-38.4	35.7	6.92	1.10	73		
3	666#	-8.8	36.0	7.30	1.08	78		
4	667#	-73.3	39.4	10.93	1.21	85		
5	695#	52.3	10.7	*	*	*		S
6	699#	-49.8	21.6	8.39	0.69	91		
7	702#	-44.4	21.4	8.41	0.66	92		
8	703#	-42.1	39.3	7.32	1.13	77		
9	706#	-3.3	31.9	5.54	0.95	72		
10	707#	-18.3	21.1	4.71	0.65	78		S
11	708#	-31.8	28.4	8.03	0.90	84		
12	709#	-10.9	20.4	3.02	0.63	61		S
13	710#	10.1	34.7	3.51	1.07	41		S
14	713#	-13.0	35.2	6.45	1.02	76		
15	714#	-71.3	32.7	9.47	1.01	86		S
16	715#	-49.8	28.7	8.64	0.89	87		
17	716#	-30.7	25.9	7.19	0.80	85		
18	717#	-23.9	42.5	4.99	1.27	53		
19	718#	-34.9	24.7	7.97	0.77	88		
20	719#	-33.6	43.5	7.39	1.34	68		
21	721#	-37.6	23.6	6.43	0.73	85		
22	722#	-63.2	30.9	7.93	0.92	85		
23	723#	-38.6	27.1	6.98	0.86	81		
24	724#	6.2	40.0	4.21	1.23	43		S
25	725#	-34.4	30.7	7.41	0.92	83		
26	726#	-64.5	30.4	7.84	0.91	85		
27	727#	-40.2	30.0	7.95	0.93	84		T
28	735#	-47.9	21.8	9.44	0.69	93		T1R
29	736#	-28.9	22.2	6.63	0.71	85		
30	740#	-59.3	27.3	9.16	0.87	88		T
31	741#	-129.4	54.9	9.98	1.58	76		
32	742#	-30.4	20.6	7.03	0.64	90		
33	743#	-69.1	30.9	8.68	0.92	87		
34	744#	-65.3	31.4	8.55	0.91	88		
35	745#	-50.3	23.5	9.26	0.75	91		T1R
36	746#	-21.8	22.4	7.66	0.71	88		
37	747#	-14.5	24.2	7.63	0.77	87		T
38	748#	-23.8	27.9	6.56	0.89	78		
39	749#	-63.0	28.1	6.86	0.81	86		
40	750#	-37.4	18.0	5.35	0.55	87		
41	751#	-49.7	24.0	7.44	0.74	88		
42	752#	-24.2	31.4	5.84	0.94	74		
43	753#	-2.6	21.1	6.99	0.67	88		
44	754#	-77.4	35.1	10.87	1.04	89		T
45	755#	-119.0	32.8	9.86	0.98	89		
MEAN(121Cv)		-35.3	14.2	7.18	0.45	94		

TOTAL POD WT/M2 FROM TREATMENT 1.GROUP 2

SL#	CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
46	756#	-78.6	28.8	8.02	0.86	87		
47	757#	-83.9	50.2	10.90	1.49	80		T
48	758#	-64.1	29.1	8.26	0.90	86		
49	759#	-40.5	13.4	5.84	0.41	93		S1R
50	760#	-92.0	30.3	8.18	0.84	89		
51	761#	-42.2	30.3	6.71	0.90	81		
52	762#	-42.4	27.8	9.79	0.86	90	T	
53	763#	-61.6	40.1	7.72	1.20	76		
54	764#	-18.9	18.8	6.05	0.60	87		
55	765#	-46.8	29.9	8.89	0.93	87		
56	766#	-57.4	24.8	8.50	0.75	91		
57	767#	-45.6	27.1	7.45	0.81	87		
58	768#	-23.1	34.0	8.96	1.05	84		
59	769#	-23.4	44.6	8.02	1.42	67		
60	770#	-21.3	34.1	6.09	1.07	69		
61	771#	42.0	15.9	4.32	0.51	83		
62	772#	-67.6	31.7	8.23	0.95	85		
63	773#	-39.2	62.2	8.79	1.86	62		
64	20	-38.1	52.9	8.38	1.53	71		
65	58	2.7	26.4	5.67	0.82	77		S
66	190	-52.0	35.9	6.34	1.11	69		S
67	191	-74.8	38.0	9.66	1.13	85		
68	214	-55.0	33.8	8.89	1.05	84		
69	222	-61.4	24.0	9.07	0.72	92		
70	224	-18.7	45.2	7.57	1.31	73		
71	232	-23.9	23.6	7.74	0.75	88		
72	323	-4.5	29.5	5.94	0.88	77		
73	391	2.6	46.2	5.81	1.43	53		
74	476	22.2	18.7	2.20	0.58	49		S
75	1326	-5.9	23.5	7.06	0.74	87		
76	1712	-62.9	17.9	7.94	0.53	94		
77	1789	-56.4	33.0	6.24	0.99	75		
78	3580	-35.6	32.8	7.66	1.01	80		
79	4580	-32.5	26.5	5.33	0.82	75		S
80	4751	-14.0	26.0	5.39	0.80	76		
81	5327	-109.3	34.3	11.30	1.02	90		
82	5433	-58.4	32.5	8.84	1.01	85		
83	5435	-74.1	36.0	8.69	1.07	83		
84	5465	-49.4	28.7	7.98	0.86	87		
85	5588	-22.0	38.4	7.06	1.18	71		
86	5711	-23.0	21.6	6.06	0.69	84		
87	6968	-42.9	36.7	7.01	1.11	75		
88	7220	-43.4	32.0	6.59	0.95	78		
89	7250	-65.4	30.4	8.41	0.94	85		
90	7251	-32.0	31.7	5.17	0.95	69		
MEAN(121Cv)		-35.3	14.2	7.18	0.45	94		

TOTAL POD WT/M2 FROM TREATMENT 1.GROUP 2

SL#	CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
91	7268	-36.9	43.4	8.36	1.30	76		
92	7269	-41.8	33.8	6.67	1.01	77		S
93	7297	22.3	50.7	6.28	1.52	55		T1R
94	7306	-55.8	28.3	7.64	0.85	86		
95	7308	-24.0	37.3	6.53	1.11	72		
96	7337	-33.5	24.1	5.48	0.74	79		
97	7471	-52.6	23.2	7.94	0.74	88		
98	7881	-67.7	41.6	8.21	1.24	77		
99	7882	-53.3	32.6	10.25	1.00	88		
100	7886	-37.5	22.7	8.74	0.72	91		T
101	7887	-104.0	65.0	8.66	1.74	71		
102	7896	-74.8	24.4	8.75	0.73	92		
103	7898	-61.5	27.3	9.99	0.81	92		T
104	8456	-26.4	22.7	6.08	0.72	82		
105	8460	-13.9	29.4	6.67	0.91	79		
106	8472	-81.5	32.9	8.79	0.98	86		
107	8472	-43.0	24.6	6.51	0.74	86		
108	8796	-1.3	31.4	6.49	0.97	76		
109	9167	-15.7	40.3	6.30	1.20	67		
110	9175	-67.2	32.1	9.10	0.92	89		
111	9193	-23.2	22.0	4.43	0.68	75		
112	9213	-37.0	34.6	7.05	1.04	78		
113	9317	-29.4	32.1	4.24	0.93	62		
114	9329	-81.8	35.0	8.09	1.01	84		
115	9335	-28.1	14.3	6.61	0.45	93		
116	9394	-23.3	39.0	5.89	1.21	62		
117	9395	-41.4	29.1	7.60	0.84	87		
118	9422	-35.8	42.6	7.13	1.27	70		
119	9430	-14.4	14.4	2.35	0.43	69		
120	9934	-21.9	26.8	7.91	0.83	87		T
121	9935	-12.9	18.5	9.91	0.59	95		T
MEAN(121Cv)		-35.3	14.2	7.18	0.45	94		

2:7 Regression coefficients of total biomass(g/m2) on water applied from flowering to maturity with two recovery irrigatons (T2) in group 1 genotypes.

CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
35#	124.2	85.3	10.89	2.61	52		T1R
64#	127.2	52.9	12.03	1.62	78		
389#	45.7	58.5	10.87	1.79	71		S
402#	129.3	67.1	9.78	2.00	62		
403#	37.9	61.2	17.09	1.87	85		
404#	132.3	43.1	12.51	1.32	86		
405#	198.8	61.6	8.96	1.88	59		
406#	162.8	50.6	13.13	1.54	83		T
408#	178.1	70.6	11.21	2.10	66		
409#	172.1	44.2	9.63	1.35	77		
410#	34.4	65.4	14.99	1.94	81		
411#	150.7	51.5	10.81	1.57	76		T1R
412#	85.9	48.7	8.13	1.49	66	3	
413#	142.7	40.1	7.41	1.23	70		
14	117.1	85.1	12.72	2.60	60	1	
27	186.1	60.6	11.19	1.85	70	1	T1R
30	94.0	71.5	10.76	2.18	61	3	
43	32.0	49.9	14.13	1.52	85		
273	221.4	74.1	10.24	2.26	56	1	T1R
296	303.2	53.2	6.66	1.63	51		T
366	141.1	69.6	8.75	2.07	55		
405	271.6	43.9	9.95	1.35	78	1	T
1104	164.0	30.4	10.04	0.93	89	3	S
1141	246.3	59.0	8.64	1.75	62		T1R
1204	77.2	42.5	13.45	1.30	88	1	
1311	45.7	53.5	11.94	1.59	80		
1346	105.0	41.5	11.99	1.27	86		
1660	107.1	69.4	15.75	2.12	78		
1697	30.0	67.6	19.41	2.06	85		T1R
1708	8.2	46.2	15.14	1.42	88		
1783	276.8	64.5	6.31	1.97	38	1	
1878	135.2	49.3	8.73	1.51	68		
1905	249.1	77.3	7.84	2.37	40		T1R
1933	74.3	73.3	15.56	2.18	78	1	
2716	39.0	50.8	15.15	1.55	88		
2738	154.1	51.1	9.34	1.57	70	1	
2960	186.2	46.1	12.43	1.44	84		T
2967	111.3	45.9	13.69	1.40	86		
3073	33.5	76.1	14.27	2.33	71		
3092	113.1	59.5	7.86	1.82	54		
3157	134.9	39.5	11.07	1.21	85		T1R
3215	241.1	58.4	8.82	1.79	61		T
3222	163.4	56.4	8.04	1.73	58	1	
3225	133.5	97.1	11.27	2.97	47	1	
3280	196.7	72.6	6.43	2.22	33		
MEAN(121Cv)	155.7	19.6	10.45	0.60	95		

TOTAL BIOMASS(G/M2) IN TREATMEANT 2 GROUP 1

CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
3287	430.2	34.5	*	*	*		
3301	76.0	54.2	8.28	1.61	65	1	S
3386	70.2	84.2	13.13	2.50	65		
3478	246.8	69.6	8.17	2.13	48		
3536	256.7	56.8	8.15	1.74	58		T1R
3537	211.0	46.3	11.51	1.41	81		T
3569	164.0	63.4	11.84	1.94	71		T1R
3587	187.8	53.3	13.31	1.63	81	1	T
3605	176.2	92.4	10.60	2.82	47	1	T1R
3657	134.7	74.2	11.69	2.27	63		
3680	144.4	47.2	9.87	1.45	75	1	
3704	120.6	55.4	12.29	1.69	77		
3730	158.1	33.4	10.40	1.02	87		
3736	125.0	55.1	13.36	1.68	81	3	T1R
3774	107.5	80.5	11.67	2.46	59		
4073	156.9	66.7	11.16	2.04	66		
4099	131.8	46.0	11.12	1.40	80		
4544	251.7	41.6	10.51	1.27	82		T
4546	290.7	70.5	8.52	2.16	49		T1R
4558	142.0	50.4	9.40	1.54	71	1	
4631	187.5	51.1	6.02	1.57	48	1	
4728	225.1	47.3	10.60	1.45	78	1	T
4747	128.7	69.7	15.28	2.07	79		T
4790	-20.0	44.9	19.56	1.37	93		T
4863	351.0	89.6	8.84	2.67	42	1	
4888	116.5	48.0	10.32	1.42	79		
4908	124.5	52.1	13.81	1.59	83	1	
4912	171.4	63.5	9.24	2.01	59	1	T1R
5036	77.2	58.0	10.33	1.72	71		S
5066	214.6	68.6	11.24	2.09	65	1	T1R
5094	147.6	72.3	14.89	2.21	75	1	T
5099	86.7	40.1	11.59	1.22	85		
5154	178.1	44.9	5.34	1.37	49		S
5155	107.0	47.1	9.52	1.44	74		
5156	161.0	33.5	11.91	1.02	90		T
5197	201.0	69.0	9.29	2.11	55		
5212	19.0	46.3	11.17	1.37	82		
5266	190.9	74.9	9.58	2.29	52	1	
5274	186.7	79.3	9.83	2.36	54		T
5278	218.0	71.1	8.69	2.18	50	1	
5305	110.9	68.3	11.96	2.09	68	3	
5535	107.4	64.0	12.78	1.95	74		
5964	269.8	63.3	10.48	1.89	68		T
5967	89.5	74.1	8.29	2.20	49		S
6027	151.9	41.3	11.84	1.26	85		
N(121Cv)	155.7	19.6	10.45	0.60	95		

TOTAL BIOMASS(G/M2) IN TREATMEANT 2 GROUP 1

#	CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
1	6028	185.6	91.7	10.22	2.72	48		T1R
2	6030	176.3	46.6	10.98	1.42	80		
3	6035	300.4	109.1	8.76	3.25	31		T1R
4	6038	127.7	62.0	10.53	1.89	67		
5	6039	12.8	62.9	14.83	1.87	82		
6	6040	178.8	35.5	10.38	1.08	86		
7	6058	204.0	28.6	9.55	0.88	89		
8	6165	88.8	55.5	8.79	1.70	63	3	
9	6166	550.7	35.8	*	*	*		T1R
10	6168	266.3	55.6	9.38	1.70	66	1	T
11	6171	113.8	80.0	9.75	2.38	53		
12	6172	196.2	58.0	11.28	1.83	73		
13	6175	69.0	36.4	10.54	1.11	86	1	
14	6256	361.4	34.7	*	*	*	3	
15	6321	81.0	41.9	11.87	1.28	85		
16	6374	185.9	54.6	12.23	1.67	78		T1R
17	6903	128.3	102.9	9.92	3.15	37		
18	6926	105.2	46.6	5.29	1.43	46		S
19	6948	115.6	70.0	12.12	2.14	67	3	
20	6975	101.8	61.9	10.88	1.89	68		
21	6976	204.4	103.5	8.85	3.17	31		T1R
22	6997	8.0	53.6	15.32	1.59	87		
23	7193	240.1	65.8	7.49	2.02	46		
24	7197	413.1	50.2	*	*	*	1	S
25	7199	82.9	58.6	12.19	1.79	75		
26	7200	169.9	56.3	8.04	1.72	58		
27	7201	107.9	83.9	8.58	2.57	40		
28	7202	145.4	31.6	12.92	0.96	92	3	T1R
29	7249	165.1	67.3	7.71	2.06	47		
30	7331	27.8	65.5	15.55	1.88	84	3	
31	9333	126.6	64.0	11.03	1.96	67		
MEAN(121Cv)		155.7	19.6	10.45	0.60	95		

:8 Regression coefficients of total pod weights(g/m2) on water applied from flowering to maturity with two recovery irrigatons (T2) in group 1 genotypes.

CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
35#	-68.9	41.5	8.17	1.27	73		
64#	-64.6	28.0	8.68	0.85	87		
389#	-57.4	42.8	9.84	1.31	79		
402#	-56.8	21.8	7.73	0.65	91		
403#	-117.2	36.8	12.60	1.12	89		
404#	-53.5	15.3	9.26	0.47	96		
405#	-14.0	48.5	8.24	1.49	67		
406#	-6.1	36.1	9.72	1.11	84		T
408#	-2.9	46.7	9.13	1.39	75		
409#	-0.5	33.0	6.99	1.01	76		
410#	-93.2	26.9	10.66	0.80	93		
411#	-29.1	31.3	7.76	0.96	81		
412#	1.0	31.0	6.01	0.95	72		
413#	32.2	27.7	5.87	0.85	76		
14	-64.7	40.0	8.75	1.22	77		
27	-43.3	44.4	8.84	1.36	73		
30	-30.2	23.9	6.15	0.73	82		
43	-71.1	38.1	7.57	1.17	73		
273	16.0	41.8	5.17	1.28	51		
296	89.5	38.7	4.37	1.18	46		
366	-32.1	42.5	5.76	1.27	59		
405	-15.9	30.9	8.13	0.95	83		T1R
1104	-74.8	18.9	9.44	0.58	95		
1141	-9.3	37.3	7.25	1.14	72		
1204	-83.5	19.5	10.24	0.59	95		
1311	-65.0	47.7	8.98	1.42	74		
1346	-56.4	42.7	9.06	1.30	76		
1660	-64.4	39.6	9.30	1.21	80		
1697	-103.6	40.1	11.15	1.22	85		T1R
1708	-95.1	23.0	9.05	0.70	92		
1783	166.4	23.1	*	*	*		
1878	-43.5	34.3	7.43	1.05	77		
1905	44.3	60.9	6.45	1.86	42		
1933	-70.8	31.6	9.79	0.94	89		
2716	-91.3	36.8	9.33	1.09	84		
2738	-10.5	30.9	6.76	0.95	77		
2960	-38.0	29.4	8.66	0.90	86		T1R
2967	-55.8	37.3	9.49	1.14	82		
3073	-119.9	34.2	10.97	1.04	88		
3092	-12.1	31.3	5.03	0.96	64		
3157	-43.6	30.5	9.70	0.93	88		
3215	1.8	19.7	6.18	0.60	87		
3222	20.8	32.0	4.66	0.98	59		
3225	-24.3	35.3	6.21	1.08	68		
3280	58.3	53.2	4.47	1.63	30		
AN(121Cv)	-36.3	10.8	7.64	0.33	97		

TOTAL POD WEIGHT (G/M2) FROM EBS IN TREATMENT 2 GROUP 1

CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
3287	232.0	27.4	*	*	*		
3301	6.2	38.8	4.23	1.15	47		S
3386	-75.3	51.4	7.36	1.53	61		S
3478	-6.3	56.0	8.46	1.71	61		
3536	-29.8	33.9	7.02	1.04	75		
3537	-39.6	38.8	7.40	1.19	72		
3569	-86.2	47.2	9.17	1.44	72		
3587	-45.3	45.6	10.68	1.39	79		
3605	-2.3	48.3	5.56	1.48	47		
3657	-71.4	28.1	9.71	0.86	89		
3680	-24.8	34.3	7.28	1.05	76		
3704	-63.4	36.4	9.32	1.11	82		
3730	-10.3	37.9	6.29	1.16	65		
3736	103.0	26.9	10.99	0.82	92		T1R
3774	-65.8	49.0	8.55	1.50	68		
4073	-49.1	31.0	7.24	0.95	79		
4099	-43.9	23.5	7.59	0.72	88		
4544	-53.6	23.3	8.62	0.71	91		
4546	23.8	63.4	6.98	1.94	44		
4558	-34.3	34.1	6.59	1.04	72		
4631	-15.3	29.3	5.00	0.90	67		
4728	12.1	25.9	7.60	0.79	86		T
4747	-63.2	42.0	9.47	1.25	80		
4790	113.9	28.8	11.10	0.88	91		
4863	5.7	42.4	4.98	1.26	51		
4888	-57.4	26.9	7.13	0.80	85		
4908	-22.6	45.1	5.72	1.38	52		
4912	-5.6	40.9	6.75	1.25	65		
5036	-48.0	24.8	7.51	0.76	87		
5066	-20.8	41.6	8.13	1.27	73		
5094	-71.6	35.4	9.59	1.08	84		
5099	-32.5	29.1	6.34	0.89	77		
5154	-11.7	22.6	5.01	0.69	77		S
5155	-65.3	23.3	7.02	0.71	87		
5156	-63.7	20.4	10.23	0.62	95		
5197	-5.3	47.7	8.24	1.46	67		
5212	-16.3	25.4	4.36	0.76	70		
5266	13.7	41.2	6.07	1.26	60		
5274	-43.4	26.4	5.28	0.79	76		S
5278	13.2	48.8	6.96	1.49	58		
5305	-69.5	33.5	9.30	1.03	84		
5535	-110.2	49.6	11.13	1.51	78		
5964	-38.9	22.6	8.08	0.69	90		
5967	86.5	20.7	*	*	*		S
6027	-30.6	36.0	7.00	1.10	72		
N(121Cv)	-36.3	10.8	7.64	0.33	97		

TOTAL POD WEIGHT (G/M2) FROM EBS IN TREATMENT 2 GROUP 1

CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
6028	-43.1	39.9	6.16	1.19	65		
6030	-45.6	29.6	8.26	0.90	85		
6035	12.1	60.1	8.03	1.79	58		
6038	-47.3	44.6	8.30	1.37	71		
6039	-68.0	25.8	7.15	0.77	86		
6040	-74.6	29.7	9.59	0.91	88		
6058	-81.7	18.3	8.29	0.56	94		S1R
6165	-59.6	33.2	6.42	1.02	72		
6166	138.6	53.8	4.31	1.65	28		
6168	-50.9	31.7	8.93	0.97	85		
6171	-32.0	35.5	6.06	1.06	70		
6172	-82.4	32.2	10.81	0.98	89		
6175	-79.6	22.2	8.33	0.68	91		
6256	165.0	23.0	*	*	*		
6321	-90.1	41.5	9.11	1.27	77		
6374	-15.6	26.7	7.53	0.82	85		
6903	-65.6	62.8	8.72	1.92	57		
6926	-1.1	29.3	3.42	0.90	48		
6948	-49.0	54.2	8.16	1.66	61		
6975	-75.0	26.8	8.03	0.82	86		
6976	-26.3	61.4	7.46	1.88	50		
6997	-92.8	26.8	7.44	0.79	86		
7193	-39.5	33.9	7.46	1.04	77		
7197	177.5	25.8	*	*	*		
7199	-67.3	21.1	8.42	0.65	92		
7200	-25.7	56.5	6.16	1.73	44		
7201	-35.7	85.0	6.77	2.60	28		
7202	-51.2	33.2	10.10	1.01	87		
7249	-44.9	45.9	7.64	1.40	66		
7331	-132.9	37.5	10.70	1.08	88		
9333	-62.3	26.8	6.89	0.82	82		
(121Cv)	-36.3	10.8	7.64	0.33	97		

)LE:9 Regression coefficients of total biomass(g/m2) on water applied from flowering to maturity with two recovery irrigations (T2) in group 2 genotypes.

	CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
1	660#	100.1	46.8	11.68	1.46	81		
2	661#	193.9	93.2	11.78	2.91	51		
3	666#	204.6	29.1	10.64	0.90	90		
4	667#	195.0	55.6	12.39	1.74	77		
5	695#	-68.3	97.5	13.42	3.05	55		
6	699#	136.3	56.4	14.36	1.76	81		
7	702#	168.6	98.0	12.58	3.06	51		
8	703#	177.4	95.3	12.69	2.98	53		
9	706#	273.4	62.4	5.48	1.95	32		
0	707#	19.2	70.2	6.41	2.13	37		
1	708#	52.0	101.7	11.25	3.18	43		
2	709#	209.8	35.6	*	*	*		S
3	710#	80.8	86.6	7.37	2.71	30		
4	713#	154.2	91.0	8.29	2.85	33	1	
5	714#	59.3	62.7	13.29	1.96	75		
6	715#	5.1	71.7	15.12	2.24	75		
7	716#	93.9	107.6	10.26	3.36	36		
8	717#	0.6	85.5	9.80	2.76	45		S
9	718#	67.4	71.6	9.77	2.24	55		
0	719#	27.1	86.5	7.66	2.64	35		
1	721#	62.8	51.6	9.71	1.66	70	3	S
2	722#	-7.8	103.6	12.35	3.10	53		
3	723#	411.5	44.4	*	*	*		
4	724#	162.5	85.1	9.95	2.66	46		
5	725#	101.5	57.8	9.26	1.81	63		
6	726#	184.2	58.0	12.74	1.76	79		T
7	727#	174.0	66.0	16.50	2.07	82	1	T
8	735#	165.6	80.6	11.38	2.52	56		
9	736#	300.6	64.0	8.78	2.00	55		
0	740#	188.8	68.4	14.91	2.14	76		
1	741#	179.2	83.7	15.17	2.62	69	1	T
2	742#	172.5	62.5	11.87	1.95	71		
3	743#	272.5	65.1	9.51	2.00	61		
4	744#	83.4	50.5	14.89	1.57	85		
5	745#	190.9	73.0	13.38	2.28	69		
6	746#	100.1	53.3	13.47	1.66	81		
7	747#	43.3	65.7	14.96	2.05	78		
8	748#	179.4	55.0	11.61	1.72	75		
9	749#	131.1	74.2	12.05	2.32	63		
0	750#	114.1	90.3	12.74	2.82	56		
1	751#	182.1	38.4	14.17	1.20	90		
2	752#	235.9	65.1	10.92	2.03	65		
3	753#	91.1	79.6	14.11	2.49	68		
4	754#	62.2	77.1	12.02	2.41	61		
5	755#	68.5	69.6	15.88	2.17	78		
N(200cv)		150.7	25.5	11.14	0.80	93		

