

ภาคผนวก

การวิเคราะห์อิทธิพลของระยะปลูกและการตัดใบที่มีต่อลักษณะการเจริญเติบโตของแฝกหอมฯ ด้วยโปรแกรมสถิติอิริสตา (IRRISTAT)

1. ลักษณะการเจริญเติบโตเมื่ออายุหกเดือน

1.1 ความสูง

DEPENDENT VARIABLE: stem height (Y)

INDEPENDENT VARIABLE: LEAF CUTTING
PLANT RATE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	2	1.27898291666666	0.63949145833333	<1
RESIDUAL	3	81.9452770833288	27.3150923611096	
TOTAL	5	83.2242599999954		

$$R^2 = .02ns$$

$$R^2 \text{ (ADJUSTED FOR DF)} = -.64ns$$

REGRESSION EQUATION:

$$Y = 74.719 + 0.7 (\text{LEAF CUTTI}) + 0.4 (\text{PLANT RATE})$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	0.69933333	4.26732487	0.16ns
PLANT RATE	0.36925000	2.61319213	0.14ns

1.2 ขนาดลำต้น

DEPENDENT VARIABLE: stem dimension (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	2	0.0225362500000	0.0112681250000	<1
RESIDUAL	3	0.0855797500000	0.0285265833333	
TOTAL	5	0.1081160000000		

 $R^2 = .21ns$ R^2 (ADJUSTED FOR DF)= -.32ns

REGRESSION EQUATION:

$$Y = 4.156 - 0.1 (\text{LEAF CUTTI}) + 0.02 (\text{PLANT RATE})$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	-0.11600000	.137904758	-0.84ns
PLANT RATE	0.02425000	.084449072	0.29ns

1.8 ความกว้างใบ

DEPENDENT VARIABLE: leaf wide (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	2	0.0005104166667	0.0002552083333	<1
RESIDUAL	3	0.0081484166667	0.0027161388889	
TOTAL	5	0.0086588333333		

$$R^2 = .06ns$$

$$R^2 \text{ (ADJUSTED FOR DF)} = -.57ns$$

REGRESSION EQUATION:

$$Y = 1.005 - 0.02 \text{ (LEAF CUTTI)} - 0.003 \text{ (PLANT RATE)}$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	-0.01766667	.042553017	-0.42ns
PLANT RATE	-0.00325000	.026058295	-0.12ns

1.4 ความยาวใบ

DEPENDENT VARIABLE: leaf long (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	2	36.0028771666666	18.0014385833333	2.42 ns
RESIDUAL	3	22.2854963333294	7.4284987777765	
TOTAL	5	58.2883734999959		

 $R^2 = .62ns$ R^2 (ADJUSTED FOR DF)= .36ns

REGRESSION EQUATION:

$$Y = 53.864 + 4.0 (\text{LEAF CUTTI}) - 1.7 (\text{PLANT RATE})$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	4.00433333	2.22538368	1.80ns
PLANT RATE	-1.72850000	1.36276362	-1.27ns

1.5 พันธุ์ใบ

DEPENDENT VARIABLE: leaf area (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	2	29.279300666666	14.639650333333	<1
RESIDUAL	3	95.040018666673	31.680006222224	
TOTAL	5	124.319319333339		

R = .24ns

R (ADJUSTED FOR DF)= -.27ns

REGRESSION EQUATION:

$$Y = 54.969 + 2.8 (\text{LEAF CUTTI}) - 2.1 (\text{PLANT RATE})$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	2.76333333	4.59565057	0.60ns
PLANT RATE	-2.11100000	2.81424973	-0.75ns

1.6 ขนาดถอก

DEPENDENT VARIABLE: total stem dimension (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	2	6.7395124166667	3.3697562083333	10.90 *
RESIDUAL	3	0.9271844166666	0.3090614722222	
TOTAL	5	7.6666968333333		

$$R^2 = .88^*$$

$$R^2 \text{ (ADJUSTED FOR DF)} = .80^*$$

REGRESSION EQUATION:

$$Y = 11.121 - 1.8 (\text{LEAF CUTTI}) + 0.7 (\text{PLANT RATE})$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	-1.77633333	.453917373	-3.91*
PLANT RATE	0.70825000	.277966487	2.55ns

1.7 จำนวนต้นตอก

DEPENDENT VARIABLE: no.of stem/group (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	2	1.9384204166667	0.9692102083333	2.66 ns
RESIDUAL	3	1.0933984166667	0.3644661388889	
TOTAL	5	3.0318188333333		

