

9. ภาคผนวก

ผลการวิเคราะห์ข้อมูลทางสถิติที่น่าเสนอบางส่วน มีดังนี้

พื้นที่น้ำทะเลท่วมถึง

5.1.1 น้ำทะเลท่วมถึงตามระดับน้ำขึ้นลงปกติ

Descriptive Statistics

Dependent Variable: HEIGHT

SPECIES	MONTH	Mean	Std. Deviation	N
RM	0 month	16.8000	5.4037	5
	14 month	76.6000	11.6319	5
	20 month	122.2000	14.0606	5
	28 month	146.6000	33.0953	5
	Total	100.5500	40.5326	20
RA	0 month	34.6000	2.0736	5
	14 month	58.6000	9.4763	5
	20 month	77.2000	9.5499	5
	28 month	126.0000	17.1026	5
	Total	74.1000	15.3578	20
AM	0 month	0.0000	0.0000	5
	14 month	70.2000	10.1833	5
	20 month	121.0000	2.2261	5
	28 month	219.0000	18.5068	5
	Total	105.0500	13.1438	20
Total	0 month	30.4667	24.3893	15
	14 month	68.4667	12.3859	15
	20 month	110.1333	26.0545	15
	28 month	163.8667	16.8887	15
	Total	93.2333	57.9560	60

ตารางที่ 1 Analysis of Variance ความสูงของคลื่นในพื้นที่แปลงนาทุ่ง พื้นที่ 4 ไร่ (น้ำท่วมถึงตามน้ำขึ้น-ลง)

Tests of Between-Subjects Effects

Dependent Variable: HEIGHT

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Noncent. Parameter	Observed Power
Corrected Model	188623.733 ^a	11	17148.067	36.225	.00	948.479	1.000
Intercept	521547.267	1	521547.267	2622.488	.00	2622.488	1.000
SPECIES	11185.033	2	5592.517	28.121	.00	56.212	1.000
MONTH	147415.800	3	49138.600	247.683	.00	741.219	1.000
SPECIES * MONTH	30027.900	6	5004.650	25.165	.00	150.989	1.000
Error	9546.000	18	530.333				
Total	719722.000	60					
Corrected Total	198174.733	59					

a. R Squared = .952 (Adjusted R Squared = .941)

b. Computed using alpha = .05

Multiple Comparisons

LSD

Dependent Variable	(I) SPECIES	(J) SPECIES	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
HEIGHT	RM	RA	26.4500	18.1122	.150	-9.8191	62.7191
		AM	-4.5000	18.1122	.805	-40.7691	31.7691
	RA	RM	-26.4500	18.1122	.150	-62.7191	9.8191
		AM	-30.9500	18.1122	.093	-67.2191	5.3191
	AM	RM	4.5000	18.1122	.805	-31.7691	40.7691
		RA	30.9500	18.1122	.093	-5.3191	67.2191
BRANCH	RM	RA	1.6000	3.4767	.647	-5.3619	8.5619
		AM	-9.5500*	3.4767	.008	-16.5119	-2.5881
	RA	RM	-1.6000	3.4767	.647	-8.5619	5.3619
		AM	-11.1500*	3.4767	.002	-18.1119	-4.1881
	AM	RM	9.5500*	3.4767	.008	2.5881	16.5119
		RA	11.1500*	3.4767	.002	4.1881	18.1119
DIAMETER	RM	RA	2.4150	1.2284	.034	-4.4749E-02	4.8747
		AM	1.5900	1.2284	.201	-.8697	4.0497
	RA	RM	-2.4150	1.2284	.034	-4.8747	4.475E-02
		AM	-.8250	1.2284	.505	-3.2847	1.6347
	AM	RM	-1.5900	1.2284	.201	-4.0497	.8697
		RA	.8250	1.2284	.505	-1.6347	3.2847

*. The mean difference is significant at the .05 level.

