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## LAMPIRAN

### LAMPIRAN 1

#### PERSIAPAN BAHAN



**Formulasi 3 (15 gr)**



**Penimbangan hasil agar-agar daun kelor**



## LAMPIRAN 2 HASIL LABORATORIUM



LABORATORIUM KIMIA PAKAN JURUSAN  
NUTRISI DAN MAKANAN TERNAK  
FAKULTAS PETERNAKAN  
UNIVERSITAS HASANUDDIN

### HASIL ANALISIS BAHAN

No	Kode Sampel	Protein Kasar	Calcium (mg)	Zat Besi (mg/Kg)
1	Formula 1	21	510	7,6
2	Formula 2	44	530	12,3
3	Formula 3	51	590	20,45

No	Kode Sampel	Karbohidrat (g)	Vitamin C (mg)	Lemak Total (g)
4	Formula 1	115	10	21
5	Formula 2	121	22	37
6	Formula 3	130	23,4	45

Makassar, 17 Mei  
2024 Analisis,

Muhammad Syahrul  
Nip. 19790603 2001 12 1 001



### LAMPIRAN 3

### Dokumentasi Penelitian





#### LAMPIRAN 4

#### Proses Pengujian Organoleptik Oleh Panelis/Sampel





## LAMPIRAN 5 SURAT KETERANGAN BEBAS PENELITIAN



**LABORATORIUM BIOTEKNOLOGI TERPADU PETERNAKAN  
FAKULTAS PETERNAKAN  
UNIVERSITAS HASANUDDIN**

Alamat: Jl. Perintis Kemerdekaan KM. 10 Tamalanrea, Makassar 90245  
Email: [lab\\_bioternak@unhas.ac.id](mailto:lab_bioternak@unhas.ac.id) Telp. +6281241981874

**SURAT KETERANGAN**

No. 131/LKP/VIII/2024

Yang bertanda tangan di bawah ini menyatakan

Nama : Aurelya Yulyanti Sudarmanto, S.Pt., M.Si

NIK : 19990728 202101 6 001

Jabatan : Laboran Kimia Pakan Fakultas Peternakan Universitas Hasanuddin

Menerangkan bahwa

Nama : Amalia Rezki Ananda

NIM : J012222008

Program Studi : Fakultas Kedokteran Gigi (Program Magister)

Benar telah melakukan pengambilan data penelitian di Laboratorium Kimia Pakan Fakultas Peternakan Universitas Hasanuddin.

Demikian surat keterangan ini dibuat untuk dipergunakan seperlunya

Makassar, 1 Agustus 2024

Laboran Kimia Pakan

Aurelya Yulyanti Sudarmanto, S.Pt., M.Si

NIK. 19990728 202101 6 001

## LAMPIRAN 6 SURAT REKOMENDASI ETIK



KEMENTERIAN PENDIDIKAN, KEBUDAYAAN, RISET, DAN TEKNOLOGI  
 UNIVERSITAS HASANUDDIN  
 FAKULTAS KEDOKTERAN GIGI  
 RUMAH SAKIT GIGI DAN MULUT PENDIDIKAN  
 KOMITE ETIK PENELITIAN KESEHATAN  
 Sekretariat : JL.Kandea No. 5 Makassar Lantai 2, Gedung Lama RSGM Unhas  
 Contact Person: drg. Muhammad Ikbal, Sp.Pros/Nur Aedah AR TELP. 081342971011/08114919191



### REKOMENDASI PERSETUJUAN ETIK

Nomor: 0109/PL.09/KEPK FKG-RSGM UNHAS/2024

Tanggal: 14 Mei 2024

Dengan ini menyatakan bahwa protokol dan dokumen yang berhubungan dengan protokol berikut ini telah mendapatkan persetujuan etik:

No. Protokol	UH 17121119	No Protokol Sponsor	
Peneliti Utama	Amalia Rezki Amanda	Sponsor	Pribadi
Judul Peneliti	Uji Laboratorium Dan Organoleptik Daun Kelor (Moringa Olifera) Olahan Agar-Agar Sebagai Perbaikan Gizi Pada Anak Sekolah Dasar Sdn 49 Sompong		
No. Versi Protokol	1	Tanggal Versi	6 Mei 2024
No. Versi Protokol		Tanggal Versi	
Tempat Penelitian	Laboratorium Kimia Pakan Jurusan Nutrisi dan Makanan Ternak Fakultas Peternakan dan SDN 49 Sompong Kec. Tellulimpo, Kab. Sinjai		
Dokumen Lain			
Jenis Review	<input type="checkbox"/> Exempted <input checked="" type="checkbox"/> Expedited <input type="checkbox"/> Fullboard	Masa Berlaku 14 Mei 2024 - 14 Mei 2025	Frekuensi Review Lanjutan
Ketua Komisi Etik Penelitian	Nama: Dr. drg. Marhamah, M.Kes	Tanda Tangan 	Tanggal 14 Mei 2024
Sekretaris Komisi Etik Penelitian	Nama: drg. Muhammad Ikbal, Sp.Pros	Tanda Tangan 	Tanggal 14 Mei 2024

#### Kewajiban peneliti utama:

- Menyerahkan Amandemen Protokol untuk persetujuan sebelum diimplementasikan
- Menyerahkan laporan SAE ke Komisi Etik dalam 24 Jam dan dilengkapi dalam 7 hari dan lapor SUSAR dalam 72 jam setelah peneliti utama menerima laporan.
- Menyerahkan laporan kemajuan (*progress report*) setiap 6 bulan untuk penelitian resiko tinggi dan setiap setahun untuk penelitian resiko rendah.
- Menyerahkan laporan akhir setelah penelitian berakhir.
- Melaporkan penyimpangan dari protokol yang disetujui (*protocol deviation/violation*)
- Mematuhi semua aturan yang berlaku.

## LAMPIRAN 7

### Hasil SPSS

```

UNIANOVA WARNA BY FREK
  /METHOD=SSTYPE(3)
  /INTERCEPT=INCLUDE
  /POSTHOC=FREK(DUNCAN)
  /PLOT=PROFILE(FREK) TYPE=LINE ERRORBAR=NO MEANREFERENCE=NO YAXIS=AUTO
  /PRINT DESCRIPTIVE HOMOGENEITY
  /CRITERIA=ALPHA(.05)
  /DESIGN=FREK.
  
```

### Univariate Analysis of Variance

Notes		
Output Created		23-MAY-2024 15:17:25
Comments		
Input	Active Dataset	DataSet9
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	87
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		UNIANOVA WARNA BY FREK /METHOD=SSTYPE(3) /INTERCEPT=INCLUDE /POSTHOC=FREK(DUNCAN) /PLOT=PROFILE(FREK) TYPE=LINE ERRORBAR=NO MEANREFERENCE=NO YAXIS=AUTO /PRINT DESCRIPTIVE HOMOGENEITY /CRITERIA=ALPHA(.05) /DESIGN=FREK.
Resources	Processor Time	00:00:00.05
	Elapsed Time	00:00:00.09

### Between-Subjects Factors

---

N

FREK	F1	29
	F2	29
	F3	29

### Descriptive Statistics

Dependent Variable: WARNA

FREK	Mean	Std. Deviation	N
F1	3.3448	.93640	29
F2	4.1724	.75918	29
F3	2.2759	1.09859	29
Total	3.2644	1.21483	87

### Levene's Test of Equality of Error Variances<sup>a,b</sup>

		Levene Statistic	df1	df2	Sig.
WARNA	Based on Mean	2.077	2	84	.132
	Based on Median	1.187	2	84	.310
	Based on Median and with adjusted df	1.187	2	75.896	.311
	Based on trimmed mean	1.517	2	84	.225

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Dependent variable: WARNA

b. Design: Intercept + FREK

### Tests of Between-Subjects Effects

Dependent Variable: WARNA

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	52.437 <sup>a</sup>	2	26.218	29.569	.000
Intercept	927.080	1	927.080	1045.541	.000
FREK	52.437	2	26.218	29.569	.000
Error	74.483	84	.887		
Total	1054.000	87			
Corrected Total	126.920	86			

a. R Squared = .413 (Adjusted R Squared = .399)

### Post Hoc Tests

# FREK

## Homogeneous Subsets

### WARNA

Duncan<sup>a,b</sup>

FREK	N	Subset		
		1	2	3
F3	29	2.2759		
F1	29		3.3448	
F2	29			4.1724
Sig.		1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