TOTAL BIOMASS(G/M2)IN TREATMENT 2

CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
756#	83.8	40.3	11.65	1.26	85		
757#	117.0	73.9	16.09	2.31	76		
758#	183.3	56.1	12.84	1.75	78	1	
759#	284.1	74.2	9.72	2.32	53		T
760#	267.2	82.7	8.85	2.59	42		
761#	140.3	64.8	13.73	2.02	75	1	
762#	122.8	48.4	10.94	1.51	77	3	
763#	236.2	78.3	11.98	2.45	60	1	
764#	163.2	57.0	11.51	1.78	73	1	
765#	213.3	69.2	7.41	2.17	42		
766#	126.4	69.2	14.02	2.16	73	1	
767#	182.0	66.0	11.27	2.06	66		
768#	333.5	105.9	10.07	3.31	35		
769#	116.9	88.3	16.42	2.76	70	1	
770#	55.4	56.9	13.81	1.78	80		
771#	56.1	76.6	9.93	2.40	52		
772#	192.3	72.8	10.92	2.27	59		
773#	291.9	52.4	7.70	1.64	58		
20	59.4	40.0	13.81	1.25	89		
58	296.3	58.1	6.69	1.82	46	1	
190	91.7	51.4	14.71	1.60	85		
191	134.3	55.9	9.71	1.80	67		S
214	356.7	56.5	5.70	1.77	39		
222	84.4	89.8	13.89	2.81	61		
224	168.4	71.1	12.40	2.22	67		T1R
232	504.9	65.3	*	*	*		
323	213.6	54.8	8.59	1.71	62		
391	232.2	72.7	10.70	2.27	59	1	
476	257.0	22.8	*	*	*		
1326	76.1	66.0	12.02	2.06	69		
1712	183.5	86.4	14.13	2.70	64	1	T
1789	202.0	45.6	7.22	1.43	62		
3580	63.5	94.8	16.42	2.96	66		
4580	133.9	65.7	9.72	2.05	59		
4751	152.8	45.2	10.25	1.41	78		
5327	48.2	76.1	15.37	2.18	80	3	
5433	410.9	49.0	6.40	1.53	52		T
5435	113.8	51.2	11.78	1.60	78		
5465	149.1	45.2	9.70	1.41	75		
5588	293.7	62.6	5.52	1.96	32		
5711	259.1	47.0	8.13	1.47	66		
6968	145.3	83.8	10.84	2.61	55		
7220	105.8	45.7	10.85	1.42	79		
7250	79.7	47.0	10.50	1.47	77	3	
7251	247.6	52.4	7.61	1.64	58	1	
N(200cv)	150.7	25.5	11.14	0.80	93		

TOTAL BIOMASS(G/M2) IN TREATMENT 2

CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
7268	211.1	53.0	11.91	1.65	77	1	
7269	108.2	67.7	11.46	2.05	68	3	
7297	99.8	35.3	9.21	1.10	82	3	S
7306	220.3	57.5	11.07	1.80	71	1	
7308	214.7	64.7	10.37	2.02	63	1	
7337	93.0	50.0	11.43	1.56	78	1	
7471	95.3	64.2	12.48	2.00	72	3	
7881	323.2	112.5	9.17	3.52	28	3	
7882	21.4	94.2	17.87	2.94	71	3	
7886	129.0	68.6	13.98	2.09	76		
7887	112.7	61.8	18.65	1.93	86	1	
7896	100.9	61.0	12.90	1.90	75	3	
7898	46.5	81.3	21.04	2.54	82		
8456	118.8	40.4	7.22	1.26	68	1	S
8460	166.7	39.8	8.88	1.24	77		
8472	180.3	92.4	11.70	2.89	51		
8472	141.6	78.7	12.32	2.46	62		
8796	248.1	52.8	8.37	1.65	62		
9167	129.2	55.2	10.30	1.68	72		
9175	232.5	58.9	7.56	1.84	51		
9193	143.7	55.7	9.38	1.69	68		
9213	184.9	55.2	8.58	1.73	61		
9317	234.9	87.9	9.90	2.75	44		
9329	146.2	77.5	11.52	2.42	59	1	
9335	189.5	74.7	8.91	2.34	47		
9394	408.4	40.1	*	*	*		
9395	138.7	74.0	11.40	2.31	61	1	
9422	107.1	56.2	11.83	1.75	75	3	
9430	155.6	22.1	*	*	*		S
9934	175.7	55.4	17.34	1.73	87		T
9935	192.7	48.9	8.92	1.53	69	1	
(200cv)	150.7	25.5	11.14	0.80	93		

,E:10 Regression coefficients of total pod weights(g/m2) on water applied from flowering to maturity with two recovery irrigatons (T2) in group 2 genotypes.

CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
660#	-94.9	44.4	8.78	1.39	72		
661#	30.3	62.3	6.51	1.95	40		
666#	-22.0	26.2	7.49	0.82	85		
667#	-81.9	35.7	11.05	1.11	87		
695#	-12.1	26.0	2.15	0.81	29		
699#	-79.5	23.5	9.48	0.74	92		
702#	-100.5	39.5	11.20	1.23	84		
703#	54.2	53.3	6.78	1.67	51		
706#	208.4	23.5	*	*	*		
707#	-6.2	40.2	3.16	1.22	29		
708#	-52.1	48.3	6.43	1.51	53		
709#	6.7	23.7	2.21	0.74	36		S
710#	-2.1	40.4	4.48	1.26	44		
713#	-30.1	52.9	6.85	1.65	52		
714#	-106.3	38.7	10.70	1.21	84		
715#	-99.2	33.8	9.20	1.06	83		
716#	-65.7	66.3	8.69	2.07	53		
717#	-47.9	46.6	5.28	1.46	45		S
718#	-35.5	40.9	6.62	1.28	63		
719#	-77.9	49.7	6.47	1.51	55		
721#	-45.0	19.6	6.39	0.63	88		S
722#	-74.5	47.4	6.96	1.48	58		
723#	60.1	58.7	5.16	1.84	32		
724#	40.8	49.1	5.77	1.54	47		
725#	-44.3	28.7	6.90	0.90	80		
726#	-67.2	35.9	6.75	1.09	73		S
727#	-116.6	28.8	12.47	0.90	93		T
735#	13.4	61.2	8.25	1.92	54		
736#	60.0	54.8	6.26	1.71	45		
740#	-64.2	22.4	10.05	0.70	93		
741#	-130.7	39.4	11.15	1.23	84		
742#	-14.4	40.6	6.86	1.27	65		
743#	48.5	54.5	6.26	1.70	45		
744#	-108.3	16.2	9.90	0.51	96		
745#	-101.5	34.9	11.60	1.09	88		
746#	-107.8	27.0	10.27	0.84	91		
747#	-109.6	34.0	8.92	1.06	82		
748#	-65.1	28.7	8.29	0.90	85		
749#	-93.0	39.8	8.90	1.24	77		
750#	-88.9	38.3	8.74	1.20	78		
751#	-7.9	30.1	7.55	0.94	81		
752#	-79.5	45.6	9.47	1.43	74		
753#	-76.3	31.1	10.23	0.97	88		
754#	-77.0	31.3	8.25	0.98	82		
755#	-163.6	41.2	12.31	1.29	86		
(121Cv)	-34.8	17.1	7.46	0.53	93		

