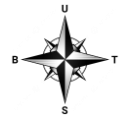


LAMPIRAN



Lampiran 1. *Layout Pengambilan Sampel*

A	A	A	A	B	B	B	B	C	C	C	C
A	A	A	A	B	B	B	B	C	C	C	C
U12				U11		U1		U8			
A	A	A	A	B	B	B	B	C	C	C	C
A	A	A	A	B	B	B	B	C	C	C	C
U9		U11		U4						U16	
A	A	A	A	B	B	B	B	C	C	C	C
A	A	A	A	B	B	B	B	C	C	C	C
U8						U14		U11		U2	
A	A	A	A	B	B	B	B	C	C	C	C
A	A	A	A	B	B	B	B	C	C	C	C
		U6		U2		U12				U9	
A	A	A	A	B	B	B	B	C	C	C	C
A	A	A	A	B	B	B	B	C	C	C	C
U7								U12			
A	A	A	A	B	B	B	B	C	C	C	C
A	A	A	A	B	B	B	B	C	C	C	C
				U13				U3			
A	A	A	A	B	B	B	B	C	C	C	C
A	A	A	A	B	B	B	B	C	C	C	C
U13						U10				U10	
A	A	A	A		B	B	B	C	C	C	C
A	A	A	A	B	B	B	B	C	C	C	C
		U5		U15				U1			
A	A	A	A	B	B	B	B	C	C	C	C
A	A	A	A	B	B	B	B	C	C	C	C
				U3		U5				U15	
A	A	A	A	B	B	B	B	C	C	C	C
A	A	A	A	B	B	B	B	C	C	C	C
U10		U15				U9		U7			
A	A	A	A	B	B	B	B	C	C	C	C
A	A	A	A	B	B	B	B	C	C	C	C
U1				U6						U14	
A	A	A	A	B	B	B	B	C	C	C	C
A	A	A	A	B	B	B	B	C	C	C	C
U4		U3				U8		U4			
A	A	A	A	B	B	B	B	C	C	C	C
A	A	A	A	B	B	B	B	C	C	C	C
										U6	
A	A	A	A	B	B	B	B	C	C	C	C
A	A	A	A	B	B	B	B	C	C	C	C
U16		U14				U16					
A	A	A	A	B	B	B	B	C	C	C	C
A	A	A	A	B	B	B	B	C	C	C	C
U2						U7		U13		U5	

Keterangan :

A = Kirani, B = *Dalmation*, C = *Honeydew*

U1,U2,U3,...,U16 = Ulangan 1, Ulangan 2, Ulangan 3,..., Ulangan 16

Lampiran 2. Deskripsi Varietas Melon

Deskripsi Varietas Melon Kirani

Golongan Varietas	: Hibrida (F1)
Umur Panen	: 58–60 HST
Bentuk Buah	: Oval
Bobot Buah	: 1,78–2,09 kg per buah
Warna Kulit Buah	: Krem
Tipe Kulit Buah	: Tidak berjaring
Warna Daging Buah	: Kuning-oranye
Tekstur Daging Buah	: Renyah
Rasa Daging Buah	: Manis
Kadar Gula	: 14,75–17,20 °Brix
Ketahanan Penyakit	: Sangat baik

Lampiran 2. (Lanjutan)

Deskripsi Varietas Melon *Dalmation*:

Golongan Varietas	: Hibrida (F1)
Umur Panen	: $\pm$ 55 HST
Bentuk Buah	: Bulat hingga bulat oval
Bobot Buah	: 1,5–2,0 kg per buah
Warna Kulit Buah	: Putih dengan bercak/totol hijau
Tipe Kulit Buah	: Tidak berjaring (non-net)
Warna Daging Buah	: Putih
Tekstur Daging Buah	: Renyah dan berair
Rasa Daging Buah	: Manis
Kadar Gula	: 15–17°Brix
Ketahanan Penyakit	: Sangat baik

Lampiran 2. (Lanjutan)

Deskripsi Varietas Melon *Honeydew*:

Golongan Varietas	: Hibrida (F1)
Umur Panen	: 35–38 HST
Bentuk Buah	: Bulat hingga oval
Ukuran Buah	: 2–2,2 kg per buah
Warna Kulit Buah	: Putih kekuningan
Tipe Kulit Buah	: Tidak berjaring dan permukaan halus
Warna Daging Buah	: Hijau muda hingga hijau terang
Tekstur Daging Buah	: Berair
Rasa Daging Buah	: Manis
Kadar Gula	: 17 °Brix
Ketahanan Penyakit	: Sangat baik

Lampiran 3. Warna Kulit Buah



Kirani (144B)



Dalmation (144B)



Honeydew (144B)

Lampiran 4. Warna Daging Buah



Kirani (145C)



Dalmation (145C)



Honeydew (145C)

Lampiran 5. Bentuk Daun



Kirani (*Pentalobate*)



Dalmation (*Entire*)



Honeydew (*Entire*)

Lampiran 6. Panjang Buah

Tabel Panjang Buah Varietas Kirani dan *Dalmation*

Varietas	Ulangan																total	rata-rata
	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16		
Kirani	6,90	6,85	6,55	6,50	6,63	6,63	6,40	6,25	6,60	6,53	7,22	6,73	6,93	6,65	6,90	6,43	106,67	6,67
<i>Dalmation</i>	6,95	6,65	6,70	6,65	6,98	7,40	7,48	7,45	7,38	7,30	7,18	6,98	6,88	6,28	6,15	6,83	111,20	6,95
Total	13,85	13,50	13,25	13,15	13,60	14,03	13,88	13,70	13,98	13,83	14,40	13,70	13,80	12,93	13,05	13,25	217,87	6,80
Rata-rata	6,93	6,75	6,63	6,58	6,80	7,01	6,94	6,85	6,99	6,91	7,20	6,85	6,90	6,46	6,53	6,63		

Setiap ulangan terdiri dari 4 buah

Lampiran 6. (Lanjutan)

Perhitungan

- a. Derajat bebas (db)

$$\text{db ulangan} = n - 1 = 16 - 1 = 15$$

$$\text{db total} = 32 - 2 = 30$$

- b. Rata-Rata (Mean)

$$\bar{x}_A = \frac{\sum x_1}{n} = \frac{6,90+6,85+6,55+6,50+\dots}{16} = 6,67$$

$$\bar{x}_B = \frac{\sum x_2}{n} = \frac{6,95+6,65+6,70+6,65+\dots}{16} = 6,95$$

- c. Jumlah Kuadrat Selisih (
- Sum of Square*
-)

$$SS_A = \sum (x_1 - \bar{x}_A)^2 = (6,90 - 6,67)^2 + (6,85 - 6,67)^2 + \dots = 0,89$$

$$SS_B = \sum (x_2 - \bar{x}_B)^2 = (6,95 - 6,95)^2 + (6,65 - 6,95)^2 + \dots = 2,44$$

- d. Ragam atau Varians (
- S^2
-)

$$S^2 A = \frac{SSA}{(n-1)} = \frac{0,89}{16-1} = 0,06$$

$$S^2 B = \frac{SSB}{(n-1)} = \frac{2,44}{16-1} = 0,16$$

- e. Standar Error (SE)

$$SE = \sqrt{\frac{S^2 A}{n} + \frac{S^2 B}{n}} = \sqrt{\frac{0,06}{16} + \frac{0,16}{16}} = 0,12$$

- f. Simpangan Baku (SD)

$$SD_A = \sqrt{\frac{\sum (x_1 - \bar{x}_A)^2}{n-1}} = \sqrt{\frac{0,89}{16-1}} = 0,24$$

$$SD_B = \sqrt{\frac{\sum (x_2 - \bar{x}_B)^2}{n-1}} = \sqrt{\frac{2,44}{16-1}} = 0,40$$

- g. Koefisien Keragaman (KK)

$$KK_A = \frac{SDA}{\bar{x}_A} \times 100\% = \frac{0,24}{6,67} \times 100\% = 3,65\%$$

$$KK_B = \frac{SDB}{\bar{x}_B} \times 100\% = \frac{0,40}{6,95} \times 100\% = 5,08\%$$

- h. Uji Normalitas (Shapiro-Wilk)

$$W_A = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,968$$

$$P\text{-value}_A = 0,803 \quad (P\text{-value} > 0,05 = \text{normal})$$

$$W_B = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,940$$

$$P\text{-value}_B = 0,354 \quad (P\text{-value} > 0,05 = \text{normal})$$

- i. Uji Homogenitas Varians

$$F\text{-hitung} = \frac{s^2_{\text{Terbesar}}}{s^2_{\text{Terkecil}}} = \frac{0,16}{0,06} = 2,75$$

$$F\text{-tabel taraf } 5\% \text{ dua arah } (0,025; 15; 15) = 2,86209253$$

$$(F\text{-hitung} < F\text{-tabel} = \text{homogen})$$

j. Selisih Varietas ($|A-B|$)
 $|A-B| = \bar{x}A - \bar{x}B = (6,67-6,95) = 0,28$

k. T Hitung
 $T\text{-hitung} = \frac{(|A-B|)}{SE} = \frac{0,28}{0,12} = 2,407$

l. T-tabel (Student's t-test)
 T-tabel taraf 5% dua arah (0,025; 30) = 2,042

m. TABEL UJI T

Tabel Uji T Panjang Buah Kirani dan *Dalmation* (cm)

Perlakuan		Panjang		$ A-B $	SE	T-hitung	T-tabel	Not
A	B	A	B					
Kirani	<i>Dalmation</i>	6,67	6,95	0,28	0,12	2,407	2,042	*

(*) berbeda nyata pada taraf 5% ; (ns) tidak berbeda nyata.

Lampiran 6. Panjang Buah

Tabel Panjang Buah Varietas Kirani dan *Honeydew*

Varietas	Ulangan																total	rata-rata
	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16		
Kirani	6,90	6,85	6,55	6,50	6,63	6,63	6,40	6,25	6,60	6,53	7,22	6,73	6,93	6,65	6,90	6,43	106,67	6,67
<i>Honeydew</i>	7,03	6,90	7,13	7,08	7,00	6,90	7,05	6,90	6,90	6,90	6,78	6,60	6,93	6,90	6,68	6,73	110,38	6,90
Total	13,93	13,75	13,68	13,58	13,63	13,53	13,45	13,15	13,50	13,43	14,00	13,33	13,85	13,55	13,58	13,15	217,05	6,78
Rata-rata	6,96	6,88	6,84	6,79	6,81	6,76	6,73	6,58	6,75	6,71	7,00	6,66	6,93	6,78	6,79	6,58		

Setiap ulangan terdiri dari 4 buah

Lampiran 6. (Lanjutan)

Perhitungan

- a. Derajat bebas (db)

$$\text{db ulangan} = n - 1 = 16 - 1 = 15$$

$$\text{db total} = 32 - 2 = 30$$

- b. Rata-Rata (Mean)

$$\bar{x}_A = \frac{\sum x_1}{n} = \frac{6,90+6,85+6,55+6,50+\dots}{16} = 6,67$$

$$\bar{x}_C = \frac{\sum x_2}{n} = \frac{7,03+6,90+7,13+7,08+\dots}{16} = 6,90$$

- c. Jumlah Kuadrat Selisih (
- Sum of Square*
-)

$$SS_A = \sum (x_1 - \bar{x}_A)^2 = (6,90 - 6,67)^2 + (6,85 - 6,67)^2 + \dots = 0,89$$

$$SS_C = \sum (x_2 - \bar{x}_C)^2 = (7,03 - 6,90)^2 + (6,90 - 6,90)^2 + \dots = 0,32$$

- d. Ragam atau Varians (
- S^2
-)

$$S^2_A = \frac{SS_A}{(n-1)} = \frac{0,89}{16-1} = 0,06$$

$$S^2_C = \frac{SS_C}{(n-1)} = \frac{0,32}{16-1} = 0,02$$

- e. Standar Error (SE)

$$SE = \sqrt{\frac{S^2_A}{n} + \frac{S^2_C}{n}} = \sqrt{\frac{0,06}{16} + \frac{0,021}{16}} = 0,070$$

- f. Simpangan Baku (SD)

$$SD_A = \sqrt{\frac{\sum (x_1 - \bar{x}_A)^2}{n-1}} = \sqrt{\frac{0,89}{16-1}} = 0,24$$

$$SD_C = \sqrt{\frac{\sum (x_1 - \bar{x}_C)^2}{n-1}} = \sqrt{\frac{0,32}{16-1}} = 0,14$$

- g. Koefisien Keragaman (KK)

$$KK_A = \frac{SD_A}{\bar{x}_A} \times 100\% = \frac{0,24}{6,67} \times 100\% = 3,65\%$$

$$KK_C = \frac{SD_C}{\bar{x}_C} \times 100\% = \frac{0,14}{6,90} \times 100\% = 2,10\%$$

- h. Uji Normalitas (Shapiro-Wilk)

$$W_A = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,968$$

$$P\text{-value}_A = 0,803 \quad (P\text{-value} > 0,05 = \text{normal})$$

$$W_C = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,940$$

$$P\text{-value}_C = 0,351 \quad (P\text{-value} > 0,05 = \text{normal})$$

- i. Uji Homogenitas Varians

$$F\text{-hitung} = \frac{s^2_{\text{Terbesar}}}{s^2_{\text{Terkecil}}} = \frac{0,06}{0,02} = 2,81$$

$$F\text{-tabel taraf } 5\% \text{ dua arah } (0,025; 15; 15) = 2,86209253$$

$$(F\text{-hitung} < F\text{-tabel} = \text{homogen})$$

j. Selisih Varietas ($|A-C|$)
 $|A-C| = \bar{x}A - \bar{x}C = (|6,67-6,90|) = 0,23$

k. T Hitung

$$T\text{-hitung} = \frac{(|A-C|)}{SE} = \frac{0,23}{0,070} = 3,263$$

l. T-tabel (Student's t-test)
 T-tabel taraf 5% dua arah (0,025; 30) = 2,042

m. TABEL UJI T

Tabel Uji T Panjang Buah Kirani dan *Honeydew* (cm)

Perlakuan		Panjang		$ A-C $	SE	T-hitung	T-tabel	Not
A	C	A	C					
Kirani	<i>Honeydew</i>	6,67	6,90	0,23	0,07	3,263	2,042	*

(*) berbeda nyata pada taraf 5%; (ns) tidak berbeda nyata.

Lampiran 6. Panjang Buah

Tabel Panjang Buah Varietas *Dalmation* dan *Honeydew*

Varietas	Ulangan																total	rata-rata
	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16		
<i>Dalmation</i>	6,95	6,65	6,70	6,65	6,98	7,40	7,48	7,45	7,38	7,30	7,18	6,98	6,88	6,28	6,15	6,83	111,2	6,95
<i>Honeydew</i>	7,03	6,90	7,13	7,08	7,00	6,90	7,05	6,90	6,90	6,90	6,78	6,60	6,93	6,90	6,68	6,73	110,38	6,90
Total	13,98	13,55	13,83	13,73	13,98	14,30	14,53	14,35	14,28	14,20	13,95	13,58	13,80	13,18	12,83	13,55	221,58	6,92
Rata-rata	6,99	6,78	6,91	6,86	6,99	7,15	7,26	7,18	7,14	7,10	6,98	6,79	6,90	6,59	6,41	6,78		

Setiap ulangan terdiri dari 4 buah

Lampiran 6. (Lanjutan)

Perhitungan

- a. Derajat bebas (db)

$$\text{db ulangan} = n - 1 = 16 - 1 = 15$$

$$\text{db total} = 32 - 2 = 30$$

- b. Rata-Rata (Mean)

$$\bar{x}_B = \frac{\sum x_1}{n} = \frac{6,95+6,65+6,70+6,65+\dots}{16} = 6,95$$

$$\bar{x}_C = \frac{\sum x_2}{n} = \frac{7,03+6,90+7,13+7,08+\dots}{16} = 6,90$$

- c. Jumlah Kuadrat Selisih (
- Sum of Square*
-)

$$SS_B = \sum (x_1 - \bar{x}_B)^2 = (6,95 - 6,95)^2 + (6,65 - 6,95)^2 + \dots = 2,44$$

$$SS_C = \sum (x_2 - \bar{x}_C)^2 = (7,03 - 6,90)^2 + (6,90 - 6,90)^2 + \dots = 0,32$$

- d. Ragam atau Varians (
- S^2
-)

$$S^2_B = \frac{SS_B}{(n-1)} = \frac{2,44}{16-1} = 0,16$$

$$S^2_C = \frac{SS_C}{(n-1)} = \frac{0,32}{16-1} = 0,02$$

- e. Standar Error (SE)

$$SE = \sqrt{\frac{S^2_B}{n} + \frac{S^2_C}{n}} = \sqrt{\frac{0,162}{16} + \frac{0,021}{16}} = 0,10$$

- f. Simpangan Baku (SD)

$$SD_B = \sqrt{\frac{\sum (x_1 - \bar{x}_B)}{n-1}} = \sqrt{\frac{2,44}{16-1}} = 0,40$$

$$SD_C = \sqrt{\frac{\sum (x_1 - \bar{x}_C)}{n-1}} = \sqrt{\frac{0,32}{16-1}} = 0,14$$

- g. Koefisien Keragaman (KK)

$$KK_B = \frac{SDB}{\bar{x}_B} \times 100\% = \frac{0,40}{6,95} \times 100\% = 5,8\%$$

$$KK_C = \frac{SDC}{\bar{x}_C} \times 100\% = \frac{0,14}{6,90} \times 100\% = 2,10\%$$

- h. Uji Normalitas (Shapiro-Wilk)

$$W_B = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - \bar{x}))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,940$$

$$P\text{-value}_B = 0,354 \quad (P\text{-value} > 0,05 = \text{normal})$$

$$W_C = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - \bar{x}))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,940$$

$$P\text{-value}_C = 0,351 \quad (P\text{-value} > 0,05 = \text{normal})$$

- i. Uji Homogenitas Varians

$$F\text{-hitung} = \frac{s^2_{\text{Terbesar}}}{s^2_{\text{Terkecil}}} = \frac{0,16}{0,02} = 7,71$$

$$F\text{-tabel taraf } 5\% \text{ dua arah } (0,025; 15; 15) = 2,86209253$$

$$(F\text{-hitung} > F\text{-tabel} = \text{tidak homogen})$$

j. Selisih Varietas ($|B-C|$)
 $|B-C| = \bar{x}B - \bar{x}C = (16,95 - 6,90) = 0,05$

k. T Hitung
 $T\text{-hitung} = \frac{(|B-C|)}{SE} = \frac{0,05}{0,107} = 0,48$

l. T-tabel (Welch's t-test)

$$db = \frac{\left(\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}\right)^2}{\frac{\left(\frac{S_1^2}{n_1}\right)^2}{n_1-1} + \frac{\left(\frac{S_2^2}{n_2}\right)^2}{n_2-1}} = \frac{\left(\frac{0,16^2}{16} + \frac{0,02^2}{16}\right)^2}{\frac{\left(\frac{0,16^2}{16}\right)^2}{15} + \frac{\left(\frac{0,02^2}{16}\right)^2}{15}} = 18,679$$

T-tabel taraf 5% dua arah ($0,025; 19$) = 2,093

m. TABEL UJI T =

Tabel Uji T Panjang Buah *Dalmation* dan *Honeydew* (cm)

Perlakuan		Panjang		$ B-C $	SE	T-hitung	T-tabel	Not
B	C	B	C					
<i>Dalmation</i>	<i>Honeydew</i>	6,95	6,90	0,05	0,107	0,48	2,093	ns

(*) berbeda nyata pada taraf 5%; (ns) tidak berbeda nyata.