R = .64ns

R (ADJUSTED FOR DF)= .40ns

REGRESSION EQUATION:

$$Y = 7.795 - 1.1 (\text{LEAF CUTTI}) + 0.3 (\text{PLANT RATE})$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	-1.05566667	.492927404	-2.14ns
PLANT RATE	0.25825000	.301855155	0.86ns

*** END OF REGRESSION ANALYSIS RUN ***

2. ลักษณะการเจริญเติบโตเมื่ออายุเก้าเดือน

2.1 ความสูง

DEPENDENT VARIABLE: leaf area (Y)

INDEPENDENT VARIABLE : LEAF CUTTING

PLANT RATE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	2	25.246938916666	12.623469458333	<1
RESIDUAL	3	231.071639083325	77.023879694442	
TOTAL	5	256.318577999991		

R = .10ns

R (ADJUSTED FOR DF)= -.50ns

REGRESSION EQUATION:

$$Y = 105.984 + 0.2 (\text{LEAF CUTTI}) + 2.5 (\text{PLANT RATE})$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	0.23333333	7.16583932	0.03ns
PLANT RATE	2.50825000	4.38816248	0.57ns

2.2 ขนาดลำต้น

DEPENDENT VARIABLE: stem dimension (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	2	0.1787822500000	0.0893911250000	11.00 *
RESIDUAL	3	0.0243797500000	0.0081265833333	
TOTAL	5	0.2031620000000		

R = .88*

R (ADJUSTED FOR DF)= .80*

REGRESSION EQUATION:

$$Y = 3.038 + 0.3 (\text{LEAF CUTTI}) + 0.1 (\text{PLANT RATE})$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	0.27000000	.073605178	3.67*
PLANT RATE	0.13175000	.045073782	2.92ns

2.3 ความกว้างใบ

DEPENDENT VARIABLE: leaf wide (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	2	0.0040582500000	0.0020291250000	1.97 ns
RESIDUAL	3	0.0030977500000	0.0010325833333	
TOTAL	5	0.0071560000000		

R = .57ns

R (ADJUSTED FOR DF)= .28ns

REGRESSION EQUATION:

$$Y = 0.950 + 0.04 (\text{LEAF CUTTI}) + 0.02 (\text{PLANT RATE})$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	0.03800000	.026237166	1.45ns
PLANT RATE	0.02175000	.016066917	1.35ns

2.4 ความยาวใบ

DEPENDENT VARIABLE: leaf long (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	2	84.695456916665	42.347728458332	4.25 ns
RESIDUAL	3	29.863552416662	9.954517472221	
TOTAL	5	114.559009333327		

R = .74ns

R (ADJUSTED FOR DF)= .57ns

REGRESSION EQUATION:

$$Y = 63.596 + 5.9 (\text{LEAF CUTTI}) - 2.9 (\text{PLANT RATE})$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	5.89333333	2.57611044	2.29ns
PLANT RATE	-2.85475000	1.57753902	-1.81ns

2.5 พันธุ์ใบ

DEPENDENT VARIABLE: leaf area (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	2	110.775461500000	55.387730750000	1.84 ns
RESIDUAL	3	90.351059333342	30.117019777781	
TOTAL	5	201.126520833343		

R = .55ns

R (ADJUSTED FOR DF)= .25ns

REGRESSION EQUATION:

$$Y = 61.108 + 8.2 (\text{LEAF CUTTI}) - 1.6 (\text{PLANT RATE})$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	8.17100000	4.48084961	1.82ns
PLANT RATE	-1.63000000	2.74394879	-0.59ns

2.6 ขนาดถ

DEPENDENT VARIABLE: total stem dimension (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	2	0.8276237500000	0.4138118750000	<1
RESIDUAL	3	3.0002297500002	1.0000765833334	
TOTAL	5	3.8278535000002		

R = .22ns

R (ADJUSTED FOR DF)= -.31ns

REGRESSION EQUATION:

$$Y = 14.447 + 0.4 (\text{LEAF CUTTI}) + 0.4 (\text{PLANT RATE})$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	0.39100000	.816527845	0.48ns
PLANT RATE	0.38675000	.500019145	0.77ns

