

ตารางผนวก

ผลการทดสอบความแตกต่างทางสถิติบางประการ

1. ชุดทดลองเรื่องการเจริญเติบโตของกล้าจาก

ทดสอบความแตกต่างทางสถิติของการเจริญเติบโตด้านความสูง

Univariate Analysis of Variance

Between-Subjects Factors			
	Value Label	N	
TYP:	1.00	wild seedling furrow	180
	2.00	fruit, furrow,side,dry	180
	3.00	bag seedling, furrow	180
	4.00	fruit, furrow, mid,dry	180
	5.00	wild seedling, no fur	180
	6.00	fruit, no fur, dry	180
	7.00	bag seedling, no fur	180
	8.00	fruit, no fur, wet	180
MONTH	1.00	0 month	240
	2.00	2 month	240
	3.00	4 month	240
	4.00	8 month	240
	5.00	12 month	240
	6.00	18 month	240

Tests of Between-Subjects Effects

Dependent Variable: HEIGHT

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	836518.131 ^a	47	17798.258	3030.775	.000
Intercept	4558725.336	1	4558725.336	776282.316	.000
TYPE	140325.108	7	20046.444	3413.608	.000
MONTH	614494.781	5	122898.956	20927.843	.000
TYPE * MONTH	81698.242	35	2334.235	397.485	.000
Error	8174.533	1392	5.873		
Total	5403418.000	1440			
Corrected Total	844692.664	1439			

a. R Squared = .990 (Adjusted R Squared = .990)

Homogeneous Subsets

HEIGHT

TYPE	N	Subset				
		1	2	3	4	5
Scheffe ^{a,b} fruit, furrow, mid.dry	180	34.0167				
fruit, furrow,aside.dry	180		51.2389			
fruit, no fur, dry	180		51.2556			
fruit, no fur, wet	180			58.3833		
wild seedling, no fur	180				62.8111	
wild seedling, furrow	180				63.3778	
bag seedling, no fur	180					64.3833
bag seedling, furrow	180					64.6556
Sig.		1.000	1.000	1.000	.670	.992

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = 5.873.

a. Uses Harmonic Mean Sample Size = 180.000.

b. Alpha = .05.

ทดสอบความแตกต่างทางสถิติของการเจริญเติบโตด้านจำนวนใบ

Univariate Analysis of Variance

Between-Subjects Factors			
		Value Label	N
TYPE	1.00	wild seedling,	180
		furrow	
	2.00	fruit,	180
		furrow,aside,dry	
	3.00	bag seedling,	180
		furrow	
	4.00	fruit, furrow,	180
		mid,dry	
5.00	wild seedling, no	180	
	fur		
6.00	fruit, no fur, dry	180	
	bag seedling, no		
7.00	fur	180	
	fruit, no fur, wet		
MONTH	1.00	0 month	240
	2.00	2 month	240
	3.00	4 month	240
	4.00	8 month	240
	5.00	12 month	240
	6.00	18 month	240

Tests of Between-Subjects Effects

Dependent Variable: LEAF

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Noncent. Parameter	Observed Power ^a
Corrected Model	3316.300 ^b	47	70.560	306.169	.000	14389.930	1.000
Intercept	12744.900	1	12744.900	55302.060	.000	55302.060	1.000
TYPE	584.967	7	83.567	362.608	.000	2538.259	1.000
MONTH	1058.350	5	211.670	918.468	.000	4592.342	1.000
TYPE * MONTH	1672.983	35	47.800	207.409	.000	7259.329	1.000
Error	320.800	1392	.230				
Total	16382.000	1440					
Corrected Total	3637.100	1439					

a. Computed using alpha = .05

Homogeneous Subsets

LEAF						
TYPE	N	Subset				
		1	2	3	4	
Scheffe ^{a,b} fruit, furrow, mid,dry	180	2.1389				
fruit, no fur, dry	180		2.1778			
fruit, furrow,aside,dry	180		2.5667			
wild seedling, no fur	180			3.0278		
bag seedling, no fur	180			3.0722		
wild seedling, furrow	180			3.1444		
bag seedling, furrow	180			3.1722		
fruit, no fur, wet	180				4.1778	
Sig.		1.000	.054	.323	1.000	

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = .231.

a. Uses Harmonic Mean Sample Size = 180.000.

b. Alpha = .05.