Lampiran 7. Lebar Buah

Tabel Lebar Buah Varietas Kirani dan *Dalmation*

Varietas	Ulangan																total	rata-rata
	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16		
Kirani	4,67	4,65	4,38	4,38	4,45	4,45	4,30	4,18	4,45	4,35	4,85	4,50	4,65	4,50	4,63	4,30	71,67	4,48
<i>Dalmation</i>	4,75	4,50	4,48	4,43	4,68	5,30	5,05	5,08	4,75	4,95	4,83	4,70	4,68	4,23	4,15	4,63	75,15	4,70
Total	9,42	9,15	8,85	8,80	9,13	9,75	9,35	9,25	9,20	9,30	9,68	9,20	9,33	8,73	8,78	8,93	146,82	4,58
Rata-rata	4,71	4,58	4,43	4,40	4,56	4,88	4,68	4,63	4,60	4,65	4,84	4,60	4,66	4,36	4,39	4,46		

Setiap ulangan terdiri dari 4 buah

Lampiran 7. (Lanjutan)

Perhitungan

- a. Derajat bebas (db)

$$\text{db ulangan} = n - 1 = 16 - 1 = 15$$

$$\text{db total} = 32 - 2 = 30$$

- b. Rata-Rata (Mean)

$$\bar{x}_A = \frac{\sum x_1}{n} = \frac{4,67+4,65+4,38+4,38+\dots}{16} = 4,48$$

$$\bar{x}_B = \frac{\sum x_2}{n} = \frac{4,75+4,50+4,48+4,43+\dots}{16} = 4,70$$

- c. Jumlah Kuadrat Selisih (
- Sum of Square*
-)

$$SS_A = \sum (x_1 - \bar{x}_A)^2 = (4,67 - 4,48)^2 + (4,65 - 4,48)^2 + \dots = 0,45$$

$$SS_B = \sum (x_2 - \bar{x}_B)^2 = (4,75 - 4,70)^2 + (4,50 - 4,70)^2 + \dots = 1,41$$

- d. Ragam atau Varians (
- S^2
-)

$$S^2_A = \frac{SS_A}{(n-1)} = \frac{0,45}{16-1} = 0,03$$

$$S^2_B = \frac{SS_B}{(n-1)} = \frac{1,41}{16-1} = 0,09$$

- e. Standar Error (SE)

$$SE = \sqrt{\frac{S^2_A}{n} + \frac{S^2_B}{n}} = \sqrt{\frac{0,03}{16} + \frac{0,09}{16}} = 0,08$$

- f. Simpangan Baku (SD)

$$SD_A = \sqrt{\frac{\sum (x_1 - \bar{x}_A)^2}{n-1}} = \sqrt{\frac{0,45}{16-1}} = 0,17$$

$$SD_B = \sqrt{\frac{\sum (x_2 - \bar{x}_B)^2}{n-1}} = \sqrt{\frac{1,41}{16-1}} = 0,30$$

- g. Koefisien Keragaman (KK)

$$KK_A = \frac{SD_A}{\bar{x}_A} \times 100\% = \frac{0,17}{4,48} \times 100\% = 3,87\%$$

$$KK_B = \frac{SD_B}{\bar{x}_B} \times 100\% = \frac{0,30}{4,70} \times 100\% = 6,52\%$$

- h. Uji Normalitas (Shapiro-Wilk)

$$W_A = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,966$$

$$P\text{-value}_A = 0,763 \quad (P\text{-value} > 0,05 = \text{normal})$$

$$W_B = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,981$$

$$P\text{-value}_B = 0,974 \quad (P\text{-value} > 0,05 = \text{normal})$$

- i. Uji Homogenitas Varians

$$F\text{-hitung} = \frac{s^2_{\text{Terbesar}}}{s^2_{\text{Terkecil}}} = \frac{0,09}{0,03} = 3,11$$

$$F\text{-tabel taraf } 5\% \text{ dua arah } (0,025; 15; 15) = 2,86209253$$

$$(F\text{-hitung} > F\text{-tabel} = \text{tidak homogen})$$

j. Selisih Varietas ($|A-B|$)
 $|A-B| = \bar{x}A - \bar{x}B = (4,48 - 4,70) = 0,22$

k. T Hitung
 $T\text{-hitung} = \frac{(|A-B|)}{SE} = \frac{0,22}{0,08} = 2,47$

l. T-tabel Welch's t-test (Normal dan tidak homogen)

$$db = \frac{\left(\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}\right)^2}{\frac{\left(\frac{S_1^2}{n_1}\right)^2}{n_1-1} + \frac{\left(\frac{S_2^2}{n_2}\right)^2}{n_2-1}} = \frac{\left(\frac{0,03^2}{16} + \frac{0,09^2}{16}\right)^2}{\frac{\left(\frac{0,03^2}{16}\right)^2}{15} + \frac{\left(\frac{0,09^2}{16}\right)^2}{15}} = 23,708$$

T-tabel taraf 5% dua arah ($0,025; 24$) = 2,06

m. TABEL UJI T (Student's t-test)

Tabel Uji T Lebar Buah Kirani dan *Dalmation* (cm)

Perlakuan		Lebar		$ A-B $	SE	T-hitung	T-tabel	Not
A	B	A	B					
Kirani	<i>Dalmation</i>	4,48	4,70	0,21	0,08	2,47	2,06	*

(*) berbeda nyata pada taraf 5%; (ns) tidak berbeda nyata.

Lampiran 7. Lebar Buah

Tabel Lebar Buah Varietas Kirani dan *Honeydew*

Varietas	Ulangan																total	rata-rata
	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16		
Kirani	4,67	4,65	4,38	4,38	4,45	4,45	4,30	4,18	4,45	4,35	4,85	4,50	4,65	4,50	4,63	4,30	71,67	4,48
<i>Honeydew</i>	4,73	4,65	4,83	4,78	4,78	4,68	4,80	4,65	4,68	4,70	4,56	4,48	4,68	3,98	3,80	3,88	72,61	4,54
Total	9,39	9,30	9,20	9,15	9,23	9,13	9,10	8,83	9,13	9,05	9,41	8,98	9,33	8,48	8,43	8,18	144,28	4,50875
Rata-rata	4,70	4,65	4,60	4,58	4,61	4,56	4,55	4,41	4,56	4,53	4,71	4,49	4,66	4,24	4,21	4,09		

Setiap ulangan terdiri dari 4 buah

Lampiran 7. (Lanjutan)

Perhitungan

- a. Derajat bebas (db)

$$\text{db ulangan} = n - 1 = 16 - 1 = 15$$

$$\text{db total} = 32 - 2 = 30$$

- b. Rata-Rata (Mean)

$$\bar{x}_A = \frac{\sum x_1}{n} = \frac{4,67+4,65+4,38+4,38+\dots}{16} = 4,48$$

$$\bar{x}_C = \frac{\sum x_2}{n} = \frac{4,73+4,65+4,83+4,78+\dots}{16} = 4,54$$

- c. Jumlah Kuadrat Selisih (
- Sum of Square*
-)

$$SS_A = \sum (x_1 - \bar{x}_A)^2 = (4,67 - 4,48)^2 + (4,65 - 4,48)^2 + \dots = 0,45$$

$$SS_C = \sum (x_2 - \bar{x}_C)^2 = (4,73 - 4,54)^2 + (4,65 - 4,54)^2 + \dots = 1,71$$

- d. Ragam atau Varians (
- S^2
-)

$$S^2_A = \frac{SS_A}{(n-1)} = \frac{0,45}{16-1} = 0,03$$

$$S^2_C = \frac{SS_C}{(n-1)} = \frac{1,71}{16-1} = 0,11$$

- e. Standar Error (SE)

$$SE = \sqrt{\frac{S^2_A}{n} + \frac{S^2_C}{n}} = \sqrt{\frac{0,03}{16} + \frac{0,11}{16}} = 0,09$$

- f. Simpangan Baku (SD)

$$SD_A = \sqrt{\frac{\sum (x_1 - \bar{x}_A)}{n-1}} = \sqrt{\frac{0,45}{16-1}} = 0,17$$

$$SD_C = \sqrt{\frac{\sum (x_1 - \bar{x}_C)}{n-1}} = \sqrt{\frac{1,71}{16-1}} = 0,33$$

- g. Koefisien Keragaman (KK)

$$KK_A = \frac{SD_A}{\bar{x}_A} \times 100\% = \frac{0,17}{4,48} \times 100\% = 3,87\%$$

$$KK_C = \frac{SD_C}{\bar{x}_C} \times 100\% = \frac{0,33}{4,59} \times 100\% = 7,44\%$$

- h. Uji Normalitas (Shapiro-Wilk)

$$W_A = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,966$$

$$P\text{-value}_A = 0,763 \text{ (P-value} > 0,05 = \text{normal)}$$

$$W_C = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,726$$

$$P\text{-value}_B = 0,00 \text{ (P-value} < 0,05 = \text{tidak normal)}$$

Tabel Transformasi $\sqrt[2]{}$ Lebar Buah Varietas Kirani dan *Honeydew*

Varietas	Ulangan																total	rata-rata
	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16		
Kirani	2,16	2,16	2,09	2,09	2,11	2,11	2,07	2,04	2,11	2,09	2,20	2,12	2,16	2,12	2,15	2,07	33,86	2,12
<i>Honeydew</i>	2,17	2,16	2,20	2,19	2,19	2,16	2,19	2,16	2,16	2,17	2,14	2,12	2,16	1,99	1,95	1,97	34,06	2,13
Total	4,33	4,31	4,29	4,28	4,29	4,27	4,26	4,20	4,27	4,25	4,34	4,24	4,32	4,12	4,10	4,04	67,92	2,12
Rata-rata	2,17	2,16	2,14	2,14	2,15	2,14	2,13	2,10	2,14	2,13	2,17	2,12	2,16	2,06	2,05	2,02		

Setiap ulangan terdiri dari 4 buah

Lampiran 7. (Lanjutan)

Perhitungan

- i. Derajat bebas (db)

$$\text{db ulangan} = n - 1 = 16 - 1 = 15$$

$$\text{db total} = 32 - 2 = 30$$

- j. Rata-Rata (Mean)

$$\bar{x}_A = \frac{\sum x_1}{n} = \frac{2,16+2,16+2,09+\dots}{16} = 2,12$$

$$\bar{x}_C = \frac{\sum x_2}{n} = \frac{2,17+2,16+2,20+2,19+\dots}{16} = 2,13$$

- k. Jumlah Kuadrat Selisih (
- Sum of Square*
-)

$$SS_A = \sum (x_1 - \bar{x}_A)^2 = (2,16 - 2,11)^2 + (2,16 - 2,11)^2 + \dots = 0,02$$

$$SS_C = \sum (x_2 - \bar{x}_C)^2 = (2,17 - 2,12)^2 + (2,16 - 2,12)^2 + \dots = 1,10$$

- l. Ragam atau Varians (
- S^2
-)

$$S^2_A = \frac{SS_A}{(n-1)} = \frac{0,02}{16-1} = 0,001$$

$$S^2_C = \frac{SS_C}{(n-1)} = \frac{0,01}{16-1} = 0,006$$

- m. Standar Error (SE)

$$SE = \sqrt{\frac{S^2_A}{n} + \frac{S^2_C}{n}} = \sqrt{\frac{0,001}{16} + \frac{0,006}{16}} = 0,02$$

- n. Simpangan Baku (SD)

$$SD_A = \sqrt{\frac{\sum (x_1 - \bar{x}_A)^2}{n-1}} = \sqrt{\frac{0,02}{16-1}} = 0,04$$

$$SD_C = \sqrt{\frac{\sum (x_1 - \bar{x}_C)^2}{n-1}} = \sqrt{\frac{0,10}{16-1}} = 0,08$$

- o. Koefisien Keragaman (KK)

$$KK_A = \frac{SD_A}{\bar{x}_A} \times 100\% = \frac{0,04}{2,12} \times 100\% = 1,93\%$$

$$KK_C = \frac{SD_C}{\bar{x}_C} \times 100\% = \frac{0,33}{2,13} \times 100\% = 3,82\%$$

- p. Uji Normalitas (Shapiro-Wilk)

$$W_A = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,966$$

$$P\text{-value}_A = 0,766 \text{ (P-value} > 0,05 = \text{normal)}$$

$$W_C = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,710$$

$$P\text{-value}_B = 0,00 \text{ (P-value} < 0,05 = \text{tidak normal)}$$

q. Jumlah Ranking (R)

$$\sum R_A = R_1 + R_2 + R_3 + \dots + R_{32} = 22 + 19,5 + 8,5 + \dots + 5,5 = 211$$

$$\sum R_C = R_1 + R_2 + R_3 + \dots + R_{32} = 27 + 19,5 + 31 + \dots + 2 = 317$$

r. Nilai Statistik *Mann-Whitney* (karena data tidak terdistribusi normal)

$$U_A = n_1 \times n_2 + \frac{n_1(n_1+1)}{2} - \sum R_A = 16 \times 16 + \frac{16(16+1)}{2} - 211 = 181$$

$$U_C = n_1 \times n_2 + \frac{n_2(n_2+1)}{2} - \sum R_C = 16 \times 16 + \frac{16(16+1)}{2} - 317 = 75$$

s. Rata-rata Nilai U

$$\mu U = \frac{n_1 \times n_2}{2} = \frac{16 \times 16}{2} = 128$$

t. Standar Deviasi U

$$\sigma U = \sqrt{\frac{n_1 \times n_2 (n_1 + n_2 + 1)}{12}} = \sqrt{\frac{16 \times 16 (16 + 16 + 1)}{12}} = 26,53$$

u. Nilai Z-tabel

$$Z\text{-tabel} \left(1 - \frac{0,05}{2}\right) = Z(1 - 0,025) = Z(0,975) = 1,96$$

v. Nilai Z-hitung

$$|Z \text{ Hitung}| = \frac{U \text{ Terkecil} - \mu U}{\sigma u} = \frac{75 - 128}{26,53} = 1,99$$

w. TABEL

Tabel Uji Nonparametrik Lebar Buah (cm)

Perlakuan		Jumlah Ranking (R)		Nilai statistik <i>Mann-Whitney</i> (U)		μU	σU	Z-hitung	Z-tabel	Not
		A	C	A	C					
Kirani	<i>Honeydew</i>	211	317	181	75	128	26,53	1,99	1,96	*

(*) berbeda nyata pada taraf 5%; (ns) tidak berbeda nyata

Lampiran 7. Lebar Buah

Tabel Lebar Buah Varietas *Dalmation* dan *Honeydew*

Varietas	Ulangan																total	rata-rata
	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16		
<i>Dalmation</i>	4,75	4,50	4,48	4,43	4,68	5,30	5,05	5,08	4,75	4,95	4,83	4,70	4,68	4,23	4,15	4,63	75,15	4,70
<i>Honeydew</i>	4,73	4,65	4,83	4,78	4,78	4,68	4,80	4,65	4,68	4,70	4,56	4,48	4,68	3,98	3,80	3,88	72,61	4,54
Total	9,475	9,15	9,30	9,20	9,45	9,98	9,85	9,73	9,43	9,65	9,39	9,18	9,35	8,20	7,95	8,50	147,76	4,6175
Rata-rata	4,74	4,58	4,65	4,60	4,73	4,99	4,93	4,86	4,71	4,83	4,69	4,59	4,68	4,10	3,98	4,25		

Setiap ulangan terdiri dari 4 buah

Lampiran 7. (Lanjutan)