2.7 จำนวนต้นตอก

DEPENDENT VARIABLE: no.of stem/group (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	2	1.2087224166667	0.6043612083333	<1
RESIDUAL	3	2.5141890833333	0.8380630277778	
TOTAL	5	3.7229115000000		

R = .32ns

R (ADJUSTED FOR DF)= -.13ns

REGRESSION EQUATION:

$$Y = 8.699 + 0.7 (\text{LEAF CUTTI}) + 0.3 (\text{PLANT RATE})$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	0.73366667	.747468183	0.98ns
PLANT RATE	0.31675000	.457728912	0.69ns

*** END OF REGRESSION ANALYSIS RUN ***

3. ลักษณะการเจริญเติบโตเมื่ออายุ 11 เดือน

3.1 ความสูง

DEPENDENT VARIABLE: stem height (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	2	128.243481666667	64.121740833333	2.25 ns
RESIDUAL	3	85.682148333346	28.560716111115	
TOTAL	5	213.925630000013		

R = .60ns

R (ADJUSTED FOR DF)= .33ns

REGRESSION EQUATION:

$$Y = 115.139 + 6.6 (\text{LEAF CUTTI}) - 4.0 (\text{PLANT RATE})$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	6.61133333	4.36353955	1.52ns
PLANT RATE	-3.95850000	2.67211134	-1.48ns

3.2 ขนาดลำต้น

DEPENDENT VARIABLE: stem dimension (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	2	0.0099649166667	0.0049824583333	<1
RESIDUAL	3	0.7163984166667	0.2387994722222	
TOTAL	5	0.7263633333333		

R = .01ns

R (ADJUSTED FOR DF)= -.64ns

REGRESSION EQUATION:

$$Y = 3.105 + 0.04 (\text{LEAF CUTTI}) + 0.04 (\text{PLANT RATE})$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	0.04466667	.398998306	0.11ns
PLANT RATE	0.04175000	.244335564	0.17ns

3.3 ความกว้างใบ

DEPENDENT VARIABLE: leaf wide (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	2	0.0002722500000	0.0001361250000	<1
RESIDUAL	3	0.0306170833333	0.0102056944444	
TOTAL	5	0.0308893333333		

R = .01ns

R (ADJUSTED FOR DF)= -.65ns

REGRESSION EQUATION:

$\hat{Y} = 1.183 - 0.000000000000001 (\text{LEAF CUTTI}) - 0.01 (\text{PLANT RATE})$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	-0.00000000	.082485128	-0.00ns
PLANT RATE	-0.00825000	.050511619	-0.16ns

8.4 ความยาวใบ

DEPENDENT VARIABLE: leaf long (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	2	74.658666916667	37.329333458333	3.48 ns
RESIDUAL	3	32.150296416666	10.716765472222	
TOTAL	5	106.808963333333		

R = .70ns

R (ADJUSTED FOR DF)= .50ns

REGRESSION EQUATION:

$$Y = 62.777 + 2.7 (\text{LEAF CUTTI}) - 4.0 (\text{PLANT RATE})$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	2.66666667	2.67292168	1.00ns
PLANT RATE	-3.99975000	1.63682356	-2.44ns

8.5 ผลการวิเคราะห์

DEPENDENT VARIABLE: leaf area (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	2	116.559300166667	58.279650083333	5.90 ns
RESIDUAL	3	29.646666666672	9.882222222224	
TOTAL	5	146.205966833339		

R = .80ns

R (ADJUSTED FOR DF)= .66ns

REGRESSION EQUATION:

$$Y = 75.234 + 2.4 (\text{LEAF CUTTI}) - 5.2 (\text{PLANT RATE})$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	2.36633333	2.56673882	0.92ns
PLANT RATE	-5.20000000	1.57180010	-3.31*

3.6 ขนาดถอก

DEPENDENT VARIABLE: total stem dimension (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	2	19.1581502500001	9.5790751250000	2.67 ns
RESIDUAL	3	10.7538797500004	3.5846265833335	
TOTAL	5	29.9120300000004		

R = .64ns

R (ADJUSTED FOR DF)= .40ns

REGRESSION EQUATION:

$$Y = 20.840 - 0.4 (\text{LEAF CUTTI}) + 2.2 (\text{PLANT RATE})$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	-0.40000000	1.54588197	-0.26ns
PLANT RATE	2.17475000	.946655505	2.30ns

8.7 จำนวนต้นตอก

DEPENDENT VARIABLE: no.of stem/group (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	2	28.0863669166666	14.0431834583333	2.57 ns
RESIDUAL	3	16.3771224166666	5.4590408055555	
TOTAL	5	44.4634893333332		