5.1.2 นำท่วมขงพื้นที่และระบยออกทุก 15 วัน (ปลูกโกงกงใบใหญ่อย่างเคียว)

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
HEIGHT	0 month	5	57.8000	5.5408	2.4779	50.9202	64.6798	52.00	61.00
	14 month	5	92.8000	8.6139	3.8523	83.1011	103.4956	83.00	101.00
	20 month	5	117.8000	13.8816	6.2081	100.5637	135.0363	97.00	131.00
	28 month	5	160.6000	6.2690	2.8036	153.8160	168.3840	152.00	167.00
	Total	20	107.2500	30.3405	8.7968	88.8381	125.6619	52.00	167.00
BRANCH	0 month	5	.0000	.0000	.0000	.0000	.0000	.00	.00
	14 month	5	7.9200	1.8199	.8139	5.6603	10.1797	6.00	10.00
	20 month	5	25.2000	2.5884	1.1576	21.9860	28.4140	23.00	29.00
	28 month	5	28.6000	3.8471	1.7205	23.8232	33.3768	21.00	31.00
	Total	20	15.4300	12.3888	2.7702	9.6318	21.2282	.00	31.00
DIAMETER	0 month	5	.0000	.0000	.0000	.0000	.0000	.00	.00
	14 month	5	2.1200	.4604	.2059	1.5183	2.6917	1.50	2.70
	20 month	5	4.1800	.4970	.2223	3.5629	4.7971	3.50	4.70
	28 month	5	4.1200	.3493	.1562	3.6863	4.5537	3.70	4.60
	Total	20	2.6050	1.7963	.4017	1.7613	3.4487	.00	4.70

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
HEIGHT	1.979	3	16	.158
BRANCH	3.844	3	16	.030
DIAMETER	3.690	3	16	.034

ค่าแปรปรวนของการเจริญเติบโตด้านความสูงของกล้าไม้แต่ละเดือนเท่ากัน

ค่าแปรปรวนของการเจริญเติบโตด้านจำนวนกิ่งและเส้นรอบวงโคนต้นแต่ละเดือนไม่เท่ากัน

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
HEIGHT	Between Groups	28058.150	3	9352.717	111.044	.000
	Within Groups	1347.600	16	84.225		
	Total	29405.750	19			
BRANCH	Between Groups	2316.934	3	938.978	151.375	.000
	Within Groups	99.248	16	6.203		
	Total	2916.182	19			
DIAMETER	Between Groups	58.985	3	19.662	135.365	.000
	Within Groups	2.324	16	.145		
	Total	61.309	19			

5.1.3 ท่วมขังในฤดูฝนแต่แห้งในฤดูแล้ง (ปลูกผสมทะเล และ แสมดำ)

Descriptive Statistics

Dependent Variable: HEIGHT

SPECIES	MONTH	Mean	Std. Deviation	N
AM	0 month	.0000	.0000	5
	14 month	90.6000	16.4104	5
	20 month	147.4000	8.2341	5
	28 month	195.6000	13.9750	5
	Total	108.4000	75.4254	20
AF	0 month	.0000	.0000	5
	14 month	80.4000	8.2946	5
	20 month	111.4000	6.5038	5
	28 month	197.8000	17.0792	5
	Total	97.4000	73.2231	20
Total	0 month	.0000	.0000	10
	14 month	85.5000	13.3853	10
	20 month	129.4000	20.2221	10
	28 month	196.7000	14.7577	10
	Total	102.9000	73.5843	40

Tests of Between-Subjects Effects

Dependent Variable: HEIGHT

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Noncent. Parameter	Observed Power ^a
Corrected Model	207430.800 ^b	7	29632.971	253.490	.000	1774.429	1.000
Intercept	423536.400	1	423536.400	3623.066	.000	3623.066	1.000
SPECIES	1210.000	1	1210.000	10.351	.003	10.351	.877
MONTH	203918.600	3	67972.867	581.462	.000	1744.385	1.000
SPECIES * MONTH	2302.200	3	767.400	6.565	.001	19.694	.953
Error	3740.800	32	116.900				
Total	634708.000	40					
Corrected Total	211171.600	39					

a. Computed using alpha = .05

b. R Squared = .962 (Adjusted R Squared = .978)