ทดสอบความแตกต่างทางสถิติของการเจริญเติบโตด้านเส้นรอบวง

Univariate Analysis of Variance

Between-Subjects Factors				
		Value Label	N	
TYPE	1.00	wild seedling,	180	
		furrow		
	2.00	fruit,		180
		furrow,aside,dr y		
	3.00	bag seedling,		180
		furrow		
	4.00	fruit, furrow,		180
		mid,dry		
5.00	wild seedling,	180		
	no fur			
6.00	fruit, no fur,	180		
	dry			
7.00	bag seedling,	180		
	no fur			
8.00	fruit, no fur,	180		
	wet			
MONTH	1.00	0 month	240	
	2.00	2 month	240	
	3.00	4 month	240	
	4.00	8 month	240	
	5.00	12 month	240	
	6.00	18 month	240	

Tests of Between-Subjects Effects					
Dependent Variable: DIAMETER					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	257245.894 ^a	47	5473.317	2853.184	.000
Intercept	463002.806	1	463002.806	241358.614	.000
TYPE	63914.044	7	9130.578	4759.676	.000
MONTH	64681.723	5	12936.345	6743.584	.000
TYPE * MONTH	128650.127	35	3675.718	1916.114	.000
Error	2670.300	1392	1.918		
Total	722919.000	1440			
Corrected Total	259916.194	1439			

a. R Squared = .990 (Adjusted R Squared = .989)

Homogeneous Subsets

DIAMETER					
TYPE	N	Subset			
		1	2	3	4
Scheffe ^{a,b} fruit, furrow, mid.dry	180	11.6167			
fruit, no fur, dry	180		14.7944		
fruit, furrow,aside.dry	180		15.0000		
wild seedling, no fur	180			16.5333	
wild seedling, furrow	180			16.6500	
bag seedling, no fur	180			16.8278	
bag seedling, furrow	180			17.0333	
fruit, no fur, wet	180				34.9944
Sig.		1.000	.961	.111	1.000

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = 1.918.

a. Uses Harmonic Mean Sample Size = 180.000.

b. Alpha = .05.

Correlations					
	TYPE	HEIGHT	LEAF	DIAMETER	
Pearson Correlation	TYPE	1.000	.022	.166	.276
	HEIGHT	.022	1.000	.709	.642
	LEAF	.166	.709	1.000	.861
	DIAMETER	.276	.642	.861	1.000
Sig. (1-tailed)	TYPE		.204	.000	.000
	HEIGHT	.204		.000	.000
	LEAF	.000	.000		.000
	DIAMETER	.000	.000	.000	
N	TYPE	1440	1440	1440	1440
	HEIGHT	1440	1440	1440	1440
	LEAF	1440	1440	1440	1440
	DIAMETER	1440	1440	1440	1440

วิเคราะห์ความสัมพันธ์ ระยะเวลาปลูกกับการเจริญเติบโตของกล้าจาก

Descriptive Statistics			
	Mean	Std. Deviation	N
MONTH	3.5000	1.70842	1440
HEIGHT	56.2785	24.23520	1440
LEAF	2.9750	1.58982	1440
DIAMETE R	15.7722	4.95128	1440

Correlations					
		MONTH	HEIGHT	LEAF	DIAMETE R
Pearson Correlation	MONTH	1.000	.851	.524	.806
	HEIGHT	.851	1.000	.713	.948
	LEAF	.524	.713	1.000	.784
	DIAMETE R	.806	.948	.784	1.000
Sig. (1-tailed)	MONTH	.	.000	.000	.000
	HEIGHT	.000	.	.000	.000
	LEAF	.000	.000	.	.000
	DIAMETE R	.000	.000	.000	.
N	MONTH	1440	1440	1440	1440
	HEIGHT	1440	1440	1440	1440
	LEAF	1440	1440	1440	1440
	DIAMETE R	1440	1440	1440	1440

2. ชุดทดลอง เรื่อง การกำจัดและไม่กำจัดวัชพืช

ทดสอบความแตกต่างทางสถิติของการเจริญเติบโตด้านความสูง

Univariate Analysis of Variance

Between-Subjects Factors			
		Value Label	N
TYPE	1.00	wild seedling.	180
		no weed	
	2.00	fruit, no weed	180
		bag seedling.	
	3.00	no weed	180
		wild seedling.	
4.00	weed	180	
	fruit, weed		
5.00	bag seedling.	180	
	weed		
MONTH	1.00	0 month	180
	2.00	2 month	180
	3.00	4 month	180
	4.00	8 month	180
	5.00	12 month	180
	6.00	18 month	180

