

Lampiran 1. Uji variansi parameter seedling *A mangium* yang ditanam di tanah pasir dan tanah buangan sampah.

jumlah pinula/pina

F-Test Two-Sample for Variances

	Variable 1	Variable 2
Mean	10	11
Variance	0.428571	0.571429
Observations	15	15
df	14	14
F	0.75	
P(F<=f) one-tail	0.298821	
F Critical one-tail	0.402621	

t-Test: Two-Sample Assuming Unequal Variances

	Variable 1	Variable 2
Mean	10	11
Variance	0.428571	0.571429
Observations	15	15
Hypothesized Mean Difference	0	
df	27	
t Stat	-3.87298	
P(T<=t) one-tail	0.000309	
t Critical one-tail	1.703288	
P(T<=t) two-tail	0.000619	
t Critical two-tail	2.05183	

Karena nilai t stat = 3.87 > t table = 2.05 maka kita menolak Ho yang berarti terdapat beda nyata antara jumlah pinula / pina

panjang pinula

F-Test Two-Sample for Variances

	Variable 1	Variable 2
Mean	3	9
Variance	0.428571	1.142857

Observations	15	15
df	14	14
F	0.375	
P(F<=f) one-tail	0.038459	
F Critical one-tail	0.402621	

t-Test: Two-Sample Assuming Equal Variances

	Variable 1	Variable 2
Mean	3	9
Variance	0.428571	1.142857
Observations	15	15
Pooled Variance	0.785714	
Hypothesized Mean Difference	0	
df	28	
t Stat	-18.5374	
P(T<=t) one-tail	1.47E-17	
t Critical one-tail	1.701131	
P(T<=t) two-tail	2.94E-17	
t Critical two-tail	2.048407	

Karena nilai t stat = 18.5374 > t table = 2.048 maka kita menolak Ho yang berarti terdapat beda nyata antara jumlah panjang pinula

lebar pinula

F-Test Two-Sample for Variances

	Variable 1	Variable 2
Mean	2	2
Variance	0.428571	0.428571
Observations	15	15
df	14	14
F	1	
P(F<=f) one-tail	0.5	
F Critical one-tail	0.402621	

t-Test: Two-Sample Assuming Unequal Variances

	Variable 1	Variable 2
Mean	2	2
Variance	0.428571	0.428571
Observations	15	15
Hypothesized Mean Difference	0	
df	28	
t Stat	0	
P(T<=t) one-tail	0.5	
t Critical one-tail	1.701131	
P(T<=t) two-tail	1	
t Critical two-tail	2.048407	

Karena nilai $t \text{ stat} = 0 < t \text{ table} = 2.048$ maka kita menerima H_0 yang berarti tidak terdapat beda nyata antara jumlah lebar pinula

panjang/lebar pinula

F-Test Two-Sample for Variances

	Variable 1	Variable 2
Mean	1.7	5.133333
Variance	0.707143	5.163492
Observations	15	15
df	14	14
F	0.136951	
P(F<=f) one-tail	0.000325	
F Critical one-tail	0.402621	

t-Test: Two-Sample Assuming Equal Variances

	Variable 1	Variable 2
Mean	1.7	5.133333
Variance	0.707143	5.163492
Observations	15	15
Pooled Variance	2.935317	

Hypothesized Mean Difference	0
df	28
t Stat	-5.48806
P(T<=t) one-tail	3.66E-06
t Critical one-tail	1.701131
P(T<=t) two-tail	7.32E-06
t Critical two-tail	2.048407

Karena nilai t stat = 5.48 > t table = 2.048 maka kita menolak H_0 yang berarti terdapat beda nyata antara panjang / lebar pinula

Ujung pinula

F-Test Two-Sample for Variances

	Variable 1	Variable 2
Mean	1.733333	1
Variance	0.209524	0
Observations	15	15
Df	14	14
F	65535	
P(F<=f) one-tail	#NUM!	
F Critical one-tail	2.483726	

t-Test: Two-Sample Assuming Unequal Variances

	Variable 1	Variable 2
Mean	1.733333	1
Variance	0.209524	0
Observations	15	15
Hypothesized Mean Difference	0	
Df	14	
t Stat	6.204837	
P(T<=t) one-tail	1.15E-05	
t Critical one-tail	1.76131	
P(T<=t) two-tail	2.3E-05	
t Critical two-tail	2.144787	