POD WT/M2 FROM TREATMENT 2

CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
756#	-78.8	21.8	8.06	0.68	90		
757#	-115.7	37.6	11.83	1.17	87		
758#	-70.9	33.1	8.83	1.04	83		
759#	79.3	53.1	5.65	1.66	41		T
760#	213.8	20.9	*	*	*		
761#	-72.7	37.0	9.91	1.16	83		
762#	-68.3	37.4	8.09	1.17	76		
763#	-42.5	37.2	9.02	1.16	80		
764#	8.3	35.7	6.95	1.11	72		
765#	-31.8	45.8	7.01	1.43	60		
766#	-67.1	46.7	9.27	1.46	72		
767#	-40.7	23.3	7.43	0.73	87		
768#	251.3	40.3	*	*	*		
769#	-124.2	34.3	12.63	1.07	90		
770#	-131.6	30.6	10.60	0.95	89		
771#	-1.1	36.8	4.85	1.15	53		
772#	-48.2	30.7	8.85	0.96	85		
773#	63.8	44.1	6.37	1.38	58		
20	-61.5	48.5	8.63	1.52	68		
58	227.3	20.4	*	*	*		
190	-90.8	46.5	9.48	1.45	73		
191	-82.2	36.3	7.33	1.13	73		S
214	80.7	50.2	4.83	1.57	36		
222	-71.1	54.5	9.73	1.70	68		
224	-53.1	53.5	8.09	1.67	60		
232	227.4	55.9	*	*	*		
323	-31.5	42.0	6.24	1.31	59		
391	50.8	45.0	4.76	1.41	41		
476	163.0	25.1	*	*	*		
1326	-116.3	22.6	9.82	0.71	93		
1712	0.5	32.9	9.12	1.03	84		
1789	-52.4	28.2	6.87	0.88	80		
3580	-89.4	37.1	9.61	1.16	82		
4580	-51.9	34.1	6.48	1.07	71		
4751	-29.3	28.0	6.81	0.87	80		
5327	-115.8	44.6	9.83	1.31	81		
5433	108.9	52.9	5.82	1.65	43		
5435	-67.5	27.0	8.19	0.84	86		T
5465	-29.9	39.5	6.15	1.24	61		
5588	224.1	24.7	*	*	*		
5711	-35.5	45.1	5.72	1.41	51		
6968	39.8	56.0	5.28	1.70	38		
7220	-52.7	23.3	6.65	0.73	85		
7250	-53.1	29.8	6.76	0.93	78		
7251	-27.2	33.9	5.97	1.06	67		
N(121Cv)	-34.8	17.1	7.46	0.53	93		

POD WT/M2 FROM TREATMENT 2

CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
7268	-27.5	56.5	8.19	1.77	58		
7269	-43.0	23.4	7.65	0.71	89		
7297	-59.7	13.6	7.31	0.42	95	S	
7306	-36.4	41.4	7.67	1.30	69		
7308	6.9	53.9	5.64	1.69	41		
7337	-59.1	37.0	6.90	1.16	70		
7471	-84.6	30.6	8.39	0.96	84		
7881	57.0	60.3	6.13	1.89	39		
7882	-116.9	31.8	11.94	0.99	91		
7886	-76.6	43.6	9.34	1.36	75		
7887	-99.9	27.7	10.42	0.86	91		
7896	-91.4	28.5	8.60	0.89	86		
7898	-138.5	30.0	12.55	0.93	92		
8456	-77.8	24.9	7.57	0.78	86	S	
8460	-6.4	29.9	5.98	0.93	73		
8472	-63.7	41.4	8.14	1.30	72		
8472	-51.3	44.7	7.66	1.40	66		
8796	209.8	21.0	*	*	*		
9167	-85.3	25.2	9.39	0.79	90		
9175	61.0	55.5	4.63	1.73	29		
9193	-100.9	27.3	8.23	0.83	88		
9213	-40.3	35.2	5.82	1.10	64		
9317	203.4	26.1	*	*	*		
9329	-61.0	34.6	7.21	1.08	74		
9335	-20.9	45.8	5.36	1.43	46		
9394	4.4	54.6	5.31	1.71	37		
9395	-63.4	30.1	8.22	0.94	83		
9422	-79.8	33.4	8.12	1.05	80		
9430	-7.1	10.1	1.33	0.32	53	S	
9934	-44.6	32.8	10.87	1.02	88	T	
9935	-18.1	35.1	8.54	1.10	80		
](121Cv)	-34.8	17.1	7.46	0.53	93		

ble:11 Regression coefficients of total biomass(g/m2) on water applied from pod set to maturity(T3) in group 1 genotypes.

#	CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
1	35#	504.1	36.3	15.60	2.92	65	3	
2	64#	326.0	53.0	16.84	4.27	49	2	
3	389#	467.9	53.5	15.63	4.37	46	3	T
4	402#	406.4	31.6	14.52	2.55	68	3	
5	403#	444.2	37.1	15.66	3.14	63		T1R
6	404#	423.2	37.7	13.60	3.04	56	3	
7	405#	562.0	48.1	*	*	*		T
8	406#	458.1	44.2	20.30	3.56	68	3	
9	408#	392.0	49.0	16.94	3.95	54	3	
10	409#	320.7	43.7	21.87	3.52	71	3	
11	410#	248.8	38.2	27.49	3.08	84	3	
12	411#	307.8	35.1	13.80	2.83	60	3	S
13	412#	294.1	47.3	11.23	3.81	34	3	
14	413#	305.3	31.5	8.59	2.54	41		S
15	14	636.4	50.7	*	*	*		
16	27	402.8	53.3	20.42	4.45	59	3	
17	30	389.9	38.5	14.32	3.10	57		
18	43	412.2	77.2	22.06	6.23	44	3	
19	273	455.0	54.0	20.12	4.35	58		
20	296	288.8	36.3	19.09	2.92	74		
21	366	551.6	19.8	*	*	*		
22	405	455.2	74.9	18.24	6.04	35		
23	1104	473.8	30.3	14.64	2.44	70		
24	1141	437.7	31.3	12.98	2.52	63		
25	1204	388.2	28.6	19.12	2.24	84		
26	1311	459.0	33.6	20.32	2.70	79		
27	1346	386.6	33.2	17.08	2.67	73		
28	1660	495.6	63.0	20.23	5.08	50		T1R
29	1697	491.1	54.8	30.93	4.42	76		T
30	1708	349.8	36.6	19.86	2.95	75	3	
31	1783	194.4	26.6	21.31	2.14	87		S
32	1878	348.1	46.4	22.12	3.74	69		
33	1905	335.6	63.3	30.35	5.11	70		T1R
34	1933	384.8	41.3	18.46	3.33	67		
35	2716	302.9	38.8	27.09	3.12	83	2	
36	2738	439.2	57.8	12.55	4.65	30		
37	2960	524.2	35.5	10.21	2.86	44		
38	2967	473.1	39.8	21.28	3.11	77	3	
39	3073	374.6	40.0	16.61	3.22	63		
40	3092	421.3	46.4	11.24	3.74	35		
41	3157	416.7	28.3	19.02	2.28	82	3	
42	3215	351.8	27.0	13.18	2.17	70	3	S
43	3222	482.9	37.7	16.08	3.04	64		T
44	3225	372.8	69.5	16.92	5.60	35	3	
45	3280	442.4	70.5	18.20	5.68	38		
EAN(121Cv)		392.1	18.5	17.70	1.49	90		