Multiple Comparisons

USD

Dependent Variable	(I) MONTH	(J) MONTH	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
HEIGHT	0 month	14 month	-35.0000*	5.8043	.000	-47.3046	-22.6954
		20 month	-60.0000*	5.8043	.000	-72.3046	-47.6954
		28 month	-102.8000*	5.8043	.000	-115.1046	-90.4954
	14 month	0 month	35.0000*	5.8043	.000	22.6954	47.3046
		20 month	-25.0000*	5.8043	.001	-37.3046	-12.6954
		28 month	-67.8000*	5.8043	.000	-80.1046	-55.4954
	20 month	0 month	60.0000*	5.8043	.000	47.6954	72.3046
		14 month	25.0000*	5.8043	.001	12.6954	37.3046
		28 month	-42.8000*	5.8043	.000	-55.1046	-30.4954
	28 month	0 month	102.8000*	5.8043	.000	90.4954	115.1046
		14 month	67.8000*	5.8043	.000	55.4954	80.1046
		20 month	42.8000*	5.8043	.000	30.4954	55.1046
BRANCH	0 month	14 month	-7.9200*	1.5752	.000	-11.2592	-4.5808
		20 month	-25.2000*	1.5752	.000	-28.5392	-21.8608
		28 month	-28.6000*	1.5752	.000	-31.9392	-25.2608
	14 month	0 month	7.9200*	1.5752	.000	4.5808	11.2592
		20 month	-17.2800*	1.5752	.000	-20.6192	-13.9408
		28 month	-20.6800*	1.5752	.000	-24.0192	-17.3408
	20 month	0 month	25.2000*	1.5752	.000	21.8608	28.5392
		14 month	17.2800*	1.5752	.000	13.9408	20.6192
		28 month	-3.4000*	1.5752	.046	-6.7392	-6.0762E-02
	28 month	0 month	28.6000*	1.5752	.000	25.2608	31.9392
		14 month	20.6800*	1.5752	.000	17.3408	24.0192
		20 month	3.4000*	1.5752	.046	6.0762E-02	6.7392
DIAMETER	0 month	14 month	-2.1200*	.2410	.000	-2.6310	-1.6090
		20 month	-4.1800*	.2410	.000	-4.6910	-3.6690
		28 month	-4.1200*	.2410	.000	-4.6310	-3.6090
	14 month	0 month	2.1200*	.2410	.000	1.6090	2.6310
		20 month	-2.0600*	.2410	.000	-2.5710	-1.5490
		28 month	-2.0000*	.2410	.000	-2.5110	-1.4890
	20 month	0 month	4.1800*	.2410	.000	3.6690	4.6910
		14 month	2.0600*	.2410	.000	1.5490	2.5710
		28 month	6.000E-02	.2410	.807	-.4510	.5710
	28 month	0 month	4.1200*	.2410	.000	3.6090	4.6310
		14 month	2.0000*	.2410	.000	1.4890	2.5110
		20 month	-6.000E-02	.2410	.807	-.5710	.4510

* The mean difference is significant at the .05 level.

5.1.4 นำท่อมขังเมื่อน้ำทะเลขึ้นสูงสุดเท่านั้น

Descriptive Statistics

Dependent Variable: HEIGHT

SPECIES	MONTH	Mean	Std. Deviation	N
RM	0 month	73.4000	4.0373	5
	14 month	86.8000	9.8590	5
	20 month	96.2000	11.2561	5
	28 month	117.0000	24.8998	5
	Total	93.3500	21.1294	20
RA	0 month	42.0000	4.5277	5
	14 month	45.6000	8.4439	5
	20 month	43.8000	8.1976	5
	28 month	169.0000	31.3050	5
	Total	75.1000	57.7516	20
CT	0 month	31.4000	3.6469	5
	14 month	31.6000	2.0736	5
	20 month	37.4000	3.5777	5
	28 month	46.2000	5.4955	5
	Total	36.6500	7.1324	20
BC	0 month	32.2000	2.7749	5
	14 month	35.8000	4.2661	5
	20 month	38.6000	2.0736	5
	28 month	70.8000	9.4446	5
	Total	44.3500	16.6141	20
NF	0 month	47.2000	7.2938	5
	14 month	47.6000	5.5946	5
	20 month	121.8000	13.4052	5
	28 month	106.0000	7.4162	5
	Total	80.6500	35.5502	20
SA	0 month	61.8000	14.5499	5
	14 month	62.2000	13.6455	5
	20 month	118.0000	21.1424	5
	28 month	270.0000	11.7260	5
	Total	128.0000	88.4992	20
Total	0 month	48.0000	16.8952	30
	14 month	51.6000	20.2563	30
	20 month	75.9667	39.0962	30
	28 month	129.8333	76.4768	30
	Total	76.3500	55.1867	120