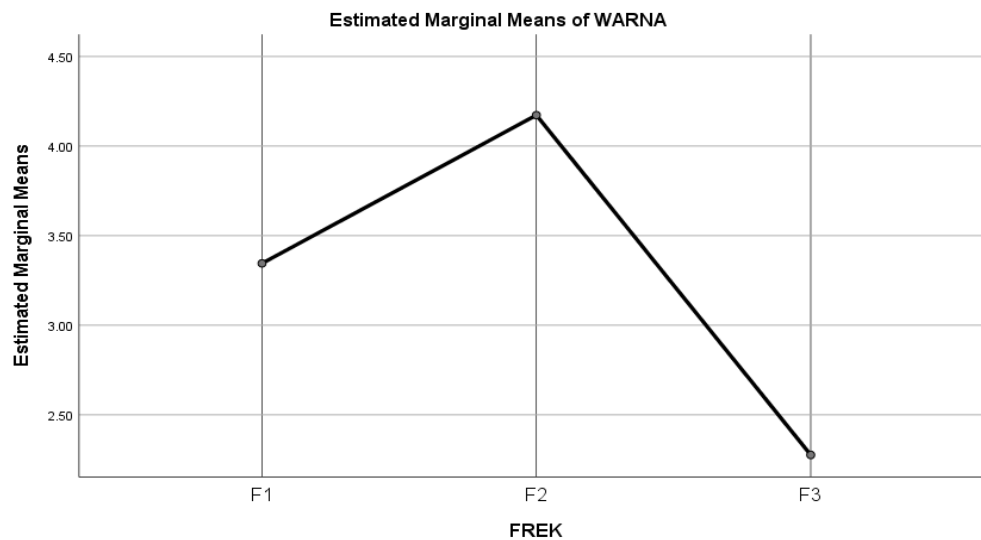
Based on observed means.

The error term is Mean Square(Error) = .887.

a. Uses Harmonic Mean Sample Size = 29.000.

b. Alpha = .05.

## Profile Plots



```
UNIANOVA AROMA BY FREK
  /METHOD=SSTYPE(3)
  /INTERCEPT=INCLUDE
  /POSTHOC=FREK(DUNCAN)
  /PLOT=PROFILE(FREK) TYPE=LINE ERRORBAR=NO MEANREFERENCE=NO YAXIS=AUTO
  /PRINT DESCRIPTIVE HOMOGENEITY
  /CRITERIA=ALPHA(.05)
  /DESIGN=FREK.
```



## Univariate Analysis of Variance

### Notes

Output Created	23-MAY-2024 15:17:32	
Comments		
Input	Active Dataset	DataSet9
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	87
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax	UNIANOVA AROMA BY FREK /METHOD=SSTYPE(3) /INTERCEPT=INCLUDE /POSTHOC=FREK(DUNCAN) /PLOT=PROFILE(FREK) TYPE=LINE ERRORBAR=NO MEANREFERENCE=NO YAXIS=AUTO /PRINT DESCRIPTIVE HOMOGENEITY /CRITERIA=ALPHA(.05) /DESIGN=FREK.	
Resources	Processor Time	00:00:00.08
	Elapsed Time	00:00:00.10

### Between-Subjects Factors

		N
FREK	F1	29
	F2	29
	F3	29

### Descriptive Statistics

Dependent Variable: AROMA

FREK	Mean	Std. Deviation	N
F1	3.5172	1.29892	29
F2	3.3793	1.29322	29
F3	2.1724	1.19729	29
Total	3.0230	1.38914	87

### Levene's Test of Equality of Error Variances<sup>a,b</sup>

		Levene Statistic	df1	df2	Sig.
AROMA	Based on Mean	.413	2	84	.663
	Based on Median	.278	2	84	.758
	Based on Median and with adjusted df	.278	2	82.505	.758
	Based on trimmed mean	.594	2	84	.555

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Dependent variable: AROMA

b. Design: Intercept + FREK

### Tests of Between-Subjects Effects

Dependent Variable: AROMA

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	31.747 <sup>a</sup>	2	15.874	9.935	.000
Intercept	795.046	1	795.046	497.619	.000
FREK	31.747	2	15.874	9.935	.000
Error	134.207	84	1.598		
Total	961.000	87			
Corrected Total	165.954	86			

a. R Squared = .191 (Adjusted R Squared = .172)

### Post Hoc Tests

#### FREK

#### Homogeneous Subsets

##### AROMA

Duncan<sup>a,b</sup>

FREK	N	Subset
------	---	--------

		1	2
F3	29	2.1724	
F2	29		3.3793
F1	29		3.5172
Sig.		1.000	.679

Means for groups in homogeneous subsets are displayed.