Karena nilai $t \text{ stat} = 6.204 > t \text{ table} = 2.144$ maka kita menolak H_0 yang berarti terdapat beda nyata ujung pinula

sudut antara dua pina

F-Test Two-Sample for Variances

	Variable 1	Variable 2
Mean	1.8	1
Variance	0.171429	0
Observations	15	15
df	14	14
F	65535	
P(F<=f) one-tail	#NUM!	
F Critical one-tail	2.483726	

t-Test: Two-Sample Assuming Unequal Variances

	Variable 1	Variable 2
Mean	1.8	1
Variance	0.171429	0
Observations	15	15
Hypothesized Mean Difference	0	
df	14	
t Stat	7.483315	
P(T<=t) one-tail	1.48E-06	
t Critical one-tail	1.76131	
P(T<=t) two-tail	2.95E-06	
t Critical two-tail	2.144787	

Karena nilai $t \text{ stat} = 7.4833 > t \text{ table} = 2.144$ maka kita menolak H_0 yang berarti terdapat beda nyata antara sudut antara pina

munculnya filodium penuh

F-Test Two-Sample for Variances

	Variable 1	Variable 2
Mean	10	12

Variance	0.571429	0.571429
Observations	15	15
df	14	14
F	1	
P(F<=f) one-tail	0.5	
F Critical one-tail	0.402621	

t-Test: Two-Sample Assuming Unequal Variances

	Variable 1	Variable 2
Mean	10	12
Variance	0.571429	0.571429
Observations	15	15
Hypothesized Mean Difference	0	
df	28	
t Stat	-7.24569	
P(T<=t) one-tail	3.45E-08	
t Critical one-tail	1.701131	
P(T<=t) two-tail	6.9E-08	
t Critical two-tail	2.048407	

Karena nilai t stat = 7.2456 > t table = 2.048 maka kita menolak Ho yang berarti terdapat beda nyata antara munculnya filodium

F-Test Two-Sample for Variances

	Variable 1	Variable 2
Mean	60.43333	66
Variance	0.888095	3
Observations	15	15
df	14	14
F	0.296032	
P(F<=f) one-tail	0.014838	
F Critical one-tail	0.402621	

t-Test: Two-Sample Assuming Equal Variances

	Variable 1	Variable 2
Mean	60.43333	66
Variance	0.888095	3
Observations	15	15
Pooled Variance	1.944048	
Hypothesized Mean Difference	0	
Df	28	
t Stat	-10.9338	
P(T<=t) one-tail	6.47E-12	
t Critical one-tail	1.701131	
P(T<=t) two-tail	1.29E-11	
t Critical two-tail	2.048407	

Karena nilai $t \text{ stat} = 10.93 > t \text{ table} = 2.048$ maka kita menolak H_0 yang berarti terdapat beda nyata antara panjang filodium

lebar filodium

F-Test Two-Sample for Variances

	Variable 1	Variable 2
Mean	13	18
Variance	0.857143	1
Observations	15	15
Df	14	14
F	0.857143	
P(F<=f) one-tail	0.38853	
F Critical one-tail	0.402621	

t-Test: Two-Sample Assuming Unequal Variances

	Variable 1	Variable 2
Mean	13	18
Variance	0.857143	1
Observations	15	15
Hypothesized Mean Difference	0	

Df	28
t Stat	-14.21

P(T<=t) one-tail	1.25E-14
t Critical one-tail	1.701131
P(T<=t) two-tail	2.5E-14
t Critical two-tail	2.048407

Karena nilai t stat = 14.21 > t table = 2.048 maka kita menolak Ho yang berarti terdapat beda nyata antara lebar filodium

panjang / lebar filodium

F-Test Two-Sample for Variances

	Variable 1	Variable 2
Mean	4.671935	3.676882
Variance	0.127592	0.048549
Observations	15	15
Df	14	14
F	2.628129	
P(F<=f) one-tail	0.040621	
F Critical one-tail	2.483726	

t-Test: Two-Sample Assuming Unequal Variances

	Variable 1	Variable 2
Mean	4.671935	3.676882
Variance	0.127592	0.048549
Observations	15	15
Hypothesized Mean Difference	0	
Df	23	
t Stat	9.182524	
P(T<=t) one-tail	1.86E-09	
t Critical one-tail	1.713872	
P(T<=t) two-tail	3.73E-09	
t Critical two-tail	2.068658	

Karena nilai t stat = 9.182 > t table = 2.068 maka kita menolak Ho yang berarti terdapat beda nyata antara lebar filodium