Tests of Between-Subjects Effects					
Dependent Variable: HEIGHT					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model ^a	499696.163 ^a	35	14277.033	4419.418	.000
Intercept	3622919.170	1	3622919.170	1121464.997	.000
TYPE	42384.419	5	8476.884	2623.997	.000
MONTH	429263.141	5	85852.628	26575.453	.000
TYPE * MONTH	28048.604	25	1121.944	347.295	.000
Error	3372.667	1044	3.231		
Total	4125988.000	1080			
Corrected Total	503068.830	1079			

^a. R Squared = .993 (Adjusted R Squared = .993)

Homogeneous Subsets

HEIGHT					
TYPE	N	Subset			
		1	2	3	
Scheffe ^{a,h}					
fruit, weed	180	48.9000			
fruit, no weed	180	49.2556			
wild seedling, weed	180		61.7056		
wild seedling, no weed	180		62.0389		
bag seedling, weed	180				62.7667
bag seedling, no weed	180				62.8444
Sig.		.620	.685		.999

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = 3.231.

a. Uses Harmonic Mean Sample Size = 180.000.

b. Alpha = .05.

ทดสอบความแตกต่างทางสถิติของการเจริญเติบโตด้านจำนวนใบ

Univariate Analysis of Variance

Between-Subjects Factors			
		Value Label	N
TYPE	1.00	wild seedling, no weed	180
		2.00	fruit, no weed
	3.00	bag seedling, no weed	180
		4.00	wild seedling, weed
	5.00	fruit, weed	180
	6.00	bag seedling, weed	180
MONTH	1.00	0 month	180
	2.00	2 month	180
	3.00	4 month	180
	4.00	8 month	180
	5.00	12 month	180
	6.00	18 month	180

Tests of Between-Subjects Effects					
Dependent Variable: LEAF					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	633.544 ^a	35	18.101	96.961	.000
Intercept	8846.556	1	8846.556	47387.404	.000
TYPE	102.171	5	20.434	109.458	.000
MONTH	218.927	5	43.785	234.540	.000
TYPE * MONTH	312.445	25	12.498	66.946	.000
Error	194.900	1044	.187		
Total	9675.000	1080			
Corrected Total	828.444	1079			

^a. R Squared = .765 (Adjusted R Squared = .757)

Homogeneous Subsets

LEAF				
	TYPE	N	Subset	
			1	2
Scheffe ^{a,b}	fruit, weed	180	2.4222	
	fruit, no weed	180	2.4389	
	wild seedling, weed	180		3.0278
	wild seedling, no weed	180		3.0389
	bag seedling, weed	180		3.1000
	bag seedling, no weed	180		3.1444
	Sig.			1.000

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = .187.

a. Uses Harmonic Mean Sample Size = 180.000.

b. Alpha = .05.

ทดสอบความแตกต่างทางสถิติของการเจริญเติบโตด้านเส้นรอบวง

Univariate Analysis of Variance

Between-Subjects Factors			
		Value Label	N
TYPE	1.00	wild seedling, no weed	180
	2.00	fruit, no weed	180
	3.00	bag seedling, no weed	180
	4.00	wild seedling, weed	180
	5.00	fruit, weed	180
	6.00	bag seedling, weed	180
MONTH	1.00	0 month	180
	2.00	2 month	180
	3.00	4 month	180
	4.00	8 month	180
	5.00	12 month	180
	6.00	18 month	180

Tests of Between-Subjects Effects					
Dependent Variable: DIAMETER					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	18773.055 ^a	35	536.373	643.524	.000
Intercept	273957.779	1	273957.779	328686.368	.000
TYPE	1336.994	5	267.399	320.817	.000
MONTH	15568.571	5	3113.714	3735.741	.000
TYPE * MONTH	1867.490	25	74.700	89.622	.000
Error	870.167	1044	.833		
Total	293601.000	1080			
Corrected Total	19643.221	1079			

a. R Squared = .956 (Adjusted R Squared = .954)

Homogeneous Subsets

DIAMETER							
TYPE	N	Subset					
		1	2	3	4	5	
Scheffe ^{a,h} fruit, weed	180	14.1833					
fruit, no weed	180		15.1667				
wild seedling, weed	180		15.4444				
bag seedling, weed	180			16.3722			
wild seedling, no weed	180				16.9222		
bag seedling, no weed	180					17.4722	
Sig.		1.000	.140	1.000	1.000	1.000	

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = .833.

a. Uses Harmonic Mean Sample Size = 180.000.

b. Alpha = .05.