R = .63ns

R (ADJUSTED FOR DF)= .39ns

REGRESSION EQUATION:

$$Y = 15.067 + 0.03 (\text{LEAF CUTTI}) + 2.6 (\text{PLANT RATE})$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	0.03333333	1.90771081	0.02ns
PLANT RATE	2.64975000	1.16822952	2.27ns

*** END OF REGRESSION ANALYSIS RUN ***

4. ลักษณะการเจริญเติบโตเมื่ออายุ 13 เดือน

4.1 ความสูง

DEPENDENT VARIABLE: stem height (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	2	61.7889866666670	30.8944933333335	3.52 ns
RESIDUAL	3	26.29820666666586	8.7660688888862	
TOTAL	5	88.0871933333256		

R = .70ns

R (ADJUSTED FOR DF)= .50ns

REGRESSION EQUATION:

$$Y = 113.157 + 6.3 (\text{LEAF CUTTI}) + 0.7 (\text{PLANT RATE})$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	6.32533333	2.41744616	2.62ns
PLANT RATE	0.66600000	1.48037739	0.45ns

4.2 ขนาดลำต้น

DEPENDENT VARIABLE: stem dimension (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	2	0.1097121666667	0.0548560833333	2.95 ns
RESIDUAL	3	0.0558726666667	0.0186242222222	
TOTAL	5	0.1655848333333		

R = .66ns

R (ADJUSTED FOR DF)= .44ns

REGRESSION EQUATION:

$$Y = 3.436 - 0.3 (\text{LEAF CUTTI}) + 0.1 (\text{PLANT RATE})$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	-0.25566667	.111427771	-2.29ns
PLANT RATE	0.05400000	.068235296	0.79ns

4.8 ความกว้างใบ

DEPENDENT VARIABLE: leaf wide (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	2	0.0052166666667	0.0026083333333	<1
RESIDUAL	3	0.0083146666667	0.0027715555556	
TOTAL	5	0.0135313333333		

R = .39ns

R (ADJUSTED FOR DF)= -.02ns

REGRESSION EQUATION:

$$Y = 1.172 - 0.1 (\text{LEAF CUTTI}) + 0.01 (\text{PLANT RATE})$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	-0.05666667	.042984924	-1.32ns
PLANT RATE	0.01000000	.026322783	0.38ns

4.4 ความยาวใบ

DEPENDENT VARIABLE: leaf long (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	2	176.136829166665	88.068414583333	3.45 ns
RESIDUAL	3	76.626847666674	25.542282555558	
TOTAL	5	252.763676833340		

R = .70ns

R (ADJUSTED FOR DF)= .49ns

REGRESSION EQUATION:

$$Y = 91.569 - 2.3 (\text{LEAF CUTTI}) - 6.5 (\text{PLANT RATE})$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	-2.27833333	4.12652255	-0.55ns
PLANT RATE	-6.48750000	2.52696867	-2.57ns

4.5 พืชใบ

DEPENDENT VARIABLE: leaf area (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	2	241.153777500004	120.576888750002	4.94 ns
RESIDUAL	3	73.226279333336	24.408759777779	
TOTAL	5	314.380056833339		

R = .77ns

R (ADJUSTED FOR DF)= .61ns

REGRESSION EQUATION:

$$Y = 106.527 - 7.0 (\text{LEAF CUTTI}) - 6.5 (\text{PLANT RATE})$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	-7.03700000	4.03391950	-1.74ns
PLANT RATE	-6.45900000	2.47026111	-2.61ns

4.6 ผลการทดลอง

DEPENDENT VARIABLE: total stem dimension (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	2	131.220015000000	65.610007500000	2.66 ns
RESIDUAL	3	73.860774999999	24.620258333333	
TOTAL	5	205.080789999998		

R = .64ns

R (ADJUSTED FOR DF)= .40ns

REGRESSION EQUATION:

$$Y = 26.701 + 1.1 (\text{LEAF CUTTI}) + 5.7 (\text{PLANT RATE})$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	1.11800000	4.05135848	0.28ns
PLANT RATE	5.68650000	2.48094026	2.29ns

4.7 จำนวนต้นตอก

DEPENDENT VARIABLE: no.of stem/group (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	2	310.117025500000	155.058512750000	9.07 ns
RESIDUAL	3	51.314193333334	17.104731111111	
TOTAL	5	361.431218833333		