Perhitungan

- a. Derajat bebas (db)

$$\text{db ulangan} = n - 1 = 16 - 1 = 15$$

$$\text{db total} = 32 - 2 = 30$$

- b. Rata-Rata (Mean)

$$\bar{x}_B = \frac{\sum x_1}{n} = \frac{4,75+4,50+4,48+4,43+\dots}{16} = 4,70$$

$$\bar{x}_C = \frac{\sum x_2}{n} = \frac{4,73+4,65+4,83+4,78+\dots}{16} = 4,54$$

- c. Jumlah Kuadrat Selisih (
- Sum of Square*
-)

$$SS_B = \sum (x_1 - \bar{x}_B)^2 = (4,75 - 4,69)^2 + (4,50 - 4,69)^2 + \dots = 1,41$$

$$SS_C = \sum (x_2 - \bar{x}_C)^2 = (4,73 - 4,54)^2 + (4,65 - 4,54)^2 + \dots = 1,71$$

- d. Ragam atau Varians (
- S^2
-)

$$S^2_B = \frac{SS_B}{(n-1)} = \frac{1,41}{16-1} = 0,09$$

$$S^2_C = \frac{SS_C}{(n-1)} = \frac{1,71}{16-1} = 0,11$$

- e. Standar Error (SE)

$$SE = \sqrt{\frac{S^2_B}{n} + \frac{S^2_C}{n}} = \sqrt{\frac{0,09}{16} + \frac{0,11}{16}} = 0,11$$

- f. Simpangan Baku (SD)

$$SD_B = \sqrt{\frac{\sum (x_1 - \bar{x}_B)}{n-1}} = \sqrt{\frac{1,41}{16-1}} = 0,30$$

$$SD_C = \sqrt{\frac{\sum (x_1 - \bar{x}_C)}{n-1}} = \sqrt{\frac{1,71}{16-1}} = 0,33$$

- g. Koefisien Keragaman (KK)

$$KK_B = \frac{SDB}{\bar{x}_B} \times 100\% = \frac{0,30}{4,70} \times 100\% = 6,52\%$$

$$KK_C = \frac{SDC}{\bar{x}_C} \times 100\% = \frac{0,33}{4,54} \times 100\% = 7,44\%$$

- h. Uji Normalitas (Shapiro-Wilk)

$$W_B = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,981$$

$$P\text{-value}_B = 0,974 \text{ (P-value} > 0,05 = \text{normal)}$$

$$W_C = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,726$$

$$P\text{-value}_C = 0,00 \text{ (P-value} < 0,05 = \text{tidak normal)}$$

Lampiran 7. Lebar Buah

Tabel Transformasi $\sqrt[2]{}$ Lebar Buah Varietas *Dalmation* dan *Honeydew*

Varietas	Ulangan																total	rata-rata
	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16		
<i>Dalmation</i>	2,18	2,12	2,12	2,10	2,16	2,30	2,25	2,25	2,18	2,22	2,20	2,17	2,16	2,06	2,04	2,15	34,66	2,17
<i>Honeydew</i>	2,17	2,16	2,20	2,19	2,19	2,16	2,19	2,16	2,16	2,17	2,14	2,12	2,16	1,99	1,95	1,97	34,06	2,13
Total	4,35	4,28	4,31	4,29	4,35	4,46	4,44	4,41	4,34	4,39	4,33	4,28	4,32	4,05	3,99	4,12	68,72	2,15
Rata-rata	2,18	2,14	2,16	2,14	2,17	2,23	2,22	2,20	2,17	2,20	2,17	2,14	2,16	2,02	1,99	2,06		

Setiap ulangan terdiri dari 4 buah

Lampiran 7. (Lanjutan)

Perhitungan

- i. Derajat bebas (db)

$$\text{db ulangan} = n - 1 = 16 - 1 = 15$$

$$\text{db total} = 32 - 2 = 30$$

- j. Rata-Rata (Mean)

$$\bar{x}_B = \frac{\sum x_1}{n} = \frac{2,18+2,12+2,12+2,10+\dots}{16} = 2,17$$

$$\bar{x}_C = \frac{\sum x_2}{n} = \frac{2,17+2,16+2,20+2,19+\dots}{16} = 2,13$$

- k. Jumlah Kuadrat Selisih (
- Sum of Square*
-)

$$SS_B = \sum (x_1 - \bar{x}_B)^2 = (2,18 - 2,17)^2 + (2,12 - 2,17)^2 + \dots = 0,07$$

$$SS_C = \sum (x_2 - \bar{x}_C)^2 = (2,17 - 2,13)^2 + (2,16 - 2,13)^2 + \dots = 0,10$$

- l. Ragam atau Varians (
- S^2
-)

$$S^2_B = \frac{SS_B}{(n-1)} = \frac{0,07}{16-1} = 0,004$$

$$S^2_C = \frac{SS_C}{(n-1)} = \frac{0,10}{16-1} = 0,006$$

- m. Standar Error (SE)

$$SE = \sqrt{\frac{S^2_B}{n} + \frac{S^2_C}{n}} = \sqrt{\frac{0,004}{16} + \frac{0,006}{16}} = 0,02$$

- n. Simpangan Baku (SD)

$$SD_B = \sqrt{\frac{\sum (x_1 - \bar{x}_B)^2}{n-1}} = \sqrt{\frac{0,07}{16-1}} = 0,07$$

$$SD_C = \sqrt{\frac{\sum (x_2 - \bar{x}_C)^2}{n-1}} = \sqrt{\frac{0,10}{16-1}} = 0,08$$

- o. Koefisien Keragaman (KK)

$$KK_A = \frac{SD_A}{\bar{x}_B} \times 100\% = \frac{0,07}{2,17} \times 100\% = 3,26\%$$

$$KK_C = \frac{SD_C}{\bar{x}_C} \times 100\% = \frac{0,08}{2,13} \times 100\% = 3,82\%$$

- p. Uji Normalitas (Shapiro-Wilk)

$$W_A = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,985$$

$$P\text{-value}_A = 0,985 \text{ (P-value} > 0,05 = \text{normal)}$$

$$W_C = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,710$$

$$P\text{-value}_C = 0,00 \text{ (P-value} < 0,05 = \text{tidak normal)}$$

- q. Jumlah Ranking (R)

$$\sum R_B = R_1 + R_2 + R_3 + \dots + R_{32} = 22,5 + 9 + 7,5 + \dots + 11 = 288,5$$

$$\sum R_C = R_1 + R_2 + R_3 + \dots + R_{32} = 21 + 12,5 + 27,5 + \dots + 2 = 239,5$$

- r. Nilai Statistik *Mann-Whitney* (karena data tidak terdistribusi normal)

$$UB = n1 \times n2 + \frac{n1(n1+1)}{2} - \sum R_B = 16 \times 16 + \frac{16(16+1)}{2} - 288,5 = 103,5$$

$$UC = n1 \times n2 + \frac{n2(n2+1)}{2} - \sum R_C = 16 \times 16 + \frac{16(16+1)}{2} - 239,5 = 152,5$$

- s. Rata-rata Nilai U

$$\mu U = \frac{n1 \times n2}{2} = \frac{16 \times 16}{2} = 128$$

- t. Standar Deviasi U

$$\sigma U = \sqrt{\frac{n1 \times n2 (n1+n2+1)}{12}} = \sqrt{\frac{16 \times 16 (16+16+1)}{12}} = 26,53$$

- u. Nilai Z-tabel

$$Z\text{-tabel} (1 - 0,05/2) = Z (1 - 0,025) = Z(0,975) = 1,96$$

- v. Nilai Z-hitung

$$|Z \text{ Hitung}| = \frac{U \text{ Terkecil} - \mu U}{\sigma u} = \frac{103,5 - 128}{26,53} = 0,92$$

- w. TABEL

Tabel Uji Nonparametrik Lebar Buah (cm)

Perlakuan		Jumlah Ranking (R)		Nilai statistik <i>Mann-Whitney</i> (U)		μU	σU	Z- hitung	Z- tabel	Not
B	C	B	C	B	C					
<i>Dalmation</i>	<i>Honeydew</i>	288,5	239,5	103,5	152,5	128	26,53	0,92	1,96	ns

* berbeda nyata pada taraf 5% ; (ns) tidak berbeda nyata

Lampiran 8.

Tabel Bobot Buah Varietas Kirani dan *Dalmation*

Varietas	Ulangan																total	rata-rata
	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16		
Kirani	70,82	70,45	67,35	67,00	68,25	68,05	66,30	64,52	68,13	67,23	73,68	69,38	70,70	68,58	70,95	66,55	1097,91	68,62
<i>Dalmation</i>	73,33	72,45	73,23	73,23	75,20	73,95	75,95	75,00	74,63	74,20	72,78	71,25	70,73	65,33	63,53	70,32	1155,07	72,19
Total	144,15	142,90	140,58	140,23	143,45	142,00	142,25	139,52	142,75	141,43	146,45	140,63	141,43	133,90	134,48	136,87	2261,99	70,41
Rata-rata	72,07	71,45	70,29	70,11	71,73	71,00	71,13	69,76	71,38	70,71	73,23	70,31	70,71	66,95	67,24	68,44		

Setiap ulangan terdiri dari 4 buah

Lampiran 8. (Lanjutan)

Perhitungan

- a. Derajat bebas (db)

$$\text{db ulangan} = n - 1 = 16 - 1 = 15$$

$$\text{db total} = 32 - 2 = 30$$

- b. Rata-Rata (Mean)

$$\bar{x}_A = \frac{\sum x_1}{n} = \frac{70,82+70,45+67,35+67,00+\dots}{16} = 68,62$$

$$\bar{x}_B = \frac{\sum x_2}{n} = \frac{73,33+72,45+73,23+73,23+\dots}{16} = 72,19$$

- c. Jumlah Kuadrat Selisih (
- Sum of Square*
-)

$$SS_A = \sum (x_1 - \bar{x}_A)^2 = (70,82 - 68,62)^2 + (70,45 - 68,62)^2 + \dots = 77,44$$

$$SS_B = \sum (x_2 - \bar{x}_B)^2 = (73,33 - 72,19)^2 + (72,45 - 72,19)^2 + \dots = 176,73$$

- d. Ragam atau Varians (
- S^2
-)

$$S^2_A = \frac{SS_A}{(n-1)} = \frac{77,44}{16-1} = 5,16$$

$$S^2_B = \frac{SS_B}{(n-1)} = \frac{176,73}{16-1} = 11,78$$

- e. Standar Error (SE)

$$SE = \sqrt{\frac{S^2_A}{n} + \frac{S^2_B}{n}} = \sqrt{\frac{5,16}{16} + \frac{11,78}{16}} = 1,02$$

- f. Simpangan Baku (SD)

$$SD_A = \sqrt{\frac{\sum (x_1 - \bar{x}_A)^2}{n-1}} = \sqrt{\frac{77,44}{16-1}} = 2,27$$

$$SD_B = \sqrt{\frac{\sum (x_2 - \bar{x}_B)^2}{n-1}} = \sqrt{\frac{176,73}{16-1}} = 3,43$$

- g. Koefisien Keragaman (KK)

$$KK_A = \frac{SD_A}{\bar{x}_A} \times 100\% = \frac{2,27}{68,62} \times 100\% = 3,31\%$$

$$KK_B = \frac{SD_B}{\bar{x}_B} \times 100\% = \frac{3,43}{72,19} \times 100\% = 4,75\%$$

- h. Uji Normalitas (Shapiro-Wilk)

$$W_A = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,968$$

$$P\text{-value}_A = 0,800 \text{ (P-value} > 0,05 = \text{normal)}$$

$$W_B = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,825$$

$$P\text{-value}_B = 0,006 \text{ (P-value} < 0,05 = \text{tidak normal)}$$

Lampiran 8.

Tabel Transformasi $\sqrt[2]{}$ Bobot Buah Varietas Kirani dan *Dalmation*

Varietas	Ulangan																total	rata-rata
	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16		
Kirani	8,42	8,39	8,21	8,19	8,26	8,25	8,14	8,03	8,25	8,20	8,58	8,33	8,41	8,28	8,42	8,16	132,52	8,28
<i>Dalmation</i>	8,56	8,51	8,56	8,56	8,67	8,60	8,71	8,66	8,64	8,61	8,53	8,44	8,41	8,08	7,97	8,39	135,91	8,49
Total	16,98	16,91	16,76	16,74	16,93	16,85	16,86	16,69	16,89	16,81	17,11	16,77	16,82	16,36	16,39	16,54	268,43	8,39
Rata-rata	8,49	8,45	8,38	8,37	8,47	8,42	8,43	8,35	8,45	8,41	8,56	8,39	8,41	8,18	8,20	8,27		

Setiap ulangan terdiri dari 4 buah

Lampiran 8. (Lanjutan)

Perhitungan

i. Derajat bebas (db)

$$\text{db ulangan} = n - 1 = 16 - 1 = 15$$

$$\text{db total} = 32 - 2 = 30$$

j. Rata-Rata (Mean)

$$\bar{x}_A = \frac{\sum x_1}{n} = \frac{8,42+8,39+8,21+8,19+\dots}{16} = 8,28$$

$$\bar{x}_B = \frac{\sum x_2}{n} = \frac{8,56+8,51+8,56+8,56+\dots}{16} = 8,49$$

k. Jumlah Kuadrat Selisih (*Sum of Square*)

$$SS_A = \sum (x_1 - \bar{x}_A)^2 = (8,42 - 8,28)^2 + (8,39 - 8,28)^2 + \dots = 0,28$$

$$SS_B = \sum (x_2 - \bar{x}_B)^2 = (8,56 - 8,49)^2 + (8,51 - 8,49)^2 + \dots = 0,63$$

l. Ragam atau Varians (S^2)

$$S^2 A = \frac{SS_A}{(n-1)} = \frac{0,28}{16-1} = 0,01$$

$$S^2 B = \frac{SS_B}{(n-1)} = \frac{0,63}{16-1} = 0,04$$

m. Standar Error (SE)

$$SE = \sqrt{\frac{S^2 A}{n} + \frac{S^2 B}{n}} = \sqrt{\frac{0,01}{16} + \frac{0,04}{16}} = 0,06$$

n. Simpangan Baku (SD)

$$SD_A = \sqrt{\frac{\sum (x_1 - \bar{x}_A)^2}{n-1}} = \sqrt{\frac{132,52}{16-1}} = 0,13$$

$$SD_B = \sqrt{\frac{\sum (x_2 - \bar{x}_B)^2}{n-1}} = \sqrt{\frac{135,91}{16-1}} = 0,20$$

o. Koefisien Keragaman (KK)

$$KK_A = \frac{SD_A}{\bar{x}_A} \times 100\% = \frac{0,13}{8,28} \times 100\% = 1,65\%$$

$$KK_B = \frac{SD_B}{\bar{x}_B} \times 100\% = \frac{0,20}{8,49} \times 100\% = 2,40\%$$

p. Uji Normalitas (Shapiro-Wilk)

$$W_A = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,970$$

$$P\text{-value}_A = 0,838 \text{ (P-value} > 0,05 = \text{normal)}$$

$$W_B = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,811$$

$$P\text{-value}_B = 0,004 \text{ (P-value} < 0,05 = \text{tidak normal)}$$

q. Jumlah Ranking (R)

$$\sum R_A = R_1 + R_2 + R_3 + \dots + R_{32} = 18 + 15 + 8 + \dots + 5 = 181$$

$$\sum R_c = R_1 + R_2 + R_3 + \dots + R_{32} = 25 + 21 + 23,5 + \dots + 14 = 347$$

- r. Nilai Statistik *Mann-Whitney* (karena data tidak terdistribusi normal)

$$U_A = n_1 \times n_2 + \frac{n_1(n_1+1)}{2} - \sum R_A = 16 \times 16 + \frac{16(16+1)}{2} - 181 = 211$$

$$U_B = n_1 \times n_2 + \frac{n_2(n_2+1)}{2} - \sum R_B = 16 \times 16 + \frac{16(16+1)}{2} - 347 = 45$$

- s. Rata-rata Nilai U

$$\mu U = \frac{n_1 \times n_2}{2} = \frac{16 \times 16}{2} = 128$$

- t. Standar Deviasi U

$$\sigma U = \sqrt{\frac{n_1 \times n_2 (n_1 + n_2 + 1)}{12}} = \sqrt{\frac{16 \times 16 (16 + 16 + 1)}{12}} = 26,53$$

- u. Nilai Z-tabel

$$Z\text{-tabel} \left(1 - \frac{0,05}{2}\right) = Z(1 - 0,025) = Z(0,975) = 1,96$$

- v. Nilai Z-hitung

$$|Z \text{ Hitung}| = \frac{U \text{ Terkecil} - \mu U}{\sigma u} = \frac{45 - 128}{26,53} = 3,12$$

- w. TABEL

Tabel Uji Nonparametrik Bobot Buah (g)

Perlakuan		Jumlah Ranking (R)		Nilai statistik <i>Mann-Whitney</i> (U)		μU	σU	Z-hitung	Z-tabel	Not
A	B	A	B	A	B					
Kirani	<i>Dalmation</i>	181	347	211	45	128	26,53	3,12	1,96	*

(*) berbeda nyata pada taraf 5% ; (ns) tidak berbeda nyata

Lampiran 8. Bobot Buah

Tabel Bobot Buah Varietas Kirani dan *Honeydew*

Varietas	Ulangan																total	rata-rata
	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16		
Kirani	70,82	70,45	67,35	67,00	68,25	68,05	66,30	64,52	68,13	67,23	73,68	69,38	70,70	68,58	70,95	66,55	1097,9	68,62
<i>Honeydew</i>	72,18	71,08	73,10	72,68	72,00	74,85	72,58	70,88	71,03	74,30	69,65	67,85	71,23	65,10	64,58	64,55	1127,60	70,48
Total	143	141,52	140,45	139,67	140,25	142,90	138,87	135,39	139,15	141,52	143,32	137,22	141,92	133,67	135,52	131,10	2225,5	69,54
Rata-rata	71,50	70,76	70,23	69,84	70,13	71,45	69,44	67,70	69,58	70,76	71,66	68,61	70,96	66,84	67,76	65,55		