Multiple Comparisons

LSD

Dependent Variable	(I) SPECIES	(J) SPECIES	Mean Difference		Sig.	95% Confidence Interval	
				Std. Error		Lower Bound	Upper Bound
HEIGHT	RM	RA	18.25	14.8349	0.221	-11.1379	47.6379
		CT	56.7	14.8349	0	27.3121	86.0879
		BC	49	14.8349	0.001	19.6121	78.3879
		NF	12.7	14.8349	0.394	-16.6879	42.0879
		SA	-34.65	14.8349	0.021	-64.0379	-5.2621
	RA	RM	-18.25	14.8349	0.221	-47.6379	11.1379
		CT	38.45	14.8349	0.011	9.0621	67.8379
		BC	30.75	14.8349	0.04	1.3621	60.1379
		NF	-5.55	14.8349	0.709	-34.9379	23.8379
		SA	-52.9	14.8349	0.001	-82.2879	-23.5121
	CT	RM	-56.7	14.8349	0	-86.0879	-27.3121
		RA	-38.45	14.8349	0.011	-67.8379	-9.0621
		BC	-7.7	14.8349	0.605	-37.0879	21.6879
		NF	-44	14.8349	0.004	-73.3879	-14.6121
		SA	-91.35	14.8349	0	-120.7379	-61.9621
	BC	RM	-49	14.8349	0.001	-78.3879	-19.6121
		RA	-30.75	14.8349	0.04	-60.1379	-1.3621
		CT	7.7	14.8349	0.605	-21.6879	37.0879
		NF	-36.3	14.8349	0.016	-65.6879	-6.9121
		SA	-83.65	14.8349	0	-113.0379	-54.2621
	NF	RM	-12.7	14.8349	0.394	-42.0879	16.6879
		RA	5.55	14.8349	0.709	-23.8379	34.9379
		CT	44	14.8349	0.004	14.6121	73.3879
		BC	36.3	14.8349	0.016	6.9121	65.6879
		SA	-47.35	14.8349	0.002	-76.7379	-17.9621
SA	RM	34.65	14.8349	0.021	5.2621	64.0379	
	RA	52.9	14.8349	0.001	23.5121	82.2879	
	CT	91.35	14.8349	0	61.9621	120.7379	
	BC	83.65	14.8349	0	54.2621	113.0379	
	NF	47.35	14.8349	0.002	17.9621	76.7379	

Tests of Between-Subjects Effects

Dependent Variable: HEIGHT

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Noncent. Parameter	Observed Power ^a
Corrected Model	348500.100 ^b	23	15152.178	104.474	.000	2402.897	1.000
Intercept	699518.700	1	699518.700	4823.158	.000	4823.158	1.000
SPECIES	111537.300	5	22307.460	153.809	.000	769.046	1.000
MONTH	128306.967	3	42768.989	294.891	.000	884.672	1.000
SPECIES * MONTH	108655.833	15	7243.722	49.945	.000	749.178	1.000
Error	13923.200	96	145.033				
Total	1061942.000	120					
Corrected Total	362423.300	119					

a. Computed using alpha = .05

b. R Squared = .962 (Adjusted R Squared = .952)