R = .86ns

R (ADJUSTED FOR DF)= .76ns

REGRESSION EQUATION:

$$Y = 7.984 + 4.2 (\text{LEAF CUTTI}) + 8.4 (\text{PLANT RATE})$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	4.21100000	3.37685565	1.25ns
PLANT RATE	8.41900000	2.06789332	4.07*

*** END OF REGRESSION ANALYSIS RUN ***

5. ลักษณะการเจริญเติบโตตามแนวโน้มของอายุแฝก

5.1 ความสูง

DEPENDENT VARIABLE: LEAF AREA (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

VETIVER AGE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	3	6661.54539036671	2220.51513012224	22.01 **
RESIDUAL	20	2017.60634746669	100.88031737333	
TOTAL	23	8679.15173783340		

R = .77**

R (ADJUSTED FOR DF)= .73**

REGRESSION EQUATION:

$$Y = 65.199 + 3.5 (\text{LEAF CUTTI}) - 0.1 (\text{PLANT RATE}) + 14.8 (\text{VETIVER AG})$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	3.46733333	4.10041293	0.85ns
PLANT RATE	-0.10375000	2.51097986	-0.04ns
VETIVER AG	14.8203000	1.83376041	8.08**

5.2 ขนาดลำต้น

DEPENDENT VARIABLE: STEM DIMENSION (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

VETIVER AGE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	3	2.8733704458333	0.9577901486111	14.89 **
RESIDUAL	20	1.2864045125000	0.0643202256250	
TOTAL	23	4.1597749583333		

R = .69**

R (ADJUSTED FOR DF)= .64**

REGRESSION EQUATION:

$$Y = 4.198 - 0.01 (\text{LEAF CUTTI}) + 0.1 (\text{PLANT RATE}) - 0.3 (\text{VETIVER AG})$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	-0.01425000	.103537614	-0.14ns
PLANT RATE	0.06293750	.063403581	0.99ns
VETIVER AG	-0.30598333	.046303429	-6.61**

5.3 ความกว้างใบ

DEPENDENT VARIABLE: LEAF WIDE (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

VETIVER AGE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	3	0.0827025125000	0.0275675041667	5.44 **
RESIDUAL	20	0.1013984458333	0.0050699222917	
TOTAL	23	0.1841009583333		

R = .45**

R (ADJUSTED FOR DF)= .37**

REGRESSION EQUATION:

$$Y = 0.947 - 0.01 (\text{LEAF CUTTI}) + 0.01 (\text{PLANT RATE}) + 0.1 (\text{VETIVER AG})$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	-0.00908333	.029068661	-0.31ns
PLANT RATE	0.00506250	.017800847	0.28ns
VETIVER AG	0.05221667	.012999900	4.02**

5.4 ความยาวใบ

DEPENDENT VARIABLE: LEAF LONG (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

VETIVER AGE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	3	967.79332005000	322.59777335000	7.45 **
RESIDUAL	20	865.84640995000	43.29232049750	
TOTAL	23	1833.63973000000		

R = .53**

R (ADJUSTED FOR DF)= .46**

REGRESSION EQUATION:

$$Y = 55.867 + 2.6 (\text{LEAF CUTTI}) - 3.8 (\text{PLANT RATE}) + 4.8 (\text{VETIVER AG})$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	2.57150000	2.68614719	0.96ns
PLANT RATE	-3.76762500	1.64492250	-2.29*
VETIVER AG	4.83390000	1.20128154	4.02**

5.5 พื้นที่ใบ

DEPENDENT VARIABLE: LEAF AREA (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

VETIVER AGE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	3	2306.91096711667	768.97032237222	17.72 **
RESIDUAL	20	867.76968884169	43.38848444208	
TOTAL	23	3174.68065595836		

R = .73**

R (ADJUSTED FOR DF)= .69**

REGRESSION EQUATION:

$$Y = 53.768 + 1.6 (\text{LEAF CUTTI}) - 3.8 (\text{PLANT RATE}) + 8.3 (\text{VETIVER AG})$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	1.56591667	2.68912887	0.58ns
PLANT RATE	-3.85000000	1.64674840	-2.34*
VETIVER AG	8.27655000	1.20261499	6.88**

5.6 ขนาดของ

DEPENDENT VARIABLE: TOTAL STEM DIMENSION (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