Setiap ulangan terdiri dari 4 buah

Lampiran 8. (Lanjutan)

Perhitungan

- a. Derajat bebas (db)

$$\text{db ulangan} = n - 1 = 16 - 1 = 15$$

$$\text{db total} = 32 - 2 = 30$$

- b. Rata-Rata (Mean)

$$\bar{x}_A = \frac{\sum x_1}{n} = \frac{70,82+70,45+67,35+67,00+\dots}{16} = 68,62$$

$$\bar{x}_C = \frac{\sum x_2}{n} = \frac{72,18+71,08+73,10+72,68+\dots}{16} = 70,48$$

- c. Jumlah Kuadrat Selisih (
- Sum of Square*
-)

$$SS_A = \sum (x_1 - \bar{x}_A)^2 = (70,82 - 68,62)^2 + (70,45 - 68,62)^2 + \dots = 77,43$$

$$SS_C = \sum (x_2 - \bar{x}_C)^2 = (72,18 - 70,48)^2 + (71,08 - 70,48)^2 + \dots = 162,89$$

- d. Ragam atau Varians (
- S^2
-)

$$S^2_A = \frac{SS_A}{(n-1)} = \frac{77,43}{16-1} = 5,16$$

$$S^2_C = \frac{SS_C}{(n-1)} = \frac{162,89}{16-1} = 10,85$$

- e. Standar Error (SE)

$$SE = \sqrt{\frac{S^2_A}{n} + \frac{S^2_C}{n}} = \sqrt{\frac{5,16}{16} + \frac{10,85}{16}} = 1,00$$

- f. Simpangan Baku (SD)

$$SD_A = \sqrt{\frac{\sum (x_1 - \bar{x}_A)^2}{n-1}} = \sqrt{\frac{77,43}{16-1}} = 2,27$$

$$SD_C = \sqrt{\frac{\sum (x_2 - \bar{x}_C)^2}{n-1}} = \sqrt{\frac{162,89}{16-1}} = 3,29$$

- g. Koefisien Keragaman (KK)

$$KK_A = \frac{SD_A}{\bar{x}_A} \times 100\% = \frac{2,27}{68,62} \times 100\% = 3,31\%$$

$$KK_C = \frac{SD_C}{\bar{x}_C} \times 100\% = \frac{3,29}{70,48} \times 100\% = 4,67\%$$

- h. Uji Normalitas (Shapiro-Wilk)

$$W_A = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,968$$

$$P\text{-value}_A = 0,800 \text{ (P-value} > 0,05 = \text{normal)}$$

$$W_C = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,880$$

$$P\text{-value}_C = 0,039 \text{ (P-value} < 0,05 = \text{tidak normal)}$$

Lampiran 8. Bobot Buah

Tabel Transformasi $\sqrt[2]{}$ Bobot Buah Varietas Kirani dan *Honeydew*

Varietas	Ulangan																total	rata-rata
	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16		
Kirani	8,42	8,39	8,21	8,19	8,26	8,25	8,14	8,03	8,25	8,20	8,58	8,33	8,41	8,28	8,42	8,16	132,52	8,28
<i>Honeydew</i>	8,50	8,43	8,55	8,52	8,49	8,65	8,52	8,42	8,43	8,62	8,35	8,24	8,44	8,07	8,04	8,03	134,28	8,39
Total	16,91	16,82	16,76	16,71	16,75	16,90	16,66	16,45	16,68	16,82	16,93	16,57	16,85	16,35	16,46	16,19	266,81	8,34
Rata-rata	8,46	8,41	8,38	8,36	8,37	8,45	8,33	8,23	8,34	8,41	8,46	8,28	8,42	8,17	8,23	8,10		

Setiap ulangan terdiri dari 4 buah

Lampiran 8. (Lanjutan)

Perhitungan

i. Derajat bebas (db)

$$\text{db ulangan} = n - 1 = 16 - 1 = 15$$

$$\text{db total} = 32 - 2 = 30$$

j. Rata-Rata (Mean)

$$\bar{x}_A = \frac{\sum x_1}{n} = \frac{8,42+8,39+8,21+8,19+\dots}{16} = 8,28$$

$$\bar{x}_C = \frac{\sum x_2}{n} = \frac{8,50+8,43+8,55+8,52+\dots}{16} = 8,39$$

k. Jumlah Kuadrat Selisih (*Sum of Square*)

$$SS_A = \sum (x_1 - \bar{x}_A)^2 = (8,42 - 8,28)^2 + (8,39 - 8,28)^2 + \dots = 0,28$$

$$SS_C = \sum (x_2 - \bar{x}_C)^2 = (8,50 - 8,39)^2 + (8,43 - 8,39)^2 + \dots = 0,59$$

l. Ragam atau Varians (S^2)

$$S^2_A = \frac{SS_A}{(n-1)} = \frac{0,28}{16-1} = 0,01$$

$$S^2_C = \frac{SS_C}{(n-1)} = \frac{0,59}{16-1} = 0,03$$

m. Standar Error (SE)

$$SE = \sqrt{\frac{S^2_A}{n} + \frac{S^2_C}{n}} = \sqrt{\frac{0,01}{16} + \frac{0,03}{16}} = 0,06$$

n. Simpangan Baku (SD)

$$SD_A = \sqrt{\frac{\sum (x_1 - \bar{x}_A)^2}{n-1}} = \sqrt{\frac{132,52}{16-1}} = 0,13$$

$$SD_C = \sqrt{\frac{\sum (x_2 - \bar{x}_C)^2}{n-1}} = \sqrt{\frac{8,39}{16-1}} = 0,19$$

o. Koefisien Keragaman (KK)

$$KK_A = \frac{SD_A}{\bar{x}_A} \times 100\% = \frac{0,13}{8,28} \times 100\% = 1,65\%$$

$$KK_C = \frac{SD_C}{\bar{x}_C} \times 100\% = \frac{0,19}{8,39} \times 100\% = 2,36\%$$

p. Uji Normalitas (Shapiro-Wilk)

$$W_A = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - \bar{x}))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,970$$

$$P\text{-value}_A = 0,838 \text{ (P-value} > 0,05 = \text{normal)}$$

$$W_C = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - \bar{x}))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,873$$

$$P\text{-value}_C = 0,031 \text{ (P-value} < 0,05 = \text{tidak normal)}$$

q. Jumlah Ranking (R)

$$\sum R_A = R_1 + R_2 + R_3 + \dots + R_{32} = 19 + 17 + 9 + \dots + 6 = 206$$

$$\sum R_C = R_1 + R_2 + R_3 + \dots + R_{32} = 26 + 23 + 29 + \dots + 2 = 322$$

- r. Nilai Statistik *Mann-Whitney* (karena data tidak terdistribusi normal)

$$U_A = n_1 \times n_2 + \frac{n_1(n_1+1)}{2} - \sum R_A = 16 \times 16 + \frac{16(16+1)}{2} - 206 = 188$$

$$U_C = n_1 \times n_2 + \frac{n_2(n_2+1)}{2} - \sum R_C = 16 \times 16 + \frac{16(16+1)}{2} - 322 = 70$$

- s. Rata-rata Nilai U

$$\mu U = \frac{n_1 \times n_2}{2} = \frac{16 \times 16}{2} = 128$$

- t. Standar Deviasi U

$$\sigma U = \sqrt{\frac{n_1 \times n_2 (n_1 + n_2 + 1)}{12}} = \sqrt{\frac{16 \times 16 (16 + 16 + 1)}{12}} = 26,53$$

- u. Nilai Z-tabel

$$Z\text{-tabel} \left(1 - \frac{0,05}{2}\right) = Z(1 - 0,025) = Z(0,975) = 1,96$$

- v. Nilai Z-hitung

$$|Z \text{ Hitung}| = \frac{U \text{ Terkecil} - \mu U}{\sigma u} = \frac{70 - 128}{26,53} = 2,19$$

- w. TABEL

Tabel Uji Nonparametrik Bobot Buah (g)

Perlakuan		Jumlah Ranking (R)		Nilai statistik <i>Mann-Whitney</i> (U)		μU	σU	Z-hitung	Z-tabel	Not
A	C	A	C	A	C					
Kirani	<i>Honeydew</i>	206	322	186	70	128	26,53	2,19	1,96	*

(*) berbeda nyata pada taraf 5% ; (ns) tidak berbeda nyata

Lampiran 8. Bobot Buah

Tabel Bobot Buah Varietas *Dalmation* dan *Honeydew*

Varietas	Ulangan																total	rata-rata
	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16		
<i>Dalmation</i>	73,33	72,45	73,23	73,23	75,20	73,95	75,95	75,00	74,63	74,20	72,78	71,25	70,73	65,33	63,53	70,32	1155,07	72,19
<i>Honeydew</i>	72,18	71,08	73,10	72,68	72,00	74,85	72,58	70,88	71,03	74,30	69,65	67,85	71,23	65,10	64,58	64,55	1127,60	70,47
Total	145,5	143,53	146,33	145,90	147,20	148,80	148,53	145,88	145,65	148,50	142,43	139,10	141,95	130,43	128,10	134,87	2291,67	71,61
Rata-rata	72,75	71,76	73,16	72,95	73,60	74,40	74,26	72,94	72,83	74,25	71,21	69,55	70,98	65,21	64,05	67,44		

Setiap ulangan terdiri dari 4 buah

Lampiran 8. (Lanjutan)

Perhitungan

- a. Derajat bebas (db)

$$\text{db ulangan} = n - 1 = 16 - 1 = 15$$

$$\text{db total} = 32 - 2 = 30$$

- b. Rata-Rata (Mean)

$$\bar{x}_B = \frac{\sum x_1}{n} = \frac{73,33+72,45+73,23+73,23+\dots}{16} = 72,19$$

$$\bar{x}_C = \frac{\sum x_2}{n} = \frac{72,18+71,08+73,10+72,68+\dots}{16} = 70,47$$

- c. Jumlah Kuadrat Selisih (
- Sum of Square*
-)

$$SS_B = \sum (x_1 - \bar{x}_B)^2 = (73,33 - 72,19)^2 + (72,45 - 72,19)^2 + \dots = 176,73$$

$$SS_C = \sum (x_2 - \bar{x}_C)^2 = (72,18 - 70,47)^2 + (71,08 - 70,47)^2 + \dots = 162,89$$

- d. Ragam atau Varians (
- S^2
-)

$$S^2_B = \frac{SS_B}{(n-1)} = \frac{176,73}{16-1} = 11,78$$

$$S^2_C = \frac{SS_C}{(n-1)} = \frac{162,89}{16-1} = 10,85$$

- e. Standar Error (SE)

$$SE = \sqrt{\frac{S^2_B}{n} + \frac{S^2_C}{n}} = \sqrt{\frac{11,78}{16} + \frac{10,85}{16}} = 1,18$$

- f. Simpangan Baku (SD)

$$SD_B = \sqrt{\frac{\sum (x_1 - \bar{x}_B)^2}{n-1}} = \sqrt{\frac{176,73}{16-1}} = 3,43$$

$$SD_C = \sqrt{\frac{\sum (x_2 - \bar{x}_C)^2}{n-1}} = \sqrt{\frac{162,89}{16-1}} = 3,29$$

- g. Koefisien Keragaman (KK)

$$KK_B = \frac{SD_B}{\bar{x}_B} \times 100\% = \frac{3,43}{72,19} \times 100\% = 4,75\%$$

$$KK_C = \frac{SD_C}{\bar{x}_C} \times 100\% = \frac{3,29}{70,47} \times 100\% = 4,67\%$$

- h. Uji Normalitas (Shapiro-Wilk)

$$W_B = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,825$$

$$P\text{-value}_B = 0,006 \text{ (P-value} < 0,05 \text{ = tidak normal)}$$

$$W_C = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,714$$

$$P\text{-value}_C = 0,000 \text{ (P-value} < 0,05 \text{ = tidak normal)}$$

Lampiran 8. Bobot Buah

Tabel Transformasi $\sqrt[2]{}$ Bobot Buah Varietas *Dalmation* dan *Honeydew*

Varietas	Ulangan																total	rata-rata
	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16		
<i>Dalmation</i>	8,56	8,51	8,56	8,56	8,67	8,60	8,71	8,66	8,64	8,61	8,53	8,44	8,41	8,08	7,97	8,39	135,91	8,49
<i>Honeydew</i>	8,50	8,43	8,55	8,52	8,49	8,65	8,52	8,42	8,43	8,62	8,35	8,24	8,44	8,07	8,04	8,03	134,28	8,39
Total	17,06	16,94	17,11	17,08	17,16	17,25	17,23	17,08	17,07	17,23	16,88	16,68	16,85	16,15	16,01	16,42	270,19	8,44
Rata-rata	8,53	8,47	8,55	8,54	8,58	8,63	8,62	8,54	8,53	8,62	8,44	8,34	8,42	8,08	8,00	8,21		

Setiap ulangan terdiri dari 4 buah

Lampiran 8. (Lanjutan)

Perhitungan

- a. Derajat bebas (db)

$$\text{db ulangan} = n - 1 = 16 - 1 = 15$$

$$\text{db total} = 32 - 2 = 30$$

- b. Rata-Rata (Mean)

$$\bar{x}_B = \frac{\sum x_1}{n} = \frac{8,56+8,51+8,56+8,56+\dots}{16} = 8,49$$

$$\bar{x}_C = \frac{\sum x_2}{n} = \frac{8,50+8,43+8,55+8,52+\dots}{16} = 8,39$$

- c. Jumlah Kuadrat Selisih (
- Sum of Square*
-)

$$SS_B = \sum (x_1 - \bar{x}_B)^2 = (8,56 - 8,49)^2 + (8,51 - 8,49)^2 + \dots = 0,63$$

$$SS_C = \sum (x_2 - \bar{x}_C)^2 = (8,50 - 8,39)^2 + (8,43 - 8,39)^2 + \dots = 0,59$$

- d. Ragam atau Varians (
- S^2
-)

$$S^2_B = \frac{SS_B}{(n-1)} = \frac{0,63}{16-1} = 0,04$$

$$S^2_C = \frac{SS_C}{(n-1)} = \frac{0,59}{16-1} = 0,03$$

- e. Standar Error (SE)

$$SE = \sqrt{\frac{S^2_B}{n} + \frac{S^2_C}{n}} = \sqrt{\frac{0,04}{16} + \frac{0,03}{16}} = 0,07$$

- f. Simpangan Baku (SD)

$$SD_B = \sqrt{\frac{\sum (x_1 - \bar{x}_B)^2}{n-1}} = \sqrt{\frac{135,91}{16-1}} = 0,20$$

$$SD_C = \sqrt{\frac{\sum (x_2 - \bar{x}_C)^2}{n-1}} = \sqrt{\frac{134,28}{16-1}} = 0,19$$

- g. Koefisien Keragaman (KK)

$$KK_B = \frac{SDB}{\bar{x}_B} \times 100\% = \frac{0,20}{72,19} \times 100\% = 2,42\%$$

$$KK_C = \frac{SDC}{\bar{x}_C} \times 100\% = \frac{0,19}{70,47} \times 100\% = 2,36\%$$

- h. Uji Normalitas (Shapiro-Wilk)

$$W_B = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,811$$

$$P\text{-value}_B = 0,004 \text{ (P-value} < 0,05 = \text{tidak normal)}$$

$$W_C = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,873$$

$$P\text{-value}_C = 0,031 \text{ (P-value} < 0,05 = \text{tidak normal)}$$

- i. Jumlah Ranking (R)

$$\sum R_B = R_1 + R_2 + R_3 + \dots + R_{32} = 24 + 17 + 22,5 + \dots + 8 = 315$$

$$\sum R_C = R_1 + R_2 + R_3 + \dots + R_{32} = 16 + 12 + 21 + \dots + 2 = 213$$

j. Nilai Statistik *Mann-Whitney* (karena data tidak terdistribusi normal)

$$UB = n_1 \times n_2 + \frac{n_1(n_1+1)}{2} - \sum R_B = 16 \times 16 + \frac{16(16+1)}{2} - 315 = 77$$

$$UC = n_1 \times n_2 + \frac{n_2(n_2+1)}{2} - \sum R_C = 16 \times 16 + \frac{16(16+1)}{2} - 213 = 179$$

k. Rata-rata Nilai U

$$\mu U = \frac{n_1 \times n_2}{2} = \frac{16 \times 16}{2} = 128$$

l. Standar Deviasi U

$$\sigma U = \sqrt{\frac{n_1 \times n_2 (n_1 + n_2 + 1)}{12}} = \sqrt{\frac{16 \times 16 (16 + 16 + 1)}{12}} = 26,53$$

m. Nilai Z-tabel

$$Z\text{-tabel} (1 - 0,05/2) = Z (1 - 0,025) = Z(0,975) = 1,96$$

n. Nilai Z-hitung

$$|Z \text{ Hitung}| = \frac{U \text{ Terkecil} - \mu U}{\sigma u} = \frac{77 - 128}{26,53} = 1,92$$

o. TABEL

Tabel Uji Nonparametrik Bobot Buah (g)

Tabel 5.1. Nonparametric Test Data (g)										
Perlakuan		Jumlah Ranking (R)		Nilai statistik		μU	σU	Z-hitung	Z-tabel	Not
				<i>Mann-Whitney</i> (U)						
B	C	B	C	B	C					
<i>Dalmation</i>	<i>Honeydew</i>	315	213	77	179	128	26,53	1,92	1,96	ns