TOTAL BIOMASS(G/M2) IN TREATMENT 3 GROUP 1

#	CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
6	3287	423.0	49.5	13.77	3.99	42	3	
7	3301	326.5	65.8	17.95	5.16	44		
8	3386	462.7	88.9	26.21	7.17	45	3	T1R
9	3478	413.0	29.6	10.33	2.39	54	3	
0	3536	282.2	54.4	26.99	4.39	71	3	
1	3537	302.4	31.9	24.63	2.49	87		
2	3569	301.5	59.7	17.38	4.81	45		
3	3587	355.1	35.5	21.35	2.86	79		
4	3605	417.8	49.4	17.19	3.98	54		
5	3657	532.1	40.6	15.25	3.27	58		T
6	3680	384.4	71.9	16.73	5.80	33		
7	3704	281.6	40.6	24.89	3.27	79		
8	3730	408.9	35.2	17.23	2.84	70	3	
9	3736	511.8	60.2	23.33	4.86	60	3	T
0	3774	284.3	42.0	23.61	3.29	78		
1	4073	359.1	33.2	20.10	2.68	79	3	
2	4099	304.5	41.0	25.66	3.20	82		
3	4544	358.1	25.6	20.24	2.06	86		
4	4546	392.4	48.0	20.51	3.86	64	3	
5	4558	274.3	38.8	21.39	3.13	75		S
6	4631	376.5	53.2	20.42	4.29	59		
7	4728	422.8	35.3	25.19	2.84	84		
8	4747	350.7	76.8	26.81	6.20	54	3	
9	4790	553.0	46.8	22.49	3.77	70	3	T
0	4863	375.2	43.0	15.06	3.46	54		
1	4888	501.1	60.0	16.87	4.84	43	3	T1R
2	4908	511.4	64.1	16.26	5.17	37	3	T1R
3	4912	410.0	70.3	16.34	5.66	33		
4	5036	234.3	22.1	15.42	1.78	83	3	S
5	5066	323.6	63.3	19.48	5.10	48	3	
6	5094	303.1	42.3	21.13	3.41	71		
7	5099	390.3	54.2	16.80	4.37	48		
8	5154	419.5	35.1	*	*	*		S
9	5155	336.6	17.1	17.33	1.38	91		
0	5156	337.4	40.0	19.76	3.22	71		
1	5197	467.1	62.8	16.27	5.32	37		T1R
2	5212	473.1	81.9	17.38	6.60	28		
3	5266	579.5	37.7	*	*	*		
4	5274	440.7	48.6	15.62	3.92	50		
5	5278	402.8	61.3	14.58	4.94	34		
6	5305	448.1	33.4	14.41	2.69	65	3	
7	5535	391.7	46.3	16.09	3.73	54		
8	5964	597.6	36.7	13.90	2.96	58		T
9	5967	288.3	58.4	19.14	4.71	51	3	S
0	6027	247.0	37.0	21.74	2.98	78	3	
EAN(121Cv)		392.1	18.5	17.70	1.49	90		

TOTAL BIOMASS(G/M2) IN TREATMENT 3 GROUP 1

#	CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
1	6028	318.0	41.2	27.44	3.32	82	3	
2	6030	313.7	35.7	21.96	2.87	79	3	
3	6035	480.2	49.8	14.95	4.01	46	3	T1R
4	6038	356.6	50.9	14.13	4.10	42		
5	6039	469.8	44.6	14.74	3.59	51	3	
6	6040	362.0	23.0	20.09	1.85	89		
7	6058	444.9	49.1	17.27	3.96	55	3	
8	6165	248.2	40.7	18.88	3.28	68	3	
9	6166	325.8	46.6	28.04	3.76	79		
0	6168	578.3	43.2	*	*	*		T
1	6171	416.3	45.3	12.75	3.65	43		
2	6172	383.6	35.7	18.30	2.79	75		
3	6175	325.2	55.9	20.00	4.36	59	3	
4	6256	364.4	25.3	8.99	2.04	55	3	S
5	6321	345.7	64.9	21.01	5.23	50	3	
6	6374	559.5	27.0	*	*	*		
7	6903	427.0	79.4	18.68	6.40	33	1	T
8	6926	240.9	47.6	12.62	3.84	40		S
9	6948	466.0	36.3	11.66	2.93	50		
0	6975	301.8	36.8	21.00	2.96	77		
1	6976	455.4	39.7	18.25	3.20	68	3	
2	6997	482.0	50.3	21.19	4.05	64	3	T
3	7193	345.2	38.8	18.70	3.13	70	3	
4	7197	546.7	31.5	*	*	*		T1R
5	7199	260.0	39.7	21.91	3.20	75		S
6	7200	601.5	78.7	*	*	*		
7	7201	378.2	58.0	12.21	4.67	28	3	
8	7202	463.5	37.7	11.86	3.04	49	2	
9	7249	509.2	46.7	11.52	3.77	36		
0	7331	328.9	43.6	23.67	3.51	75	3	
1	9333	423.3	63.3	*	*	*	2	
AN(121Cv)		392.1	18.5	17.70	1.49	90		

E:12 Regression coefficients of total pod weights(g/m2) on water applied from pod set to maturity (T3) in group 1 genotypes.

CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
35#	157.3	21.2	6.95	1.71	51		
64#	125.1	48.6	10.06	3.92	27		
389#	250.0	41.1	10.86	3.31	39		T
402#	185.9	19.2	8.47	1.55	66		
403#	204.9	25.8	6.67	2.08	38		T1R
404#	151.3	20.2	10.55	1.62	73		
405#	159.0	34.8	12.42	2.80	55		T
406#	175.2	25.7	15.99	2.07	80		T
408#	166.8	24.6	11.67	1.98	69		
409#	148.6	30.9	14.85	2.49	70		
410#	103.8	33.1	18.35	2.67	76		
411#	115.7	17.1	7.37	1.38	65		S
412#	132.4	31.2	7.26	2.52	33		
413#	148.5	16.6	5.75	1.34	54		
14	255.3	24.8	*	*	*		
27	180.4	24.0	8.41	1.94	54		
30	143.3	32.3	6.67	2.60	27		
43	79.4	37.5	14.61	3.02	60		
273	136.9	37.4	11.98	3.02	50		
296	115.3	29.8	11.83	2.40	61		
366	239.5	18.8	*	*	*		
405	173.7	33.0	9.23	2.66	42		
1104	189.8	25.6	10.99	2.06	65		
1141	171.3	20.9	8.34	1.68	61		
1204	201.7	21.2	7.75	1.71	57		
1311	222.3	25.0	7.70	2.02	48		
1346	177.6	25.7	10.19	2.07	61		
1660	273.0	27.6	*	*	*		T1R
1697	196.0	32.6	13.72	2.62	64		T
1708	121.0	19.9	10.05	1.60	72		T
1783	81.7	27.3	9.78	2.20	56		S
1878	148.0	17.6	14.28	1.42	87		
1905	152.4	25.2	17.55	2.03	83		T1R
1933	159.9	31.9	9.01	2.58	43		
2716	118.1	20.7	13.11	1.66	80		
2738	232.8	20.2	*	*	*		
2960	220.2	21.9	9.11	1.76	63		
2967	238.8	28.0	9.89	2.26	55		T1R
3073	136.3	29.0	9.25	2.34	50		
3092	188.4	29.0	7.44	2.34	38		
3157	213.6	26.4	11.72	2.12	66		
3215	192.0	13.2	*	*	*		S
3222	177.5	35.8	9.53	2.88	40		T
3225	107.6	25.3	10.79	2.04	64		T1R
3280	155.9	46.0	15.03	3.71	51		
AN(121Cv)	150.8	9.3	10.16	0.75	92		

POD WT/M2 FROM TRATMENT 3

	CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
1	3287	158.4	18.6	12.55	1.50	82		
2	3301	75.8	38.1	12.66	3.07	52		
3	3386	149.8	44.4	14.28	3.58	50		
4	3478	186.4	18.5	8.17	1.50	66		
5	3536	106.3	26.5	12.12	2.13	68		
6	3537	90.8	27.2	13.02	2.19	70		
7	3569	89.2	32.2	10.47	2.59	51		
8	3587	168.2	25.1	13.85	2.02	75		
9	3605	199.8	36.0	7.54	2.90	28		
10	3657	233.1	34.8	11.38	2.80	51		T
11	3680	202.2	25.4	*	*	*		
12	3704	120.4	28.9	15.37	2.33	74		
13	3730	187.1	26.5	9.44	2.14	55		
14	3736	240.4	37.8	11.29	3.04	46		T
15	3774	128.2	27.4	13.93	2.20	72		
16	4073	120.2	30.3	7.45	2.45	36		
17	4099	138.6	20.6	11.65	1.66	76		
18	4544	154.1	27.1	10.46	2.18	59		
19	4546	132.5	41.3	10.69	3.33	38		
20	4558	111.3	36.4	9.34	2.94	38		S
21	4631	136.7	29.9	11.38	2.41	59		
22	4728	138.6	35.7	13.95	2.87	60		
23	4747	91.0	32.3	15.34	2.60	69		
24	4790	206.2	23.1	9.79	1.86	64		T
25	4863	90.9	35.0	8.35	2.83	34		
26	4888	130.5	29.8	13.48	2.40	67		
27	4908	119.6	17.5	10.67	1.41	79		
28	4912	233.4	28.1	*	*	*		
29	5036	116.4	26.8	9.19	2.16	53		S
30	5066	116.9	26.7	11.39	2.15	64		
31	5094	108.5	32.0	11.34	2.58	55		
32	5099	124.8	29.9	8.26	2.41	42		
33	5154	190.3	23.6	*	*	*		S
34	5155	131.1	16.2	10.08	1.30	80		
35	5156	176.1	24.6	9.04	1.98	57		T
36	5197	233.9	28.8	7.28	2.33	37		T1R
37	5212	120.1	36.3	11.36	2.93	48		
38	5266	164.2	25.4	6.46	2.04	37		
39	5274	114.8	23.0	9.21	1.85	61		
40	5278	135.7	44.3	12.46	3.57	43		
41	5305	191.6	23.0	9.14	1.86	61		
42	5535	131.3	30.9	12.01	2.49	60		
43	5964	226.8	23.6	7.42	1.90	49		T
44	5967	25.1	47.9	11.46	3.86	34		S
45	6027	88.2	35.9	11.56	2.89	50		
MEAN(121Cv)		150.8	9.3	10.16	0.75	92		