VETIVER AGE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	3	2986.15318092916	995.38439364305	66.90 **
RESIDUAL	20	297.58884240417	14.87944212021	
TOTAL	23	3283.74202333333		

R = .91**

R (ADJUSTED FOR DF)= .90**

REGRESSION EQUATION:

Y= -6.327 - 0.2 (LEAF CUTTI) + 2.2 (PLANT RATE) + 9.8 (VETIVER AG)

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	-0.16683333	1.57477205	-0.11ns
PLANT RATE	2.23906250	.964346998	2.32*
VETIVER AG	9.84170000	.704259472	13.97**

5.7 จำนวนต้นตอก

DEPENDENT VARIABLE: NO.OF STEM/GROUP (Y)

INDEPENDENT VARIABLE: LEAF CUTTING

PLANT RATE

VETIVER AGE

ANALYSIS OF VARIANCE

SV	DF	SS	MS	F
REGRESSION	3	2218.82529451250	739.60843150417	41.74 **
RESIDUAL	20	354.35266544583	17.71763327229	
TOTAL	23	2573.17795995834		

R = .86**

R (ADJUSTED FOR DF)= .84**

REGRESSION EQUATION:

$$Y = -10.918 + 1.0 (\text{LEAF CUTTI}) + 2.9 (\text{PLANT RATE}) + 8.3 (\text{VETIVER AG})$$

	COEFFICIENT	STANDARD ERROR	T-TEST
LEAF CUTTI	0.98058333	1.71841173	0.57ns
PLANT RATE	2.91093750	1.05230798	2.77*
VETIVER AG	8.32161667	.768497089	10.83**

*** END OF REGRESSION ANALYSIS RUN ***

ลักษณะการเจริญเติบโตของแฝกหอมฯ เมื่ออายุหกเดือน

	ต้นสูง	ขนาด ต้น	ใบ กว้าง	ใบ ยาว	ขนาด กอ	ต้น ต่อกอ	พ.ท. ใบ
T1R1	70.63	4.30	1.20	62.20	11.00	7.50	74.60
T1R2	88.28	4.14	1.02	57.60	11.00	7.60	58.75
T1R3	72.90	4.30	0.90	56.20	7.50	5.00	50.58
T2R1	71.30	4.08	0.88	57.50	6.00	3.80	50.60
T2R2	72.90	3.96	1.00	61.10	6.00	5.80	61.10
T2R3	68.80	3.46	0.88	53.20	14.00	9.60	46.82
T3R1	70.26	4.26	1.02	50.10	10.00	7.00	51.10
T3R2	85.80	3.88	0.96	54.00	8.17	5.60	51.84
T3R3	65.20	3.80	0.85	56.30	15.18	10.40	47.86
T4R1	85.50	3.93	1.03	70.00	8.76	6.00	72.10
T4R2	87.70	3.92	1.08	54.28	8.00	5.20	58.62
T4R3	68.60	3.98	0.84	55.90	8.10	5.20	46.96
T5R1	72.44	4.16	0.94	55.00	9.00	5.40	51.70
T5R2	73.80	4.80	1.12	48.50	13.00	8.80	54.32
T5R3	76.10	3.15	0.82	49.80	12.00	8.00	40.84
T6R1	70.52	3.96	0.98	51.66	9.00	6.20	50.63
T6R2	82.38	4.64	1.08	54.10	11.00	7.40	58.43
T6R3	84.00	3.82	0.90	68.00	10.00	6.60	61.20