(*) berbeda nyata pada taraf 5% ; (ns) tidak berbeda nyata

Lampiran 9. Rendemen

Tabel Rendemen Ekstrak Varietas Kirani dan *Dalmation*

Varietas	Ulangan																total	rata-rata
	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16		
Kirani	25,56	22,42	23,33	25,64	25,89	25,33	26,11	25,39	24,08	26,55	25,47	24,75	24,25	24,16	24,08	25,56	398,57	24,91
<i>Dalmation</i>	24,27	25,56	25,61	27,05	21,38	24,43	26,30	25,72	22,40	24,00	21,61	21,26	20,19	20,21	26,39	19,95	376,33	23,52
Total	49,83	47,98	48,94	52,69	47,27	49,76	52,41	51,11	46,48	50,55	47,08	46,01	44,44	44,37	50,47	45,51	774,9	24,21
Rata-rata	24,92	23,99	24,47	26,35	23,64	24,88	26,21	25,56	23,24	25,28	23,54	23,01	22,22	22,19	25,24	22,76		

Setiap ulangan terdiri dari 4 buah

Lampiran 9. (Lanjutan)

Perhitungan

- a. Derajat bebas (db)

$$\text{db ulangan} = n - 1 = 16 - 1 = 15$$

$$\text{db total} = 32 - 2 = 30$$

- b. Rata-Rata (Mean)

$$\bar{x}_A = \frac{\sum x_1}{n} = \frac{25,56 + 22,42 + 23,33 + 25,64 + \dots}{16} = 24,91$$

$$\bar{x}_B = \frac{\sum x_2}{n} = \frac{24,27 + 25,56 + 25,61 + 27,05 + \dots}{16} = 23,52$$

- c. Jumlah Kuadrat Selisih (
- Sum of Square*
-)

$$SS_A = \sum (x_1 - \bar{x}_A)^2 = (25,56 - 24,91)^2 + (22,42 - 24,91)^2 + \dots = 18,28$$

$$SS_B = \sum (x_2 - \bar{x}_B)^2 = (24,27 - 23,52)^2 + (25,56 - 23,52)^2 + \dots = 92,80$$

- d. Ragam atau Varians (
- S^2
-)

$$S^2 A = \frac{SS_A}{(n-1)} = \frac{18,28}{16-1} = 1,21$$

$$S^2 B = \frac{SS_B}{(n-1)} = \frac{92,80}{16-1} = 6,18$$

- e. Standar Error (SE)

$$SE = \sqrt{\frac{S^2 A}{n} + \frac{S^2 B}{n}} = \sqrt{\frac{1,21}{16} + \frac{6,18}{16}} = 0,68$$

- f. Simpangan Baku (SD)

$$SD_A = \sqrt{\frac{\sum (x_1 - \bar{x}_A)^2}{n-1}} = \sqrt{\frac{18,28}{16-1}} = 1,10$$

$$SD_B = \sqrt{\frac{\sum (x_2 - \bar{x}_B)^2}{n-1}} = \sqrt{\frac{92,80}{16-1}} = 2,48$$

- g. Koefisien Keragaman (KK)

$$KK_A = \frac{SD_A}{\bar{x}_A} \times 100\% = \frac{1,10}{24,91} \times 100\% = 4,43\%$$

$$KK_B = \frac{SD_B}{\bar{x}_B} \times 100\% = \frac{2,48}{23,52} \times 100\% = 10,57\%$$

- h. Uji Normalitas (Shapiro-Wilk)

$$W_A = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,937$$

$$P\text{-value}_A = 0,318 \quad (P\text{-value} > 0,05 = \text{normal})$$

$$W_B = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,905$$

$$P\text{-value}_B = 0,097 \quad (P\text{-value} > 0,05 = \text{normal})$$

- i. Uji Homogenitas Varians

$$F\text{-hitung} = \frac{s^2_{\text{Terbesar}}}{s^2_{\text{Terkecil}}} = \frac{6,18}{1,21} = 5,07$$

$$F\text{-tabel taraf } 5\% \text{ dua arah } (0,025; 15; 15) = 2,86209253$$

$$(F\text{-hitung} > F\text{-tabel} = \text{tidak homogen})$$

j. Selisih Varietas ($|A-B|$)

$$|A-B| = \bar{x}A - \bar{x}B = (124,91 - 23,52) = 1,39$$

k. T Hitung

$$T\text{-hitung} = \frac{(|A-B|)}{SE} = \frac{1,39}{0,68} = 2,043$$

l. T-tabel (Normal dan tidak homogen menggunakan db welch)

$$db = \frac{\left(\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}\right)^2}{\frac{\left(\frac{s_1^2}{n_1}\right)^2}{n_1-1} + \frac{\left(\frac{s_2^2}{n_2}\right)^2}{n_2-1}} = \frac{\left(\frac{1,12^2}{16} + \frac{6,18^2}{16}\right)^2}{\frac{\left(\frac{1,12^2}{16}\right)^2}{15} + \frac{\left(\frac{6,18^2}{16}\right)^2}{15}} = 20,691$$

$$T\text{-tabel taraf 5\% dua arah } (0,025; 21) = 2,07$$

m. TABEL UJI T

Tabel Uji T Rendemen Varietas Kirani dan *Dalmation* (%)

Perlakuan		Rendemen		A-B	SE	T-hitung	T-tabel	Not
A	B	A	B					
Kirani	<i>Dalmation</i>	24,91	23,52	1,39	0,68	2,043	2,07	ns

(*) berbeda nyata pada taraf 5% ; (ns) tidak berbeda nyata.

Lampiran 9. Rendemen

Tabel Rendemen Varietas Kirani dan *Honeydew*

Varietas	Ulangan																total	rata-rata
	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16		
Kirani	25,56	22,42	23,33	25,64	25,89	25,33	26,11	25,39	24,08	26,55	25,47	24,75	24,25	24,16	24,08	25,56	398,57	24,91
<i>Honeydew</i>	20,38	20,63	21,31	20,21	23,44	20,38	20,13	20,88	20,94	24,83	20,54	20,36	21,84	20,46	22,73	20,59	339,65	21,23
Total	45,94	43,05	44,64	45,85	49,33	45,71	46,24	46,27	45,02	51,38	46,01	45,11	46,09	44,62	46,81	46,15	738,22	23,06
Rata-rata	22,97	21,53	22,32	22,93	24,67	22,86	23,12	23,14	22,51	25,69	23,01	22,56	23,05	22,31	23,41	23,08		

Setiap ulangan terdiri dari 4 buah

Lampiran 9. (Lanjutan)

Perhitungan

- a. Derajat bebas (db)

$$\text{db ulangan} = n - 1 = 16 - 1 = 15$$

$$\text{db total} = 32 - 2 = 30$$

- b. Rata-Rata (Mean)

$$\bar{x}_A = \frac{\sum x_1}{n} = \frac{25,56 + 22,42 + 23,33 + 25,64 + \dots}{16} = 24,91$$

$$\bar{x}_C = \frac{\sum x_2}{n} = \frac{20,38 + 20,63 + 21,31 + 20,21 + \dots}{16} = 21,23$$

- c. Jumlah Kuadrat Selisih (
- Sum of Square*
-)

$$SS_A = \sum (x_1 - \bar{x}_A)^2 = (25,56 - 24,91)^2 + (22,42 - 24,91)^2 + \dots = 18,28$$

$$SS_C = \sum (x_2 - \bar{x}_C)^2 = (24,38 - 21,23)^2 + (20,63 - 21,23)^2 + \dots = 26,97$$

- d. Ragam atau Varians (
- S^2
-)

$$S^2_A = \frac{SS_A}{(n-1)} = \frac{18,28}{16-1} = 1,21$$

$$S^2_C = \frac{SS_C}{(n-1)} = \frac{26,97}{16-1} = 1,79$$

- e. Standar Error (SE)

$$SE = \sqrt{\frac{S^2_A}{n} + \frac{S^2_C}{n}} = \sqrt{\frac{1,21}{16} + \frac{1,79}{16}} = 0,43$$

- f. Simpangan Baku (SD)

$$SD_A = \sqrt{\frac{\sum (x_1 - \bar{x}_A)^2}{n-1}} = \sqrt{\frac{18,28}{16-1}} = 1,10$$

$$SD_C = \sqrt{\frac{\sum (x_2 - \bar{x}_C)^2}{n-1}} = \sqrt{\frac{26,97}{16-1}} = 1,34$$

- g. Koefisien Keragaman (KK)

$$KK_A = \frac{SD_A}{\bar{x}_A} \times 100\% = \frac{1,10}{24,91} \times 100\% = 4,43\%$$

$$KK_C = \frac{SD_C}{\bar{x}_C} \times 100\% = \frac{1,34}{21,23} \times 100\% = 6,31\%$$

- h. Uji Normalitas (Shapiro-Wilk)

$$W_A = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,937$$

$$P\text{-value}_A = 0,318 \text{ (P-value} > 0,05 = \text{normal)}$$

$$W_C = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,759$$

$$P\text{-value}_C = 0,001 \text{ (P-value} < 0,05 = \text{tidak normal)}$$

Lampiran 9. Rendemen

Tabel Transformasi $\sqrt[2]{}$ Rendemen Varietas Kirani dan *Honeydew*

Varietas	Ulangan																total	rata-rata
	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16		
Kirani	5,06	4,73	4,83	5,06	5,09	5,03	5,11	5,04	4,91	5,15	5,05	4,97	4,92	4,92	4,91	5,06	79,84	4,99
<i>Honeydew</i>	4,51	4,54	4,62	4,50	4,84	4,51	4,49	4,57	4,58	4,98	4,53	4,51	4,67	4,52	4,77	4,54	73,69	4,61
Total	9,57	9,28	9,45	9,56	9,93	9,55	9,60	9,61	9,48	10,14	9,58	9,49	9,60	9,44	9,67	9,59	153,52	4,80
Rata-rata	4,79	4,64	4,72	4,78	4,96	4,77	4,80	4,80	4,74	5,07	4,79	4,74	4,80	4,72	4,84	4,80		

Setiap ulangan terdiri dari 4 buah

Lampiran 9. (Lanjutan)

Perhitungan

i. Derajat bebas (db)

$$\text{db ulangan} = n - 1 = 16 - 1 = 15$$

$$\text{db total} = 32 - 2 = 30$$

j. Rata-Rata (Mean)

$$\bar{x}_A = \frac{\sum x_1}{n} = \frac{5,06+4,73+4,83+5,06+\dots}{16} = 4,99$$

$$\bar{x}_C = \frac{\sum x_2}{n} = \frac{4,51+4,54+4,62+4,50+\dots}{16} = 4,61$$

k. Jumlah Kuadrat Selisih (*Sum of Square*)

$$SS_A = \sum (x_1 - \bar{x}_A)^2 = (5,06 - 4,99)^2 + (4,73 - 4,99)^2 + \dots = 0,19$$

$$SS_C = \sum (x_2 - \bar{x}_C)^2 = (4,51 - 4,61)^2 + (4,54 - 4,61)^2 + \dots = 0,30$$

l. Ragam atau Varians (S^2)

$$S^2_A = \frac{SS_A}{(n-1)} = \frac{0,19}{16-1} = 0,01$$

$$S^2_C = \frac{SS_C}{(n-1)} = \frac{0,30}{16-1} = 0,02$$

m. Standar Error (SE)

$$SE = \sqrt{\frac{S^2_A}{n} + \frac{S^2_C}{n}} = \sqrt{\frac{0,01}{16} + \frac{0,02}{16}} = 0,04$$

n. Simpangan Baku (SD)

$$SD_A = \sqrt{\frac{\sum (x_1 - \bar{x}_A)^2}{n-1}} = \sqrt{\frac{0,19}{16-1}} = 0,11$$

$$SD_C = \sqrt{\frac{\sum (x_2 - \bar{x}_C)^2}{n-1}} = \sqrt{\frac{0,30}{16-1}} = 0,14$$

o. Koefisien Keragaman (KK)

$$KK_A = \frac{SD_A}{\bar{x}_A} \times 100\% = \frac{0,11}{4,99} \times 100\% = 2,23\%$$

$$KK_C = \frac{SD_C}{\bar{x}_C} \times 100\% = \frac{0,25}{4,84} \times 100\% = 3,08\%$$

p. Uji Normalitas (Shapiro-Wilk)

$$W_A = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,928$$

$$P\text{-value}_A = 0,223 \quad (P\text{-value} > 0,05 = \text{normal})$$

$$W_C = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,764$$

$$P\text{-value}_C = 0,001 \quad (P\text{-value} < 0,05 = \text{tidak normal})$$

q. Jumlah Ranking (R)

$$\sum R_A = R_1 + R_2 + R_3 + \dots + R_{32} = 27,5 + 14 + 16 + \dots + 27,5 = 382$$

$$\sum R_C = R_1 + R_2 + R_3 + \dots + R_{32} = 4,5 + 9 + 12 + \dots + 8 = 146$$

- r. Nilai Statistik *Mann-Whitney* (karena data tidak terdistribusi normal)

$$U_A = n_1 \times n_2 + \frac{n_1(n_1+1)}{2} - \sum R_A = 16 \times 16 + \frac{16(16+1)}{2} - 382 = 10$$

$$U_C = n_1 \times n_2 + \frac{n_2(n_2+1)}{2} - \sum R_C = 16 \times 16 + \frac{16(16+1)}{2} - 146 = 246$$

- s. Rata-rata Nilai U

$$\mu U = \frac{n_1 \times n_2}{2} = \frac{16 \times 16}{2} = 128$$

- t. Standar Deviasi U

$$\sigma U = \sqrt{\frac{n_1 \times n_2 (n_1 + n_2 + 1)}{12}} = \sqrt{\frac{16 \times 16 (16 + 16 + 1)}{12}} = 26,53$$

- u. Nilai Z-tabel

$$Z\text{-tabel} \left(1 - \frac{0,05}{2}\right) = Z(1 - 0,025) = Z(0,975) = 1,96$$

- v. Nilai Z-hitung

$$|Z \text{ Hitung}| = \frac{U \text{ Terkecil} - \mu U}{\sigma u} = \frac{10 - 128}{26,53} = 4,44$$

- w. TABEL

Tabel Uji Nonparametrik Rendemen Ekstrak (%)

Perlakuan		Jumlah Ranking (R)		Nilai statistik <i>Mann-Whitney</i> (U)		μU	σU	Z-hitung	Z-tabel	Not
A	C	A	C	A	C					
Kirani	<i>Honeydew</i>	382	146	10	246	128	26,53	4,44	1,96	*

(*) berbeda nyata pada taraf 5% ; (ns) tidak berbeda nyata

Lampiran 9. Rendemen

Tabel Rendemen Varietas *Dalmation* dan *Honeydew*

Varietas	Ulangan																total	rata-rata
	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16		
<i>Dalmation</i>	24,27	25,56	25,61	27,05	21,38	24,43	26,30	25,72	22,40	24,00	21,61	21,26	20,19	20,21	26,39	19,95	376,33	23,52
<i>Honeydew</i>	20,38	20,63	21,31	20,21	23,44	20,38	20,13	20,88	20,94	24,83	20,54	20,36	21,84	20,46	22,73	20,59	339,65	21,23
Total	44,65	46,19	46,92	47,26	44,82	44,81	46,43	46,60	43,34	48,83	42,15	41,62	42,03	40,67	49,12	40,54	715,98	22,37
Rata-rata	22,33	23,10	23,46	23,63	22,41	22,41	23,22	23,30	21,67	24,42	21,08	20,81	21,02	20,34	24,56	20,27		

Setiap ulangan terdiri dari 4 buah

Lampiran 9. (Lanjutan)

Perhitungan

a. Derajat Bebas

$$\text{db ulangan} = n - 1 = 16 - 1 = 15$$

$$\text{db total} = 32 - 2 = 30$$

b. Rata-Rata (Mean)

$$\bar{x}_B = \frac{\sum x_1}{n} = \frac{24,27+25,56+25,61+27,05+\dots}{16} = 23,52$$

$$\bar{x}_C = \frac{\sum x_2}{n} = \frac{20,38+20,63+21,31+20,21+\dots}{16} = 21,23$$

c. Jumlah Kuadrat Selisih (*Sum of Square*)

$$SS_B = \sum (x_1 - \bar{x}_B)^2 = (24,27 - 23,52)^2 + (25,56 - 23,52)^2 + \dots = 92,80$$

$$SS_C = \sum (x_2 - \bar{x}_C)^2 = (20,38 - 21,23)^2 + (20,63 - 21,23)^2 + \dots = 26,97$$

d. Ragam atau Varians (S^2)

$$S^2_B = \frac{SS_B}{(n-1)} = \frac{92,80}{16-1} = 6,18$$

$$S^2_C = \frac{SS_C}{(n-1)} = \frac{26,97}{16-1} = 1,79$$

e. Standar Error (SE)

$$SE = \sqrt{\frac{S^2_B}{n} + \frac{S^2_C}{n}} = \sqrt{\frac{6,18}{16} + \frac{1,79}{16}} = 0,70$$

f. Simpangan Baku (SD)

$$SD_B = \sqrt{\frac{\sum (x_1 - \bar{x}_B)^2}{n-1}} = \sqrt{\frac{92,80}{16-1}} = 2,48$$

$$SD_C = \sqrt{\frac{\sum (x_2 - \bar{x}_C)^2}{n-1}} = \sqrt{\frac{26,97}{16-1}} = 1,34$$

g. Koefisien Keragaman (KK)

$$KK_A = \frac{SD_A}{\bar{x}_B} \times 100\% = \frac{2,48}{23,52} \times 100\% = 10,57\%$$

$$KK_C = \frac{SD_C}{\bar{x}_C} \times 100\% = \frac{1,34}{21,23} \times 100\% = 6,31\%$$

h. Uji Normalitas (Shapiro-Wilk)

$$W_A = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - \bar{x}_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,905$$

$$P\text{-value}_A = 0,097 \text{ (P-value} > 0,05 = \text{normal)}$$

$$W_C = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - \bar{x}_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,759$$

$$P\text{-value}_C = 0,01 \text{ (P-value} < 0,05 = \text{tidak normal)}$$

Lampiran 9. Rendemen

Tabel Transformasi $\sqrt[2]{}$ Rendemen Varietas *Dalmation* dan *Honeydew*

Varietas	Ulangan																total	rata-rata
	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16		
<i>Dalmation</i>	4,93	5,06	5,06	5,20	4,62	4,94	5,13	5,07	4,73	4,90	4,65	4,61	4,49	4,50	5,14	4,47	77,49	4,84
<i>Honeydew</i>	4,51	4,54	4,62	4,50	4,84	4,51	4,49	4,57	4,58	4,98	4,53	4,51	4,67	4,52	4,77	4,54	73,69	4,61
Total	9,44	9,60	9,68	9,70	9,47	9,46	9,61	9,64	9,31	9,88	9,18	9,12	9,17	9,02	9,90	9,00	151,18	4,72
Rata-rata	4,72	4,80	4,84	4,85	4,73	4,73	4,81	4,82	4,65	4,94	4,59	4,56	4,58	4,51	4,95	4,50		