MONTH * SPECIES

Dependent Variable: HEIGHT

MONTH	SPECIES	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
0 month	RM	73.400	5.386	62.709	84.091
	RA	42.000	5.386	31.309	52.691
	CT	31.400	5.386	20.709	42.091
	BC	32.200	5.386	21.509	42.891
	NF	47.200	5.386	36.509	57.891
	SA	61.800	5.386	51.109	72.491
14 month	RM	86.800	5.386	76.109	97.491
	RA	45.600	5.386	34.909	56.291
	CT	31.600	5.386	20.909	42.291
	BC	35.800	5.386	25.109	46.491
	NF	47.600	5.386	36.909	58.291
	SA	62.200	5.386	51.309	72.891
20 month	RM	96.200	5.386	85.509	106.891
	RA	43.800	5.386	33.109	54.491
	CT	37.400	5.386	26.709	48.091
	BC	38.600	5.386	27.909	49.291
	NF	121.800	5.386	111.109	132.491
	SA	118.000	5.386	107.309	128.691
23 month	RM	117.000	5.386	106.309	127.691
	RA	169.000	5.386	158.309	179.691
	CT	46.200	5.386	35.309	56.891
	BC	70.800	5.386	60.109	81.491
	NF	106.000	5.386	95.309	116.691
	SA	270.000	5.386	259.309	280.691

Multiple Comparisons

LSD

Dependent Variable	(I) MONTH	(J) MONTH	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
HEIGHT	0 month	14 month	-17.3900	12.1673	.156	-41.4889	6.7089
		20 month	-40.1400*	12.1673	.001	-64.2389	-16.0411
		28 month	-80.2567*	12.1673	.000	-104.3556	-56.1577
	14 month	0 month	17.3900	12.1673	.156	-6.7089	41.4889
		20 month	-22.7500	12.1673	.064	-46.8489	1.3489
		28 month	-62.8667*	12.1673	.000	-86.9656	-38.7677
	20 month	0 month	40.1400*	12.1673	.001	16.0411	64.2389
		14 month	22.7500	12.1673	.064	-1.3489	46.8489
		28 month	-40.1167*	12.1673	.001	-64.2156	-16.0177
	28 month	0 month	80.2567*	12.1673	.000	56.1577	104.3556
		14 month	62.8667*	12.1673	.000	38.7677	86.9656
		20 month	40.1167*	12.1673	.001	16.0177	64.2156
BRA#LEA	0 month	14 month	-4.5333	4.3814	.303	-13.2113	4.1446
		20 month	-10.5667*	4.3814	.017	-19.2446	-1.8887
		28 month	-20.6000*	4.3814	.000	-29.2780	-11.9220
	14 month	0 month	4.5333	4.3814	.303	-4.1446	13.2113
		20 month	-6.0333	4.3814	.171	-14.7113	2.6446
		28 month	-16.0667*	4.3814	.000	-24.7446	-7.3887
	20 month	0 month	10.5667*	4.3814	.017	1.8887	19.2446
		14 month	6.0333	4.3814	.171	-2.6446	14.7113
		28 month	-10.0333*	4.3814	.024	-18.7113	-1.3554
	28 month	0 month	20.6000*	4.3814	.000	11.9220	29.2780
		14 month	16.0667*	4.3814	.000	7.3887	24.7446
		20 month	10.0333*	4.3814	.024	1.3554	18.7113
DIAMETER	0 month	14 month	-1.1700	.7100	.102	-2.5763	2.363
		20 month	-2.7367*	.7100	.000	-4.1430	-1.3303
		28 month	-5.8867*	.7100	.000	-7.2930	-4.4803
	14 month	0 month	1.1700	.7100	.102	-.2363	2.5763
		20 month	-1.5667*	.7100	.029	-2.9730	-.1603
		28 month	-4.7167*	.7100	.000	-6.1230	-3.3103
	20 month	0 month	2.7367*	.7100	.000	1.3303	4.1430
		14 month	1.5667*	.7100	.029	.1603	2.9730
		28 month	-3.1500*	.7100	.000	-4.5563	-1.7437
	28 month	0 month	5.8867*	.7100	.000	4.4803	7.2930
		14 month	4.7167*	.7100	.000	3.3103	6.1230
		20 month	3.1500*	.7100	.000	1.7437	4.5563

*. The mean difference is significant at the .05 level.