ลักษณะการเจริญเติบโตของแฝกหอมฯ เมื่ออายุเก้าเดือน

	ต้นสูง	ขนาดต้น	ใบ-กว้าง	ใบ-ยาว	ขนาดกอ	ต้น/กอ	พ.ท. ใบ
T1R1	128.30	3.82	1.20	73.30	15.80	10.60	87.96
T1R2	105.00	3.48	1.00	65.20	12.10	7.60	65.20
T1R3	80.40	3.30	0.84	62.50	20.20	13.00	52.50
T2R1	96.30	3.50	1.00	63.52	11.80	8.20	63.52
T2R2	113.50	3.54	1.08	58.10	10.40	6.80	62.75
T2R3	111.20	3.88	1.00	88.30	21.34	13.40	88.30
T3R1	116.70	4.02	1.04	63.40	15.50	10.80	65.94
T3R2	117.40	3.34	1.12	65.60	15.00	9.60	73.47
T3R3	103.50	3.08	0.90	62.20	15.70	9.40	55.98
T4R1	131.80	4.11	1.32	71.20	13.40	9.20	93.98
T4R2	118.50	3.56	1.12	71.00	12.80	8.40	79.52
T4R3	106.90	3.98	0.90	80.10	24.20	17.40	72.09
T5R1	114.10	4.10	1.16	60.10	15.60	10.60	69.72
T5R2	117.50	3.48	1.06	56.00	10.80	5.60	60.31
T5R3	118.20	3.52	0.96	65.72	19.80	13.40	63.09
T6R1	107.30	4.08	0.96	58.70	14.50	9.80	56.35
T6R2	99.20	4.26	1.24	62.74	15.60	10.60	77.80
T6R3	108.50	3.66	1.00	73.40	19.98	13.40	73.40

ลักษณะการเจริญเติบโตของแผงหอมฯ เมื่ออายุ 11 เดือน

	ต้นสูง	ขนาด ต้น	ใบ- กว้าง	ใบ-ยาว	ขนาด กอ	ต้น/ กอ	พ.ท.ใบ
T1R1	120.00	3.50	1.50	68.00	26.50	19.40	102.00
T1R2	115.00	3.00	1.20	53.00	14.60	9.40	63.60
T1R3	108.50	3.50	1.00	57.00	21.50	18.00	57.00
T2R1	136.00	2.50	1.10	67.00	27.30	24.00	73.70
T2R2	120.00	3.50	1.10	53.00	20.30	11.40	58.30
T2R3	115.00	3.50	1.00	82.00	20.70	18.80	82.00
T3R1	128.00	3.00	1.30	49.00	28.40	24.20	63.70
T3R2	99.00	2.60	1.20	53.00	21.90	15.00	63.60
T3R3	120.00	2.50	1.10	67.00	27.00	27.60	73.70
T4R1	135.00	4.00	1.30	67.00	28.90	26.50	87.10
T4R2	135.00	3.50	1.20	47.00	22.60	14.60	56.40
T4R3	110.00	3.50	1.20	63.00	25.90	25.80	75.60
T5R1	118.00	3.00	1.20	56.00	35.00	33.00	67.20
T5R2	120.00	4.00	1.00	43.00	24.60	14.40	43.00
T5R3	96.00	4.00	1.00	71.00	23.60	22.60	71.00
T6R1	112.00	3.50	1.40	45.00	26.10	20.20	63.00
T6R2	105.00	2.50	1.20	65.00	25.40	19.00	78.00
T6R3	116.00	3.00	1.00	52.00	22.30	23.60	52.00

ลักษณะการเจริญเติบโตของแฝกหอมฯ เมื่ออายุ 13 เดือน

	ต้นสูง	ขนาด ต้น	ใบ กว้าง	ใบ ยาว	ขนาด กอ	ต้น/กอ	พ.ท.ใบ
T1R1	119.00	3.10	1.10	83.00	29.00	17.00	91.00
T1R3	124.00	3.50	1.20	84.00	28.00	14.00	100.80
T1R3	122.00	2.90	1.17	68.00	31.83	17.30	79.56
T2R1	117.00	3.03	1.00	74.67	33.50	31.67	74.67
T2R2	129.00	2.67	1.10	69.17	36.33	17.00	76.09
T2R3	124.00	3.50	1.10	112.50	32.67	32.00	123.00
T3R1	114.00	3.33	1.06	77.67	39.83	33.33	82.33
T3R2	131.00	3.00	1.10	73.50	44.50	20.00	80.85
T3R3	121.00	3.30	1.03	88.17	53.17	44.67	90.82
T4R1	140.60	3.20	1.12	61.00	45.96	40.20	68.32
T4R2	150.00	3.00	1.10	76.00	39.33	18.00	83.60
T4R3	97.00	3.00	1.06	72.00	41.83	45.33	76.32
T5R1	122.50	3.16	1.20	66.17	36.83	30.33	79.40
T5R2	120.16	2.90	1.06	66.00	38.70	32.67	69.96
T5R3	113.67	4.40	1.30	80.33	50.87	52.00	104.43
T6R1	142.50	2.53	1.23	57.33	41.67	33.67	70.52
T6R2	130.83	3.03	1.03	65.83	53.83	39.00	67.80
T6R3	113.33	3.33	0.97	77.83	37.67	42.33	75.50