Setiap ulangan terdiri dari 4 buah

Lampiran 9. (Lanjutan)

Perhitungan

i. Derajat bebas (db)

$$\text{db ulangan} = n - 1 = 16 - 1 = 15$$

$$\text{db total} = 32 - 2 = 30$$

j. Rata-Rata (Mean)

$$\bar{x}_B = \frac{\sum x_1}{n} = \frac{4,93+5,06+5,06+5,20+\dots}{16} = 4,84$$

$$\bar{x}_C = \frac{\sum x_2}{n} = \frac{4,51+4,54+4,62+4,50+\dots}{16} = 4,61$$

k. Jumlah Kuadrat Selisih (*Sum of Square*)

$$SS_B = \sum (x_1 - \bar{x}_B)^2 = (4,93 - 4,84)^2 + (5,06 - 4,84)^2 + \dots = 1,00$$

$$SS_C = \sum (x_2 - \bar{x}_C)^2 = (4,51 - 4,61)^2 + (4,54 - 4,61)^2 + \dots = 0,30$$

l. Ragam atau Varians (S^2)

$$S^2_B = \frac{SS_B}{(n-1)} = \frac{1,00}{16-1} = 0,06$$

$$S^2_C = \frac{SS_C}{(n-1)} = \frac{0,30}{16-1} = 0,02$$

m. Standar Error (SE)

$$SE = \sqrt{\frac{S^2_B}{n} + \frac{S^2_C}{n}} = \sqrt{\frac{0,06}{16} + \frac{0,002}{16}} = 0,07$$

n. Simpangan Baku (SD)

$$SD_B = \sqrt{\frac{\sum (x_1 - \bar{x}_B)^2}{n-1}} = \sqrt{\frac{1,00}{16-1}} = 0,25$$

$$SD_C = \sqrt{\frac{\sum (x_2 - \bar{x}_C)^2}{n-1}} = \sqrt{\frac{0,30}{16-1}} = 0,14$$

o. Koefisien Keragaman (KK)

$$KK_B = \frac{SDB}{\bar{x}_B} \times 100\% = \frac{0,25}{4,84} \times 100\% = 5,32\%$$

$$KK_C = \frac{SDC}{\bar{x}_C} \times 100\% = \frac{0,14}{4,61} \times 100\% = 3,08\%$$

p. Uji Normalitas (Shapiro-Wilk)

$$W_A = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,901$$

$$P\text{-value}_A = 0,083 \quad (P\text{-value} > 0,05 = \text{normal})$$

$$W_C = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,764$$

$$P\text{-value}_C = 0,001 \quad (P\text{-value} < 0,05 = \text{tidak normal})$$

q. Jumlah Ranking (R)

$$\sum R_A = R_1 + R_2 + R_3 + \dots + R_{32} = 24 + 27 + 28 + \dots + 1 = 327,5$$

$$\sum R_C = R_1 + R_2 + R_3 + \dots + R_{32} = 7,5 + 12 + 16 + \dots + 11 = 200,5$$

- r. Nilai Statistik *Mann-Whitney* (karena data tidak terdistribusi normal)

$$U_A = n_1 \times n_2 + \frac{n_1(n_1+1)}{2} - \sum R_A = 16 \times 16 + \frac{16(16+1)}{2} - 327,5 = 64,5$$

$$U_C = n_1 \times n_2 + \frac{n_2(n_2+1)}{2} - \sum R_C = 16 \times 16 + \frac{16(16+1)}{2} - 200,5 = 191,5$$

- s. Rata-rata Nilai U

$$\mu U = \frac{n_1 \times n_2}{2} = \frac{16 \times 16}{2} = 128$$

- t. Standar Deviasi U

$$\sigma U = \sqrt{\frac{n_1 \times n_2 (n_1 + n_2 + 1)}{12}} = \sqrt{\frac{16 \times 16 (16 + 16 + 1)}{12}} = 26,53$$

- u. Nilai Z-tabel

$$Z\text{-tabel} \left(1 - \frac{0,05}{2}\right) = Z(1 - 0,025) = Z(0,975) = 1,96$$

- v. Nilai Z-hitung

$$|Z \text{ Hitung}| = \frac{U \text{ Terkecil} - \mu U}{\sigma u} = \frac{64,5 - 128}{26,53} = 2,39$$

- w. TABEL

Tabel Uji Nonparametrik Rendemen Ekstrak (%)

Perlakuan		Jumlah Ranking (R)		Nilai statistik		μU	σU	Z- hitung	Z- tabel	Not
				<i>Mann-Whitney</i> (U)						
B	C	B	C	B	C					
<i>Dalmation</i>	<i>Honeydew</i>	327,5	200	64,5	191,5	128	26,53	2,39	1,96	*

(*) berbeda nyata pada taraf 5% ; (ns) tidak berbeda nyata

Lampiran 10. Kandungan Total fenolik

Tabel Total fenolik Varietas Kirani dan *Dalmation*

Varietas	Ulangan																total	rata-rata
	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16		
Kirani	15,71	16,06	15,30	12,57	15,19	11,36	14,19	8,27	8,52	14,76	13,53	12,72	16,44	14,18	17,54	15,10	221,45	13,84
<i>Dalmation</i>	48,13	49,82	47,27	35,67	39,31	37,98	34,77	34,44	32,67	36,33	35,87	41,93	41,25	49,19	45,32	36,65	646,57	40,41
Total	63,84	65,89	62,57	48,24	54,50	49,34	48,96	42,71	41,19	51,08	49,40	54,65	57,69	63,37	62,86	51,75	868,02	27,12
Rata-rata	31,92	32,94	31,28	24,12	27,25	24,67	24,48	21,35	20,59	25,54	24,70	27,32	28,85	31,68	31,43	25,87		

Setiap ulangan terdiri dari 4 buah

Lampiran 10. (Lanjutan)
Perhitungan

- a. Derajat bebas (db)

$$\text{db ulangan} = n - 1 = 16 - 1 = 15$$

$$\text{db total} = 32 - 2 = 30$$

- b. Rata-Rata (Mean)

$$\bar{x}_A = \frac{\sum x_1}{n} = \frac{15,71+16,06+15,30+12,5\ldots}{16} = 13,84$$

$$\bar{x}_B = \frac{\sum x_2}{n} = \frac{48,13+49,82+47,27+35,67+\ldots}{16} = 40,41$$

- c. Jumlah Kuadrat Selisih (*Sum of Square*)

$$SS_A = \sum (x_1 - \bar{x}_A)^2 = (15,71 - 13,84)^2 + (16,06 - 13,84)^2 + \ldots = 103,91$$

$$SS_B = \sum (x_2 - \bar{x}_B)^2 = (48,13 - 40,41)^2 + (49,82 - 40,41)^2 + \ldots = 507,99$$

- d. Ragam atau Varians (S^2)

$$S^2_A = \frac{SSA}{(n-1)} = \frac{103,91}{16-1} = 6,92$$

$$S^2_B = \frac{SSB}{(n-1)} = \frac{507,99}{16-1} = 33,86$$

- e. Standar Error (SE)

$$SE = \sqrt{\frac{S^2_A}{n} + \frac{S^2_B}{n}} = \sqrt{\frac{6,92}{16} + \frac{33,86}{16}} = 1,59$$

- f. Simpangan Baku (SD)

$$SD_A = \sqrt{\frac{\sum (x_1 - \bar{x}_A)}{n-1}} = \sqrt{\frac{103,91}{16-1}} = 2,63$$

$$SD_B = \sqrt{\frac{\sum (x_2 - \bar{x}_B)}{n-1}} = \sqrt{\frac{507,99}{16-1}} = 5,81$$

- g. Koefisien Keragaman (KK)

$$KK_A = \frac{SD_A}{\bar{x}_A} \times 100\% = \frac{2,63}{13,84} \times 100\% = 19,01\%$$

$$KK_B = \frac{SD_B}{\bar{x}_B} \times 100\% = \frac{5,81}{40,41} \times 100\% = 14,40\%$$

- h. Uji Normalitas (Shapiro-Wilk)

$$W_A = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,904$$

$$P\text{-value}_A = 0,093 \text{ (P-value} > 0,05 = \text{normal)}$$

$$W_B = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,899$$

$$P\text{-value}_B = 0,079 \text{ (P-value} > 0,05 = \text{normal)}$$

- i. Uji Homogenitas Varians

$$F\text{-hitung} = \frac{s^2_{\text{Terbesar}}}{s^2_{\text{Terkecil}}} = \frac{33,86}{6,92} = 4,88$$

$$F\text{-tabel taraf } 5\% \text{ dua arah } (0,025; 15; 15) = 2,86209253$$

$$(F\text{-hitung} > F\text{-tabel} = \text{tidak homogen})$$

j. Selisih Varietas ($|A-B|$)

$$|A-B| = \bar{x}A - \bar{x}B = (13,84 - 40,41) = 26,57$$

k. T Hitung

$$T\text{-hitung} = \frac{(|A-B|)}{SE} = \frac{26,57}{1,59} = 16,64$$

l. T-tabel (Normal dan tidak homogen menggunakan db welch)

$$db = \frac{\left(\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}\right)^2}{\frac{\left(\frac{S_1^2}{n_1}\right)^2}{n_1-1} + \frac{\left(\frac{S_2^2}{n_2}\right)^2}{n_2-1}} = \frac{\left(\frac{6,92^2}{16} + \frac{33,86^2}{16}\right)^2}{\frac{(6,92^2)^2}{15} + \frac{(33,86^2)^2}{15}} = 20,895$$

$$T\text{-tabel taraf } 5\% \text{ dua arah } (0,025; 21) = 2,07$$

m. TABEL UJI T

Tabel Uji T Total fenolik Kirani dan *Dalmation* (mg GAE/g ekstrak)

Perlakuan		Total fenolik		A-B	SE	T-hitung	T-tabel	Not
A	B	A	B					
Kirani	<i>Dalmation</i>	13,84	40,41	26,57	1,59	16,64	2,07	*

(*) berbeda nyata pada taraf 5%, (ns) tidak berbeda nyata.

Lampiran 10. Kandungan Total fenolik

Tabel Kandungan Total fenolik Varietas Kirani dan *Honeydew*

Varietas	Ulangan																total	rata-rata
	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16		
Kirani	15,714	16,06	15,30	12,57	15,19	11,36	14,19	8,27	8,52	14,76	13,53	12,72	16,44	14,18	17,54	15,10	221,452	13,84
<i>Honeydew</i>	31,91	35,88	39,45	27,64	13,27	19,61	19,63	11,74	31,52	34,21	16,67	18,91	21,73	14,97	21,07	32,98	391,18	24,45
Total	47,623	51,94	54,75	40,22	28,46	30,97	33,81	20,01	40,04	48,97	30,21	31,63	38,17	29,15	38,61	48,08	612,636	19,145
Rata-rata	23,81	25,97	27,37	20,11	14,23	15,49	16,91	10,01	20,02	24,48	15,10	15,81	19,09	14,58	19,30	24,04		

Setiap ulangan terdiri dari 4 buah

Lampiran 10. (Lanjutan)

Perhitungan

- a. Derajat bebas (db)

$$\text{db ulangan} = n - 1 = 16 - 1 = 15$$

$$\text{db total} = 32 - 2 = 30$$

- b. Rata-Rata (Mean)

$$\bar{x}_A = \frac{\sum x_1}{n} = \frac{15,71+16,06+15,30+12,57+\dots}{16} = 13,84$$

$$\bar{x}_C = \frac{\sum x_2}{n} = \frac{31,91+35,88+39,45+27,64+\dots}{16} = 24,45$$

- c. Jumlah Kuadrat Selisih (
- Sum of Square*
-)

$$SS_A = \sum (x_1 - \bar{x}_A)^2 = (15,71 - 13,84)^2 + (16,06 - 13,84)^2 + \dots = 103,91$$

$$SS_C = \sum (x_2 - \bar{x}_C)^2 = (31,91 - 24,45)^2 + (35,88 - 24,45)^2 + \dots = 1172,60$$

- d. Ragam atau Varians (
- S^2
-)

$$S^2_A = \frac{SS_A}{(n-1)} = \frac{103,91}{16-1} = 6,92$$

$$S^2_C = \frac{SS_C}{(n-1)} = \frac{1172,60}{16-1} = 78,17$$

- e. Standar Error (SE)

$$SE = \sqrt{\frac{S^2_A}{n} + \frac{S^2_C}{n}} = \sqrt{\frac{6,92}{16} + \frac{78,17}{16}} = 2,30$$

- f. Simpangan Baku (SD)

$$SD_A = \sqrt{\frac{\sum (x_1 - \bar{x}_A)^2}{n-1}} = \sqrt{\frac{103,91}{16-1}} = 2,63$$

$$SD_C = \sqrt{\frac{\sum (x_2 - \bar{x}_C)^2}{n-1}} = \sqrt{\frac{1172,60}{16-1}} = 8,84$$

- g. Koefisien Keragaman (KK)

$$KK_A = \frac{SD_A}{\bar{x}_A} \times 100\% = \frac{2,63}{13,84} \times 100\% = 19,00\%$$

$$KK_C = \frac{SD_C}{\bar{x}_C} \times 100\% = \frac{8,84}{24,45} \times 100\% = 36,17\%$$

- h. Uji Normalitas (Shapiro-Wilk)

$$W_A = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,904$$

$$P\text{-value}_A = 0,093 \quad (P\text{-value} > 0,05 = \text{normal})$$

$$W_C = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,930$$

$$P\text{-value}_C = 0,247 \quad (P\text{-value} > 0,05 = \text{normal})$$

- i. Uji Homogenitas Varians

$$F\text{-hitung} = \frac{s^2_{\text{Terbesar}}}{s^2_{\text{Terkecil}}} = \frac{78,17}{6,92} = 11,28$$

$$F\text{-tabel taraf } 5\% \text{ dua arah } (0,025; 15; 15) = 2,86209253$$

$$(F\text{-hitung} > F\text{-tabel} = \text{tidak homogen})$$

j. Selisih Varietas ($|A-C|$)

$$|A-C| = \bar{x}_A - \bar{x}_C = (13,84 - 24,45) = 10,60$$

k. T Hitung

$$T\text{-hitung} = \frac{|A-C|}{SE} = \frac{10,60}{2,30} = 4,59$$

l. T-tabel (Normal dan tidak homogen menggunakan db welch)

$$db = \frac{\left(\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}\right)^2}{\frac{\left(\frac{S_1^2}{n_1}\right)^2}{n_1-1} + \frac{\left(\frac{S_2^2}{n_2}\right)^2}{n_2-1}} = \frac{\left(\frac{6,92^2}{16} + \frac{78,17^2}{16}\right)^2}{\frac{(6,92^2)^2}{15} + \frac{(78,17^2)^2}{15}} = 17,63$$

$$T\text{-tabel taraf } 5\% \text{ dua arah } (0,025; 18) = 2,44$$

m. TABEL UJI T

Tabel Uji T Total fenolik Buah Kirani dan *Honeydew* (mg GAE/g ekstrak)

Perlakuan		Total fenolik		$ A-C $	SE	T-hitung	T-tabel	Not
A	C	A	C					
Kirani	<i>Honeydew</i>	13,84	24,45	10,60	2,30	4,59	2,10	*

(*) berbeda nyata pada taraf 5%, (ns) tidak berbeda nyata.