5.2 พื้นที่น้ำท่วมไม่ถึง (ปลูกไม้ฝาด ปรอง ไม้ถั่ว)

AREA * MONTH * SPECIES

Dependent Variable: HEIGHT

AREA	MONTH	SPECIES	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
น้ำ ไม่กร่อง	0 month	LR	39.200	5.145	28.987	49.413
		BC	38.400	5.145	28.187	48.613
		CT	11.660	5.145	1.447	21.873
	14 month	LR	88.800	5.145	78.587	99.013
		BC	41.600	5.145	31.387	71.913
		CT	29.200	5.145	18.987	39.413
	20 month	LR	130.000	5.145	119.787	140.213
		BC	58.000	5.145	47.787	68.213
		CT	29.600	5.145	19.387	39.813
	28 month	LR	226.000	5.145	215.787	236.213
		BC	128.000	5.145	117.787	138.213
		CT	42.000	5.145	31.787	52.213
น้ำ ขกร่อง	0 month	LR	25.800	5.145	15.587	36.013
		BC	27.000	5.145	16.787	37.213
		CT	21.200	5.145	10.987	31.413
	14 month	LR	32.400	5.145	22.187	42.613
		BC	32.400	5.145	22.187	42.613
		CT	23.200	5.145	12.987	33.413
	20 month	LR	122.600	5.145	112.387	132.813
		BC	33.600	5.145	23.387	43.813
		CT	30.300	5.145	20.087	40.513
	28 month	LR	179.200	5.145	167.987	188.413
		BC	38.000	5.145	27.787	48.213
		CT	32.600	5.145	22.387	42.813

Tests of Between-Subjects Effects

Dependent Variable: HEIGHT

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Noncent. Parameter	Observed Power ^a
Corrected Model	353142.683 ^b	23	15354.030	115.992	.000	2667.803	1.000
Intercept	456185.345	1	456185.345	3446.237	.000	3446.237	1.000
SPECIES	126834.941	2	63417.470	479.085	.000	958.170	1.000
MONTH	108254.186	3	36084.729	272.601	.000	317.803	1.000
AREA	16940.880	1	16940.880	127.979	.000	127.979	1.000
SPECIES * MONTH * AREA	101112.676	17	5947.804	44.932	.000	763.852	1.000
Error	12707.712	96	132.372				
Total	822035.740	120					
Corrected Total	365850.395	119					

a. Computed using alpha = .05

b. R Squared = .965 (Adjusted R Squared = .957)

Multiple Comparisons

LSD

Dependent Variable	(I) SPECIES	(J) SPECIES	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
HEIGHT	LR	BC	53.2500*	10.1066	.000	33.2344	73.2656
		CT	77.9050*	10.1066	.000	57.8894	97.9206
	BC	LR	-53.2500*	10.1066	.000	-73.2656	-33.2344
		CT	24.6550*	10.1066	.016	-4.6394	44.6706
	CT	LR	-77.9050*	10.1066	.000	-97.9206	-57.8894
		BC	-24.6550*	10.1066	.016	-44.6706	-4.6394
BRA#LEA	LR	BC	-7.8500*	3.6357	.033	-15.0503	-.6497
		CT	13.8000*	3.6357	.000	6.5997	21.0003
	BC	LR	7.8500*	3.6357	.033	.6497	15.0503
		CT	21.6500*	3.6357	.000	14.4497	28.8503
	CT	LR	-13.8000*	3.6357	.000	-21.0003	-6.5997
		BC	-21.6500*	3.6357	.000	-28.8503	-14.4497
DIAMETER	LR	BC	1.4600	.7480	.053	-2.1308-02	2.9413
		CT	2.7750*	.7480	.000	1.2937	4.2563
	BC	LR	-1.4600	.7480	.053	-2.9413	2.1308-02
		CT	1.3150	.7480	.081	-.1663	2.7963
	CT	LR	-2.7750*	.7480	.000	-4.2563	-1.2937
		BC	-1.3150	.7480	.081	-2.7963	.1663

*. The mean difference is significant at the .05 level.