POD WT/M2 FROM TRATMENT 3

	CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
	6028	100.6	27.2	10.13	2.19	58		
	6030	114.2	30.2	15.85	2.43	73		
	6035	218.6	32.7	9.69	2.63	46		T
	6038	237.1	25.4	*	*	*		
	6039	129.4	15.4	8.74	1.24	76		
	6040	149.6	20.3	11.94	1.64	78		
	6058	171.6	21.1	8.33	1.70	60		
	6165	65.6	30.5	12.45	2.46	62		
	6166	127.8	26.7	18.23	2.15	83		
	6168	168.2	41.9	8.66	3.38	27		
	6171	120.3	23.5	7.59	1.89	50		
	6172	179.9	21.0	10.82	1.69	73		
	6175	127.8	22.9	11.99	1.84	73		
	6256	119.8	18.4	3.93	1.48	29		S
	6321	165.5	42.1	11.94	3.39	43		
	6374	208.3	10.3	*	*	*		
	6903	183.5	55.8	11.58	4.49	27		T
	6926	191.3	30.0	*	*	*		S
	6948	185.7	26.3	7.56	2.12	44		
	6975	145.5	13.3	12.50	1.07	90		
	6976	164.4	26.2	11.59	2.11	66		
	6997	146.8	21.5	11.17	1.73	73		
	7193	127.1	25.4	8.12	2.05	50		
	7197	246.9	20.6	*	*	*		
	7199	108.1	33.1	9.32	2.67	43		S
	7200	316.3	77.9	*	*	*		
	7201	103.1	20.9	9.51	1.69	67		
	7202	194.3	27.1	9.21	2.19	53		
	7249	210.8	23.3	8.05	1.88	54		
	7331	97.3	33.9	12.23	2.73	56		
	9333	144.1	30.6	*	*	*		
	AN(121Cv)	150.8	9.3	10.16	0.75	92		

LE:13 Regression coefficients of total biomass(g/m2) on water applied from pod set to maturity(T3) in group 2 genotypes.

L#	CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
1	660#	628.3	50.0	*	*	*		
2	661#	647.2	133.2	*	*	*		T
3	666#	341.0	84.6	18.32	6.37	33		
4	667#	403.9	64.3	19.35	4.84	50	3	
5	695#	415.8	35.3	*	*	*	3	PG
6	699#	392.4	43.5	20.17	3.28	71	3	
7	702#	533.8	37.4	*	*	*		
8	703#	360.7	68.4	18.20	5.15	43		
9	706#	311.9	55.8	11.30	4.20	29		
10	707#	308.0	29.8	*	*	*		S
11	708#	193.1	37.9	12.27	2.85	54		S
12	709#	238.5	44.7	*	*	*		
13	710#	309.0	34.9	*	*	*		S
14	713#	639.7	137.4	*	*	*	3	
15	714#	175.8	81.3	20.03	6.12	39		S
16	715#	330.0	53.2	11.87	4.00	34	3	
17	716#	402.5	45.2	*	*	*		
18	717#	191.2	62.1	14.74	4.67	37	3	S
19	718#	158.7	44.7	17.68	3.36	64		S
20	719#	83.4	53.5	21.00	4.03	64		S
21	721#	442.8	49.7	*	*	*		
22	722#	336.8	53.7	17.02	4.04	53	3	
23	723#	204.3	45.4	16.71	3.41	60		
24	724#	210.3	62.8	15.94	4.73	41		S
25	725#	351.6	47.8	10.56	3.60	34		
26	726#	554.4	59.5	13.97	4.48	37	2	T
27	727#	324.5	76.5	31.70	5.76	66	3	
28	735#	476.8	74.1	17.81	5.58	38	3	T
29	736#	463.9	71.7	16.46	5.40	36	3	
30	740#	504.6	77.7	17.67	5.67	38	3	T
31	741#	409.5	82.6	17.16	6.22	31	2	
32	742#	635.6	50.2	*	*	*	2	
33	743#	394.5	47.7	21.10	3.59	69	3	
34	744#	368.3	41.2	19.05	3.10	71	3	
35	745#	423.7	71.3	23.39	5.37	55	3	
36	746#	418.0	51.8	20.62	3.90	64		
37	747#	400.9	75.7	21.22	5.70	46	3	
38	748#	563.1	56.3	20.62	4.24	60	3	
39	749#	332.6	56.0	12.53	4.22	34	3	
40	750#	296.3	64.8	20.90	4.87	54	3	
41	751#	345.0	71.1	30.17	5.35	67	3	
42	752#	388.8	65.8	17.56	4.95	44		
43	753#	397.5	62.6	21.05	4.71	56		
44	754#	595.2	37.0	*	*	*		
45	755#	389.1	39.8	17.11	2.99	68		
MEAN(12ICv)		341.6	21.5	17.21	1.62	88		

TOTAL BIOMASS(G/M2) IN TREATMENT 3 GROUP 2

#	CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
46	756#	385.6	50.6	16.52	3.81	54	3	
47	757#	438.6	65.7	24.58	4.94	61	3	
48	758#	232.6	37.3	25.03	2.81	84	3	
49	759#	335.3	62.0	18.20	4.67	49		
50	760#	449.2	63.3	14.94	4.73	39	2	
51	761#	297.6	56.6	17.52	4.26	51	3	
52	762#	310.3	59.0	21.68	4.44	60	3	
53	763#	244.6	50.8	23.49	3.82	71		
54	764#	410.1	55.5	15.95	4.18	47	3	
55	765#	313.8	51.7	16.45	3.89	53		
56	766#	408.4	44.0	18.79	3.31	67	3	
57	767#	356.2	41.9	17.65	3.15	67	2	
58	768#	378.9	63.8	20.16	4.85	54	3	
59	769#	441.3	104.4	20.74	7.86	28		
60	770#	320.1	62.2	19.06	4.68	51	3	
61	771#	255.3	39.7	11.59	2.98	48	3	
62	772#	326.1	42.3	12.75	3.18	50	3	
63	773#	277.2	40.0	15.96	3.01	64		
64	20	570.3	42.2	*	*	*	3	
65	58	257.0	40.0	23.66	3.01	80		
66	190	389.6	41.3	14.33	3.11	57	3	
67	191	465.2	64.7	14.03	4.87	33	3	
68	214	287.3	43.4	14.08	3.26	54		
69	222	422.5	47.5	16.88	3.57	59	3	
70	224	293.5	53.6	22.88	4.03	68	3	
71	232	342.4	66.6	14.56	4.86	36		
72	323	357.5	38.7	13.42	2.91	57	3	
73	391	334.8	68.1	19.75	5.13	48		
74	476	79.3	69.8	13.36	5.25	27		PG
75	1326	318.5	46.2	21.97	3.48	72		
76	1712	331.8	48.6	20.02	3.66	66	3	
77	1789	178.8	27.2	20.55	2.04	87		S
78	3580	352.6	116.1	36.71	8.74	53	3	
79	4580	278.8	44.7	12.90	3.36	48	3	
80	4751	256.8	53.6	13.05	4.03	39		
81	5327	412.1	105.8	20.86	7.97	28		
82	5433	479.7	60.2	18.09	4.53	50		T1R
83	5435	536.8	32.0	*	*	*		T1R
84	5465	610.7	38.8	*	*	*		T
85	5588	487.8	38.7	*	*	*	3	
86	5711	334.1	46.8	25.87	3.52	78		
87	6968	380.6	53.3	12.16	4.01	35		
88	7220	242.2	37.7	19.26	2.84	75		S
89	7250	227.3	92.7	26.94	6.98	48		
90	7251	486.8	36.4	*	*	*		
MEAN(121Cv)		341.6	21.5	17.21	1.62	88		