Lampiran 10. Kandungan Total fenolik

Tabel Kandungan Total fenolik Varietas *Dalmation* dan *Honeydew*

Varietas	Ulangan																total	rata-rata
	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16		
<i>Dalmation</i>	48,134	49,82	47,27	35,67	39,31	37,98	34,77	34,44	32,67	36,33	35,87	41,93	41,25	49,19	45,32	36,65	646,572	40,41
<i>Honeydew</i>	31,91	35,88	39,45	27,64	13,27	19,61	19,63	11,74	31,52	34,21	16,67	18,91	21,73	14,97	21,07	32,98	391,18	24,45
Total	80,043	85,70	86,71	63,31	52,57	57,59	54,40	46,17	64,19	70,54	52,54	60,83	62,98	64,16	66,39	69,62	1037,76	32,43
Rata-rata	40,02	42,85	43,36	31,66	26,29	28,79	27,20	23,09	32,09	35,27	26,27	30,42	31,49	32,08	33,19	34,81		

Setiap ulangan terdiri dari 4 buah

Lampiran 10. (Lanjutan)

Perhitungan

- a. Derajat bebas (db)

$$\text{db ulangan} = n - 1 = 16 - 1 = 15$$

$$\text{db total} = 32 - 2 = 30$$

- b. Rata-Rata (Mean)

$$\bar{x}_B = \frac{\sum x_1}{n} = \frac{48,13+49,82+47,27+35,67\ldots}{16} = 40,41$$

$$\bar{x}_C = \frac{\sum x_2}{n} = \frac{31,91+35,88+39,45+27,64\ldots}{16} = 24,45$$

- c. Jumlah Kuadrat Selisih (
- Sum of Square*
-)

$$SS_B = \sum (x_1 - \bar{x}_B)^2 = (48,13 - 40,41)^2 + (49,82 - 40,41)^2 + \ldots = 507,98$$

$$SS_C = \sum (x_2 - \bar{x}_C)^2 = (31,91 - 24,45)^2 + (35,88 - 24,45)^2 + \ldots = 1172,60$$

- d. Ragam atau Varians (
- S^2
-)

$$S^2_B = \frac{SS_B}{(n-1)} = \frac{507,98}{16-1} = 33,86$$

$$S^2_C = \frac{SS_C}{(n-1)} = \frac{1172,60}{16-1} = 78,17$$

- e. Standar Error (SE)

$$SE = \sqrt{\frac{S^2_B}{n} + \frac{S^2_C}{n}} = \sqrt{\frac{33,86}{16} + \frac{78,18}{16}} = 2,64$$

- f. Simpangan Baku (SD)

$$SD_B = \sqrt{\frac{\sum (x_1 - \bar{x}_B)}{n-1}} = \sqrt{\frac{507,98}{16-1}} = 5,81$$

$$SD_C = \sqrt{\frac{\sum (x_1 - \bar{x}_C)}{n-1}} = \sqrt{\frac{1172,60}{16-1}} = 8,84$$

- g. Koefisien Keragaman (KK)

$$KK_B = \frac{SDB}{\bar{x}_B} \times 100\% = \frac{5,81}{40,41} \times 100\% = 14,40\%$$

$$KK_C = \frac{SDC}{\bar{x}_C} \times 100\% = \frac{8,84}{24,45} \times 100\% = 36,16\%$$

- h. Uji Normalitas (Shapiro-Wilk)

$$W_b = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - \bar{x}_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,899$$

$$P\text{-value}_b = 0,079 \quad (P\text{-value} > 0,05 = \text{normal})$$

$$W_c = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - \bar{x}_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,930$$

$$P\text{-value}_c = 0,247 \quad (P\text{-value} > 0,05 = \text{normal})$$

- i. Uji Homogenitas Varians

$$F\text{-hitung} = \frac{s^2_{\text{Terbesar}}}{s^2_{\text{Terkecil}}} = \frac{78,17}{33,86} = 2,30$$

$$F\text{-tabel taraf } 5\% \text{ dua arah } (0,025; 15; 15) = 2,86209253$$

$$(F\text{-hitung} < F\text{-tabel} = \text{homogen})$$

j. Selisih Varietas ($|A-C|$)
 $|B-C| = \bar{x}B - \bar{x}C = (40,41 - 24,45) = 15,96$

k. T Hitung
 $T\text{-hitung} = \frac{(|A-C|)}{SE} = \frac{15,96}{2,64} = 6,03$

l. T-tabel (Normal dan homogen)

T-tabel taraf 5% dua arah $(0,025;30) = 2,042$

m. TABEL UJI T

Tabel Uji T Total fenolik Varietas *Dalmation* dan *Honeydew* (mg GAE/g ekstrak)

Perlakuan		Total fenolik		$ B-C $	SE	T-hitung	T-tabel	Not
B	C	B	C					
<i>Dalmation</i>	<i>Honeydew</i>	40,41	24,45	15,96	2,64	6,03	2,042	*

(*) berbeda nyata pada taraf 5%, (ns) tidak berbeda nyata.

Lampiran 11. Kandungan Total Flavonoid

Tabel Total Flavonoid Varietas Kirani dan *Dalmation*

Varietas	Ulangan																total	rata-rata
	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16		
Kirani	1,927	2,18	1,83	1,75	2,56	1,81	3,06	1,59	2,23	2,03	2,61	1,08	3,66	3,79	2,98	3,29	38,389	2,40
<i>Dalmation</i>	4,90	3,47	3,94	3,59	4,43	4,39	4,58	4,12	4,02	4,29	6,83	4,75	5,75	6,50	5,83	4,98	76,36	4,77
Total	6,83	5,65	5,77	5,34	6,99	6,21	7,65	5,71	6,26	6,32	9,44	5,82	9,41	10,29	8,81	8,27	114,752	3,586
Rata-rata	3,42	2,83	2,89	2,67	3,50	3,10	3,82	2,85	3,13	3,16	4,72	2,91	4,70	5,15	4,40	4,13		

Setiap ulangan terdiri dari 4 buah

Lampiran 11. (Lanjutan)

Perhitungan

- a. Derajat bebas (db)

$$\text{db ulangan} = n - 1 = 16 - 1 = 15$$

$$\text{db total} = 32 - 2 = 30$$

- b. Rata-Rata (Mean)

$$\bar{x}_A = \frac{\sum x_1}{n} = \frac{1,92+2,18+1,83+1,75+\dots}{16} = 2,40$$

$$\bar{x}_B = \frac{\sum x_2}{n} = \frac{4,90+3,47+3,94+3,59+\dots}{16} = 4,77$$

- c. Jumlah Kuadrat Selisih (
- Sum of Square*
-)

$$SS_A = \sum (x_1 - \bar{x}_A)^2 = (1,92 - 2,40)^2 + (2,18 - 2,40)^2 + \dots = 9,081$$

$$SS_B = \sum (x_2 - \bar{x}_B)^2 = (4,90 - 4,77)^2 + (3,47 - 4,77)^2 + \dots = 14,68$$

- d. Ragam atau Varians (
- S^2
-)

$$S^2_A = \frac{SS_A}{(n-1)} = \frac{9,08}{16-1} = 0,60$$

$$S^2_B = \frac{SS_B}{(n-1)} = \frac{14,68}{16-1} = 0,97$$

- e. Standar Error (SE)

$$SE = \sqrt{\frac{S^2_A}{n} + \frac{S^2_B}{n}} = \sqrt{\frac{0,60}{16} + \frac{0,97}{16}} = 0,31$$

- f. Simpangan Baku (SD)

$$SD_A = \sqrt{\frac{\sum (x_1 - \bar{x}_A)^2}{n-1}} = \sqrt{\frac{9,08}{16-1}} = 0,77$$

$$SD_B = \sqrt{\frac{\sum (x_2 - \bar{x}_B)^2}{n-1}} = \sqrt{\frac{14,68}{16-1}} = 0,98$$

- g. Koefisien Keragaman (KK)

$$KK_A = \frac{SD_A}{\bar{x}_A} \times 100\% = \frac{0,77}{2,40} \times 100\% = 32,43\%$$

$$KK_B = \frac{SD_B}{\bar{x}_B} \times 100\% = \frac{0,98}{4,77} \times 100\% = 20,79\%$$

- h. Uji Normalitas (Shapiro-Wilk)

$$W_A = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,958$$

$$P\text{-value}_A = 0,617 (P\text{-value} > 0,05 = \text{normal})$$

$$W_B = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,923$$

$$P\text{-value}_B = 0,187 (P\text{-value} > 0,05 = \text{normal})$$

- i. Uji Homogenitas Varians

$$F\text{-hitung} = \frac{s^2_{\text{Terbesar}}}{s^2_{\text{Terkecil}}} = \frac{0,97}{0,60} = 1,61$$

$$F\text{-tabel taraf } 5\% \text{ dua arah } (0,025; 15; 15) = 2,86209253$$

$$(F\text{-hitung} < F\text{-tabel} = \text{homogen})$$

- j. Selisih Varietas ($|A-B|$)
 $|A-B| = \bar{x}A - \bar{x}B = (2,39 - 4,77) = 2,37$
- k. T Hitung
 $T\text{-hitung} = \frac{(|A-B|)}{SE} = \frac{2,37}{0,31} = 7,54$
- l. T-tabel (Normal dan homogen)
 T-tabel taraf 5% dua arah ($0,025; 30$) = 2,042
- m. TABEL UJI T

Tabel Uji T Total Flavonoid Kirani dan *Dalmation* (mg QE/g ekstrak)

Perlakuan		Total Flavonoid		$ A-B $	SE	T-hitung	T-tabel	Not
A	B	A	B					
Kirani	<i>Dalmation</i>	2,40	4,77	2,37	0,31	7,54	2,042	*

(*) berbeda nyata pada taraf 5%, (ns) tidak berbeda nyata.

Lampiran 11. Kandungan Total Flavonoid

Tabel Total Flavonoid Varietas Kirani dan *Honeydew*

Varietas	Ulangan																total	rata-rata
	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16		
Kirani	1,927	2,18	1,83	1,75	2,56	1,81	3,06	1,59	2,23	2,03	2,61	1,08	3,66	3,79	2,98	3,29	38,389	2,40
<i>Honeydew</i>	4,85	7,03	5,49	6,50	5,60	3,70	3,65	3,77	5,81	3,86	6,03	6,55	3,76	7,59	4,50	6,18	84,86	5,30
Total	6,777	9,22	7,32	8,25	8,16	5,52	6,71	5,36	8,04	5,89	8,64	7,63	7,42	11,38	7,48	9,47	123,25	3,8515
Rata-rata	3,39	4,61	3,66	4,12	4,08	2,76	3,35	2,68	4,02	2,95	4,32	3,81	3,71	5,69	3,74	4,73		

Setiap ulangan terdiri dari 4 buah

Lampiran 11. (Lanjutan)

Perhitungan

- a. Derajat bebas (db)

$$\text{db ulangan} = n - 1 = 16 - 1 = 15$$

$$\text{db total} = 32 - 2 = 30$$

- b. Rata-Rata (Mean)

$$\bar{x}_A = \frac{\sum x_1}{n} = \frac{1,92+2,18+1,83+1,75+\dots}{16} = 2,40$$

$$\bar{x}_C = \frac{\sum x_2}{n} = \frac{4,85+7,03+5,49+6,50\dots}{16} = 5,30$$

- c. Jumlah Kuadrat Selisih (
- Sum of Square*
-)

$$SS_A = \sum (x_1 - \bar{x}_A)^2 = (1,92 - 2,40)^2 + (2,18 - 2,40)^2 + \dots = 9,08$$

$$SS_C = \sum (x_2 - \bar{x}_C)^2 = (4,85 - 5,30)^2 + (7,03 - 5,30)^2 + \dots = 25,82$$

- d. Ragam atau Varians (
- S^2
-)

$$S^2_A = \frac{SS_A}{(n-1)} = \frac{9,08}{16-1} = 0,60$$

$$S^2_C = \frac{SS_C}{(n-1)} = \frac{25,82}{16-1} = 1,72$$

- e. Standar Error (SE)

$$SE = \sqrt{\frac{S^2_A}{n} + \frac{S^2_C}{n}} = \sqrt{\frac{0,60}{16} + \frac{1,72}{16}} = 0,38$$

- f. Simpangan Baku (SD)

$$SD_A = \sqrt{\frac{\sum (x_1 - \bar{x}_A)^2}{n-1}} = \sqrt{\frac{9,08}{16-1}} = 0,77$$

$$SD_C = \sqrt{\frac{\sum (x_2 - \bar{x}_C)^2}{n-1}} = \sqrt{\frac{25,82}{16-1}} = 1,31$$

- g. Koefisien Keragaman (KK)

$$KK_A = \frac{SD_A}{\bar{x}_A} \times 100\% = \frac{0,77}{2,40} \times 100 = 32,43\%$$

$$KK_C = \frac{SD_C}{\bar{x}_C} \times 100\% = \frac{1,31}{5,30} \times 100 = 24,73\%$$

- h. Uji Normalitas (Shapiro-Wilk)

$$W_A = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,958$$

$$P\text{-value}_A = 0,617 \text{ (P-value} > 0,05 = \text{normal)}$$

$$W_C = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,917$$

$$P\text{-value}_C = 0,153 \text{ (P-value} > 0,05 = \text{normal)}$$

- i. Uji Homogenitas Varians

$$F\text{-hitung} = \frac{s^2_{\text{Terbesar}}}{s^2_{\text{Terkecil}}} = \frac{1,72}{0,60} = 2,84$$

$$F\text{-tabel taraf } 5\% \text{ dua arah } (0,025; 15; 15) = 2,86209253$$

$$(F\text{-hitung} < F\text{-tabel} = \text{homogen})$$

- j. Selisih Varietas ($|A-C|$)
 $|A-C| = \bar{x}A - \bar{x}C = (2,39 - 5,30) = 2,90$
- k. T Hitung

$$T\text{-hitung} = \frac{(|A-C|)}{SE} = \frac{2,90}{0,38} = 7,61$$
- l. T-tabel (Normal dan homogen
Tabel taraf 5% dua arah $(0,025; 30) = 2,042$
- m. TABEL UJI T

Tabel Uji T Total Flavonoid Buah Kirani dan *Honeydew* (mg QE/g ekstrak)

Perlakuan		Total Flavonoid		$ A-C $	SE	T-hitung	T-tabel	Not
A	C	A	C					
Kirani	<i>Honeydew</i>	2,40	5,30	2,90	0,38	7,61	2,042	*

(*) berbeda nyata pada taraf 5%, (ns) tidak berbeda nyata.

Lampiran 11. Kandungan Total Flavonoid

Tabel Total Flavonoid Varietas *Dalmation* dan *Honeydew*

Varietas	Ulangan																total	rata-rata
	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16		
<i>Dalmation</i>	4,90	3,47	3,94	3,59	4,43	4,39	4,58	4,12	4,02	4,29	6,83	4,75	5,75	6,50	5,83	4,98	76,36	4,77
<i>Honeydew</i>	4,85	7,03	5,49	6,50	5,60	3,70	3,65	3,77	5,81	3,86	6,03	6,55	3,76	7,59	4,50	6,18	84,86	5,30
Total	9,75	10,50	9,43	10,08	10,03	8,10	8,23	7,89	9,83	8,15	12,86	11,30	9,51	14,09	10,33	11,15	161,22	5,03
Rata-rata	4,88	5,25	4,71	5,04	5,02	4,05	4,11	3,95	4,92	4,07	6,43	5,65	4,75	7,05	5,16	5,58		

Setiap ulangan terdiri dari 4 buah

Lampiran 11. (Lanjutan)

Perhitungan

- a. Derajat bebas (db)

$$\text{db ulangan} = n - 1 = 16 - 1 = 15$$

$$\text{db total} = 32 - 2 = 30$$

- b. Rata-Rata (Mean)

$$\bar{x}_B = \frac{\sum x_1}{n} = \frac{4,90+3,47+3,94+3,59+\dots}{16} = 4,77$$

$$\bar{x}_C = \frac{\sum x_2}{n} = \frac{4,85+7,03+5,49+6,50+\dots}{16} = 5,30$$

- c. Jumlah Kuadrat Selisih (
- Sum of Square*
-)

$$SS_B = \sum (x_1 - \bar{x}_B)^2 = (4,90 - 4,77)^2 + (3,47 - 4,77)^2 + \dots = 14,58$$

$$SS_C = \sum (x_2 - \bar{x}_C)^2 = (4,85 - 5,30)^2 + (7,03 - 5,30)^2 + \dots = 25,82$$

- d. Ragam atau Varians (
- S^2
-)

$$S^2_B = \frac{SS_B}{(n-1)} = \frac{14,58}{16-1} = 0,97$$

$$S^2_C = \frac{SS_C}{(n-1)} = \frac{25,82}{16-1} = 1,72$$

- e. Standar Error (SE)

$$SE = \sqrt{\frac{S^2_B}{n} + \frac{S^2_C}{n}} = \sqrt{\frac{0,97}{16} + \frac{1,72}{16}} = 0,41$$

- f. Simpangan Baku (SD)

$$SD_B = \sqrt{\frac{\sum (x_1 - \bar{x}_B)^2}{n-1}} = \sqrt{\frac{14,68}{16-1}} = 0,98$$

$$SD_C = \sqrt{\frac{\sum (x_2 - \bar{x}_C)^2}{n-1}} = \sqrt{\frac{25,82}{16-1}} = 1,31$$

- g. Koefisien Keragaman (KK)

$$KK_B = \frac{SDB}{\bar{x}_B} \times 100\% = \frac{0,98}{4,77} \times 100\% = 20,72\%$$

$$KK_C = \frac{SDC}{\bar{x}_C} \times 100\% = \frac{1,31}{5,30} \times 100\% = 24,73\%$$

- h. Uji Normalitas (Shapiro-Wilk)

$$W_b = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - \bar{x}_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,923$$

$$P\text{-value}_b = 0,187 \quad (P\text{-value} > 0,05 = \text{normal})$$

$$W_c = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - \bar{x}_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,917$$

$$P\text{-value}_c = 0,153 \quad (P\text{-value} > 0,05 = \text{normal})$$

- i. Uji Homogenitas Varians

$$F\text{-hitung} = \frac{s^2_{\text{Terbesar}}}{s^2_{\text{Terkecil}}} = \frac{1,72}{0,97} = 1,75$$

$$F\text{-tabel taraf } 5\% \text{ dua arah } (0,025; 15; 15) = 2,86209253$$

$$(F\text{-hitung} < F\text{-tabel} = \text{homogen})$$

j. Selisih Varietas (|B-C|)
 $|B-C| = \bar{x}B - \bar{x}C = (4,77 - 5,30) = 0,53$

k. T Hitung
 $T\text{-hitung} = \frac{(|B-C|)}{SE} = \frac{0,53}{0,41} = 1,29$

l. T-tabel (Normal dan homogen)
 T-tabel taraf 5% dua arah (0,025; 30) = 2,042

m. TABEL UJI T

Tabel Uji T Total Flavonoid Buah *Dalmation* dan *Honeydew* (mg QE/g ekstrak)

Perlakuan		Total Flavonoid		B-C	SE	T-hitung	T-tabel	Not
B	C	B	C					
<i>Dalmation</i>	<i>Honeydew</i>	4,77	5,30	0,53	0,41	1,29	2,042	ns

(*) berbeda nyata pada taraf 5%, (ns) tidak berbeda nyata.

Lampiran 12. Aktivitas Antioksidan

Tabel Aktivitas Antioksidan Varietas Kirani dan *Dalmation*

Varietas	Ulangan																total	rata-rata
	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16		
Kirani	143,17	138,41	136,01	157,61	153,60	144,39	147,66	163,99	168,67	156,90	158,56	151,98	134,21	146,26	131,81	140,47	2373,7	148,36
<i>Dalmation</i>	107,36	100,36	105,51	117,50	111,55	116,89	116,85	119,07	116,06	117,87	118,31	106,55	110,23	104,92	106,38	114,39	1789,80	111,86
Total	250,53	238,77	241,52	275,11	265,15	261,28	264,51	283,06	284,73	274,77	276,87	258,53	244,44	251,18	238,19	254,86	4163,5	130,11
Rata-rata	125,27	119,39	120,76	137,56	132,58	130,64	132,26	141,53	142,37	137,39	138,44	129,27	122,22	125,59	119,10	127,43		

Setiap ulangan terdiri dari 4 buah

Lampiran 12. (Lanjutan)

Perhitungan

- a. Derajat bebas (db)

$$\text{db ulangan} = n - 1 = 16 - 1 = 15$$

$$\text{db total} = 32 - 2 = 30$$

- b. Rata-Rata (Mean)

$$\bar{x}_A = \frac{\sum x_1}{n} = \frac{143,17 + 138,41 + 136,01 + 157,61 \dots}{16} = 148,36$$

$$\bar{x}_B = \frac{\sum x_2}{n} = \frac{107,36 + 100,36 + 105,51 + 117,50 \dots}{16} = 111,86$$

- c. Jumlah Kuadrat Selisih (
- Sum of Square*
-)

$$SS_A = \sum (x_1 - \bar{x}_A)^2 = (143,17 - 148,36)^2 + (138,41 - 148,36)^2 + \dots = 1795,38$$

$$SS_B = \sum (x_2 - \bar{x}_B)^2 = (107,36 - 111,86)^2 + (100,36 - 111,86)^2 + \dots = 537,72$$

- d. Ragam atau Varians (
- S^2
-)

$$S^2_A = \frac{SS_A}{(n-1)} = \frac{1795,38}{16-1} = 119,69$$

$$S^2_B = \frac{SS_B}{(n-1)} = \frac{537,72}{16-1} = 35,84$$

- e. Standar Error (SE)

$$SE = \sqrt{\frac{S^2_A}{n} + \frac{S^2_B}{n}} = \sqrt{\frac{119,69}{16} + \frac{35,84}{16}} = 3,11$$

- f. Simpangan Baku (SD)

$$SD_A = \sqrt{\frac{\sum (x_1 - \bar{x}_A)^2}{n-1}} = \sqrt{\frac{1795,38}{16-1}} = 10,94$$

$$SD_B = \sqrt{\frac{\sum (x_2 - \bar{x}_B)^2}{n-1}} = \sqrt{\frac{537,72}{16-1}} = 5,98$$

- g. Koefisien Keragaman (KK)

$$KK_A = \frac{SD_A}{\bar{x}_A} \times 100\% = \frac{10,94}{148,36} \times 100\% = 7,37\%$$

$$KK_B = \frac{SD_B}{\bar{x}_B} \times 100\% = \frac{5,98}{111,86} \times 100\% = 5,35\%$$

- h. Uji Normalitas (Shapiro-Wilk)

$$W_A = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,971$$

$$P\text{-value}_A = 0,851 \text{ (} P\text{-value} > 0,05 = \text{normal)}$$

$$W_B = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,899$$

$$P\text{-value}_B = 0,078 \text{ (} P\text{-value} > 0,05 = \text{normal)}$$

- i. Uji Homogenitas Varians

$$F\text{-hitung} = \frac{s^2_{\text{Terbesar}}}{s^2_{\text{Terkecil}}} = \frac{119,69}{35,84} = 3,33$$

$$F\text{-tabel taraf } 5\% \text{ dua arah } (0,025; 15; 15) = 2,86209253$$

$$(F\text{-hitung} > F\text{-tabel} = \text{tidak homogen})$$

j. Selisih Varietas ($|A-B|$)

$$|A-B| = \bar{x}A - \bar{x}B = (148,36 - 111,86) = 36,49$$

k. T Hitung

$$T\text{-hitung} = \frac{(|A-B|)}{SE} = \frac{36,49}{3,11} = 11,70$$

l. T-tabel (Normal dan tidak homogen menggunakan db welch)

$$db = \frac{\left(\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}\right)^2}{\frac{\left(\frac{S_1^2}{n_1}\right)^2}{n_1-1} + \frac{\left(\frac{S_2^2}{n_2}\right)^2}{n_2-1}} = \frac{\left(\frac{10,94^2}{16} + \frac{5,98^2}{16}\right)^2}{\frac{(10,94^2)^2}{15} + \frac{(5,98^2)^2}{15}} = 23,24$$

$$T\text{-tabel taraf } 5\% \text{ dua arah } (0,025; 23) = 2,069$$

m. TABEL UJI T

Tabel Uji T Aktivitas Antioksidan Kirani dan *Dalmation* ($\mu\text{g/ml}$)

Perlakuan		Aktivitas Antioksidan		$ A-B $	SE	T-hitung	T-tabel	Not
A	B	A	B					
Kirani	<i>Dalmation</i>	148,36	111,86	36,49	3,11	11,70	2,069	*

(*) berbeda nyata pada taraf 5%, (ns) tidak berbeda nyata.

Lampiran 12. Aktivitas Antioksidan

Tabel Aktivitas Antioksidan Varietas Kirani dan *Honeydew*

Varietas	Ulangan																total	rata-rata
	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16		
Kirani	143,17	138,41	136,01	157,61	153,60	144,39	147,66	163,99	168,67	156,90	158,56	151,98	134,21	146,26	131,81	140,47	2373,7	148,36
<i>Honeydew</i>	117,28	115,72	113,98	120,24	138,54	125,06	128,12	138,75	114,04	117,90	129,33	126,20	117,74	130,72	119,97	107,66	1961,25	122,58
Total	260,45	254,13	249,99	277,85	292,14	269,45	275,78	302,74	282,71	274,80	287,89	278,18	251,95	276,98	251,78	248,13	4334,95	135,47
Rata-rata	130,23	127,07	125,00	138,93	146,07	134,73	137,89	151,37	141,36	137,40	143,95	139,09	125,98	138,49	125,89	124,07		

Setiap ulangan terdiri dari 4 buah

Lampiran 12. (Lanjutan)

Perhitungan

- a. Derajat bebas (db)

$$\text{db ulangan} = n - 1 = 16 - 1 = 15$$

$$\text{db total} = 32 - 2 = 30$$

- b. Rata-Rata (Mean)

$$\bar{x}_A = \frac{\sum x_1}{n} = \frac{143,17 + 138,41 + 136,01 + 157,61 + \dots}{16} = 148,36$$

$$\bar{x}_C = \frac{\sum x_2}{n} = \frac{117,28 + 115,72 + 113,98 + 120,24 + \dots}{16} = 122,58$$

- c. Jumlah Kuadrat Selisih (
- Sum of Square*
-)

$$SS_A = \sum (x_1 - \bar{x}_A)^2 = (143,17 - 148,36)^2 + (138,41 - 148,36)^2 + \dots = 1795,38$$

$$SS_C = \sum (x_2 - \bar{x}_C)^2 = (117,28 - 122,58)^2 + (115,72 - 122,58)^2 + \dots = 1180,22$$

- d. Ragam atau Varians (
- S^2
-)

$$S^2_A = \frac{SS_A}{(n-1)} = \frac{1795,38}{16-1} = 119,69$$

$$S^2_C = \frac{SS_C}{(n-1)} = \frac{1180,22}{16-1} = 78,68$$

- e. Standar Error (SE)

$$SE = \sqrt{\frac{S^2_A}{n} + \frac{S^2_C}{n}} = \sqrt{\frac{119,69}{16} + \frac{78,68}{16}} = 3,52$$

- f. Simpangan Baku (SD)

$$SD_A = \sqrt{\frac{\sum (x_1 - \bar{x}_A)^2}{n-1}} = \sqrt{\frac{1795,38}{16-1}} = 10,94$$

$$SD_C = \sqrt{\frac{\sum (x_2 - \bar{x}_C)^2}{n-1}} = \sqrt{\frac{1180,22}{16-1}} = 8,87$$

- g. Koefisien Keragaman (KK)

$$KK_A = \frac{SD_A}{\bar{x}_A} \times 100\% = \frac{10,94}{148,36} \times 100 = 7,37\%$$

$$KK_C = \frac{SD_C}{\bar{x}_C} \times 100\% = \frac{8,87}{122,58} \times 100 = 7,23\%$$

- h. Uji Normalitas (Shapiro-Wilk)

$$W_A = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,971$$

$$P\text{-value}_A = 0,851 \quad (P\text{-value} > 0,05 = \text{normal})$$

$$W_C = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - x_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,951$$

$$P\text{-value}_C = 0,500 \quad (P\text{-value} > 0,05 = \text{normal})$$

- i. Uji Homogenitas Varians

$$F\text{-hitung} = \frac{s^2_{\text{Terbesar}}}{s^2_{\text{Terkecil}}} = \frac{119,69}{78,68} = 1,52$$

$$F\text{-tabel taraf } 5\% \text{ dua arah } (0,025; 15; 15) = 2,86209253$$

$$(F\text{-hitung} < F\text{-tabel} = \text{homogen})$$

j. Selisih Varietas ($|A-C|$)
 $|A-C| = \bar{x}A - \bar{x}C = (148,36 - 122,58) = 25,78$

k. T Hitung
 $T\text{-hitung} = \frac{(|A-C|)}{SE} = \frac{25,78}{3,52} = 7,32$

l. T-tabel (Normal dan homogen)
 Tabel taraf 5% dua arah $(0,025; 30) = 2,042$

m. TABEL UJI T

Tabel Uji T Aktivitas Antioksidan Kirani dan *Honeydew* ($\mu\text{g/ml}$)

Perlakuan		Aktivitas Antioksidan		$ A-C $	SE	T-hitung	T-tabel	Not
A	C	A	C					
Kirani	<i>Honeydew</i>	148,36	122,58	25,78	3,52	7,32	2,042	*

(*) berbeda nyata pada taraf 5%, (ns) tidak berbeda nyata.

Lampiran 12. Aktivitas Antioksidan

Tabel Aktivitas Antioksidan Varietas *Dalmation* dan *Honeydew*

Varietas	Ulangan																total	rata-rata
	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16		
<i>Dalmation</i>	107,36	100,36	105,51	117,50	111,55	116,89	116,85	119,07	116,06	117,87	118,31	106,55	110,23	104,92	106,38	114,39	1789,8	111,86
<i>Honeydew</i>	117,28	115,72	113,98	120,24	138,54	125,06	128,12	138,75	114,04	117,90	129,33	126,20	117,74	130,72	119,97	107,66	1961,25	122,58
Total	224,64	216,08	219,49	237,74	250,09	241,95	244,97	257,82	230,10	235,77	247,64	232,75	227,97	235,64	226,35	222,05	3751,05	117,22
Rata-rata	112,32	108,04	109,75	118,87	125,05	120,98	122,49	128,91	115,05	117,89	123,82	116,38	113,99	117,82	113,18	111,03		

Setiap ulangan terdiri dari 4 buah

Lampiran 12. (Lanjutan)

Perhitungan

- a. Derajat bebas (db)

$$\text{db ulangan} = n - 1 = 16 - 1 = 15$$

$$\text{db total} = 32 - 2 = 30$$

- b. Rata-Rata (Mean)

$$\bar{x}_B = \frac{\sum x_1}{n} = \frac{107,36 + 100,36 + 105,51 + 117,50 \dots}{16} = 111,86$$

$$\bar{x}_C = \frac{\sum x_2}{n} = \frac{117,28 + 115,72 + 113,98 + 120,24 \dots}{16} = 122,58$$

- c. Jumlah Kuadrat Selisih (
- Sum of Square*
-)

$$SS_B = \sum (x_1 - \bar{x}_B)^2 = (107,36 - 111,86)^2 + (100,36 - 111,86)^2 + \dots = 537,72$$

$$SS_C = \sum (x_2 - \bar{x}_C)^2 = (117,28 - 122,58)^2 + (115,72 - 122,58)^2 + \dots = 1180,22$$

- d. Ragam atau Varians (
- S^2
-)

$$S^2_B = \frac{SS_B}{(n-1)} = \frac{537,72}{16-1} = 35,85$$

$$S^2_C = \frac{SS_C}{(n-1)} = \frac{1180,22}{16-1} = 78,68$$

- e. Standar Error (SE)

$$SE = \sqrt{\frac{S^2_B}{n} + \frac{S^2_C}{n}} = \sqrt{\frac{35,85}{16} + \frac{78,68}{16}} = 2,67$$

- f. Simpangan Baku (SD)

$$SD_B = \sqrt{\frac{\sum (x_1 - \bar{x}_B)^2}{n-1}} = \sqrt{\frac{537,72}{16-1}} = 5,98$$

$$SD_C = \sqrt{\frac{\sum (x_2 - \bar{x}_C)^2}{n-1}} = \sqrt{\frac{1180,22}{16-1}} = 8,87$$

- g. Koefisien Keragaman (KK)

$$KK_B = \frac{SD_B}{\bar{x}_B} \times 100\% = \frac{5,98}{111,86} \times 100\% = 5,35\%$$

$$KK_C = \frac{SD_C}{\bar{x}_C} \times 100\% = \frac{8,87}{122,58} \times 100\% = 7,23\%$$

- h. Uji Normalitas (Shapiro-Wilk)

$$W_b = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - \bar{x}_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,899$$

$$P\text{-value}_b = 0,851 \quad (P\text{-value} > 0,05 = \text{normal})$$

$$W_c = \frac{(\sum_{i=1}^k a_i (X_{n-i+1} - \bar{x}_i))^2}{\sum_{i=1}^k (X_i - \bar{x})^2} = 0,951$$

$$P\text{-value}_c = 0,500 \quad (P\text{-value} > 0,05 = \text{normal})$$

- i. Uji Homogenitas Varians

$$F\text{-hitung} = \frac{s^2_{\text{Terbesar}}}{s^2_{\text{Terkecil}}} = \frac{35,84}{78,68} = 2,19$$

$$F\text{-tabel taraf } 5\% \text{ dua arah } (0,025; 15; 15) = 2,86209253$$

$$(F\text{-hitung} < F\text{-tabel} = \text{homogen})$$

j. Selisih Varietas ($|B-C|$)
 $|B-C| = \bar{x}B - \bar{x}C = (111,86 - 122,58) = 10,72$

k. T Hitung
 $T\text{-hitung} = \frac{(|B-C|)}{SE} = \frac{10,72}{2,67} = 4,00$

l. T-tabel (Normal dan homogen)

T-tabel taraf 5% dua arah $(0,025;30) = 2,042$

m. TABEL UJI T

Tabel Uji T Aktivitas Antioksidan Buah *Dalmation* dan *Honeydew* ($\mu\text{g/ml}$)

Perlakuan		Aktivitas Antioksidan		$ B-C $	SE	T-hitung	T-tabel	Not
B	C	B	C					
<i>Dalmation</i>	<i>Honeydew</i>	111,86	122,58	10,72	2,67	4,00	2,042	*

(*) berbeda nyata pada taraf 5%, (ns) tidak berbeda nyata.

Lampiran 13. Dokumentasi Penelitian



Pengambilan
Sampel



Pengamatan Bentuk
Daun



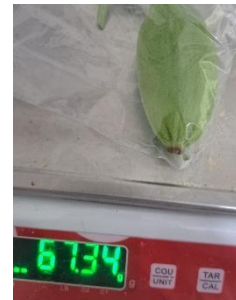
Pengamatan Warna Kulit
Buah



Pengamatan Warna
Daging Buah



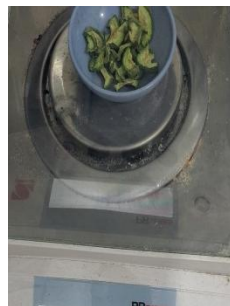
Pengukuran Panjang dan
Lebar



Pengukuran Bobot Buah



Pengeringan Sampel
dengan *Dryer*



Penimbangan Sampel
Kering



Penghalusan Sampel

Lampiran 13. Lanjutan



Perendaman Sampel
dengan Etanol 70%



Penyaringan Sampel



Penguapan Sampel



Pembuatan Ekstrak
Kental



Penimbangan Ekstrak
Kental



Penimbangan bahan-
bahan untuk pengujian
Total fenolik, Total
Flavonoid, dan Aktivitas
Antioksidan



Pembuatan larutan
untuk pengujian Total
fenolik dan Total
Flavonoid



Pembuatan larutan untuk
pengujian aktivitas
antioksidan



Pengujian *Total fenolik*,
Total Flavonoid, dan
Aktivitas Antioksidan
dengan Spektrofotometer

RIWAYAT HIDUP



Penulis bernama lengkap Amarilis Karina Putri, lahir di Wonosobo, 20 Juli 2004. Penulis menyelesaikan pendidikan Sekolah Dasar di SDN 1 Kaliwiro, Wonosobo lulus 2016, Sekolah Menengah Pertama di SMPN 1 Kaliwiro, Wonosobo lulus 2019, dan Sekolah Menengah Atas di SMAN 1 Banjarnegara lulus 2022.

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