TOTAL BIOMASS(G/M2) IN TREATMENT 3 GROUP 2

#	CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
91	7268	450.6	44.4	20.13	3.34	70	3	T
92	7269	320.5	31.7	16.57	2.39	76	3	
93	7297	306.4	38.8	13.65	2.92	58		
94	7306	286.7	51.8	16.08	3.90	52		
95	7308	345.1	71.8	17.64	5.41	39		
96	7337	166.1	66.8	25.96	5.03	63		
97	7471	329.4	56.5	15.10	4.25	44	3	
98	7881	297.3	75.0	22.37	5.65	50		
99	7882	329.5	123.6	29.31	9.31	37	3	
00	7886	398.9	55.3	26.22	4.16	72	3	T
01	7887	438.7	61.1	24.12	4.60	64	2	T
02	7896	308.6	52.0	16.94	3.91	54	3	
03	7898	418.4	66.4	28.27	4.99	67	3	T
04	8456	298.8	41.6	12.14	3.13	48		S
05	8460	252.5	102.7	27.47	7.73	44		
06	8472	300.0	40.3	17.18	3.03	67	3	T
07	8472	397.5	48.3	20.90	3.64	68		
08	8796	478.8	51.4	*	*	*		
09	9167	313.2	28.6	12.86	2.15	70		
10	9175	370.3	44.7	19.69	3.36	69		
11	9193	312.8	47.3	12.29	3.56	42		
12	9213	341.5	38.6	12.24	2.90	53	3	
13	9317	331.3	53.2	15.24	4.00	47	3	
14	9329	363.8	37.7	9.10	2.84	38	3	
15	9335	255.5	35.2	15.44	2.65	69	3	S
16	9394	352.8	54.5	17.68	4.10	54	3	
17	9395	314.5	31.5	14.60	2.36	71		
18	9422	339.4	44.5	21.97	3.35	74	3	
19	9430	99.0	58.7	12.39	4.42	31		S
20	9934	367.6	72.3	27.13	5.45	61		T
21	9935	259.5	73.0	25.62	5.49	58		
MEAN(121Cv)		341.6	21.5	17.21	1.62	88		

)LE:14 Regression coefficients of total pod weights (g/m2) on water applied from pod set to maturity(T3) in group 2 genotypes.

#	CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
1	660#	273.1	29.0	*	*	*		
2	661#	341.6	116.6	*	*	*		T
3	666#	100.7	57.9	12.56	4.36	33		
4	667#	141.1	41.1	12.76	3.09	52		
5	695#	90.4	23.1	*	*	*		
6	699#	128.1	35.0	11.45	2.63	54		
7	702#	252.1	19.3	*	*	*		
8	703#	120.0	38.3	9.44	2.88	39		
9	706#	197.4	18.6	*	*	*		
10	707#	180.3	23.1	*	*	*		S
11	708#	30.0	26.6	9.54	2.00	59		S
12	709#	112.8	25.2	*	*	*		
13	710#	179.1	23.5	*	*	*		S
14	713#	344.6	119.7	*	*	*		
15	714#	61.7	40.2	14.11	3.03	58		S
16	715#	113.8	33.6	9.27	2.53	45		
17	716#	227.3	23.8	*	*	*		
18	717#	66.8	26.8	8.53	2.02	53		S
19	718#	44.5	25.7	12.73	1.93	74		S
20	719#	32.8	36.0	10.84	2.71	50		S
21	721#	179.8	22.1	*	*	*		
22	722#	133.5	37.8	8.90	2.85	37		
23	723#	79.9	26.5	9.68	2.00	60		
24	724#	42.2	29.3	11.40	2.20	63		S
25	725#	178.9	14.5	*	*	*		
26	726#	108.3	38.2	9.24	2.88	38		
27	727#	76.2	36.1	12.65	2.71	58		
28	735#	165.8	49.9	12.00	3.76	38		T
29	736#	223.2	20.0	*	*	*		
30	740#	148.4	40.0	8.97	3.01	34		
31	741#	107.7	42.8	10.75	3.22	40		
32	742#	152.0	36.7	7.34	2.76	29		
33	743#	75.0	25.7	13.28	1.93	76		
34	744#	91.1	24.0	9.90	1.80	66		
35	745#	138.4	40.2	11.27	3.03	46		
36	746#	100.5	28.5	16.96	2.14	80		
37	747#	84.0	46.0	12.41	3.46	44		
38	748#	99.3	26.7	12.13	2.01	70		
39	749#	194.6	20.0	*	*	*		
40	750#	75.2	21.7	12.57	1.63	80		
41	751#	86.2	36.5	13.06	2.75	59		
42	752#	114.5	40.3	9.76	3.03	38		
43	753#	111.0	43.5	15.11	3.27	58		
44	754#	179.2	29.1	7.68	2.19	43		
45	755#	97.1	19.4	12.06	1.45	82		
MEAN(121Cv)		115.5	14.5	9.08	1.09	82		

POD WT/M2 FROM TREATMENT 3

	CULTIVAR ICG/GNP#	A g/m2	SE.	SLOPE g/m2/cm	SE.	%VAR	VS *	Comment
	756#	84.7	37.5	12.12	2.82	54		
	757#	147.8	47.1	10.71	3.54	35		
	758#	34.1	23.5	13.82	1.76	80		
	759#	119.3	38.2	8.83	2.88	36		
	760#	243.4	20.4	*	*	*		
	761#	218.3	19.3	*	*	*		
	762#	123.9	30.4	11.30	2.29	61		
	763#	82.8	46.1	12.37	3.47	44		
	764#	75.4	21.2	8.65	1.60	65		
	765#	134.9	38.8	10.02	2.92	42		
	766#	144.0	21.7	11.53	1.63	77		
	767#	111.7	26.0	8.78	1.96	56		
8	768#	276.4	21.4	*	*	*		
9	769#	297.1	31.4	*	*	*		
0	770#	143.8	36.6	9.47	2.76	42		
1	771#	78.6	28.1	6.45	2.12	36		
2	772#	199.6	17.3	*	*	*		
3	773#	114.3	40.2	9.14	3.03	35		
4	20	235.1	23.5	*	*	*		
5	58	39.6	48.5	13.43	3.65	46		
6	190	112.9	37.1	8.73	2.80	37		
7	191	292.7	27.9	*	*	*		
8	214	117.9	30.9	6.84	2.33	34		
9	222	112.1	21.3	9.94	1.61	71		
0	224	74.1	29.8	13.97	2.24	72		
1	232	139.1	36.3	7.30	2.73	29		
2	323	163.2	31.3	8.15	2.36	42		
3	391	205.4	20.4	*	*	*		
4	476	133.2	27.3	*	*	*		
5	1326	113.6	24.7	10.59	1.86	68		
6	1712	99.1	35.6	11.62	2.68	54		
7	1789	47.2	26.4	8.55	1.98	54	S	
8	3580	64.4	37.5	15.91	2.82	67		
9	4580	168.7	16.2	*	*	*		
0	4751	68.1	35.5	10.08	2.67	47		
1	5327	97.2	42.8	14.09	3.22	55		
2	5433	156.2	43.0	11.23	3.23	42		T1R
3	5435	244.1	17.9	*	*	*		T1R
4	5465	141.4	37.7	10.06	2.84	44		T
5	5588	205.6	18.6	*	*	*		
6	5711	83.6	32.0	9.08	2.41	47		
7	6968	84.3	28.7	10.36	2.16	59		
8	7220	59.2	33.1	10.92	2.49	55		S
9	7250	108.7	36.8	10.70	2.77	48		
0	7251	192.0	17.3	*	*	*		
	(121Cv)	115.5	14.5	9.08	1.09	82		