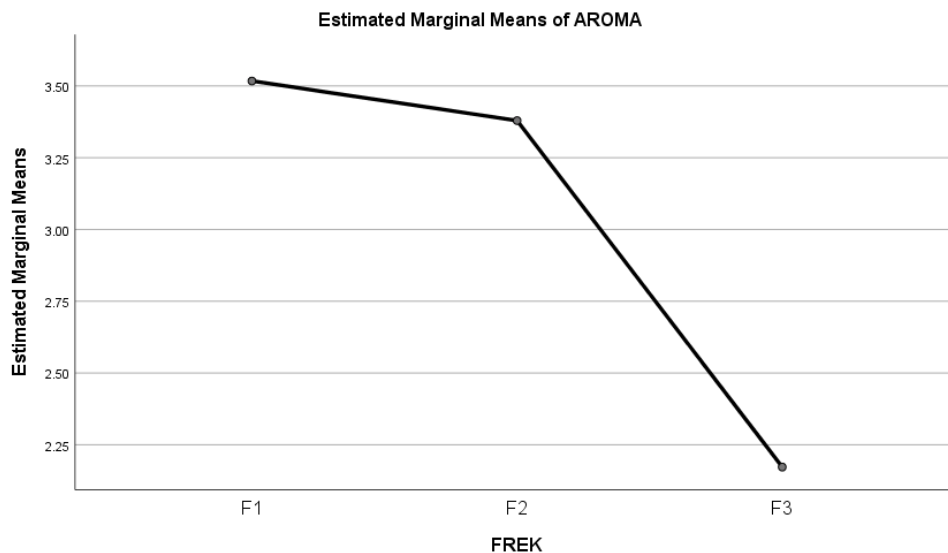
Based on observed means.

The error term is Mean Square(Error) = 1.598.

a. Uses Harmonic Mean Sample Size = 29.000.

b. Alpha = .05.

## Profile Plots



```

UNIANOVA RASA BY FREK
  /METHOD=SSTYPE (3)
  /INTERCEPT=INCLUDE
  /POSTHOC=FREK (DUNCAN)
  /PLOT=PROFILE (FREK) TYPE=LINE ERRORBAR=NO MEANREFERENCE=NO YAXIS=AUTO
  /PRINT DESCRIPTIVE HOMOGENEITY
  /CRITERIA=ALPHA (.05)
  /DESIGN=FREK.

```

## Univariate Analysis of Variance

### Notes

Output Created	23-MAY-2024 15:17:40
Comments	
Input	Active Dataset DataSet9

	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	87
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		UNIANOVA RASA BY FREK /METHOD=SSTYPE(3) /INTERCEPT=INCLUDE /POSTHOC=FREK(DUNCAN) /PLOT=PROFILE(FREK) TYPE=LINE ERRORBAR=NO MEANREFERENCE=NO YAXIS=AUTO /PRINT DESCRIPTIVE HOMOGENEITY /CRITERIA=ALPHA(.05) /DESIGN=FREK.
Resources	Processor Time	00:00:00.05
	Elapsed Time	00:00:00.10

### Between-Subjects Factors

		N
FREK	F1	29
	F2	29
	F3	29

### Descriptive Statistics

Dependent Variable: RASA

FREK	Mean	Std. Deviation	N
F1	3.4483	1.27016	29
F2	3.3103	1.13715	29
F3	2.7931	1.34641	29
Total	3.1839	1.27159	87

### Levene's Test of Equality of Error Variances<sup>a,b</sup>

		Levene Statistic	df1	df2	Sig.
RASA	Based on Mean	.747	2	84	.477
	Based on Median	.659	2	84	.520
	Based on Median and with adjusted df	.659	2	82.225	.520
	Based on trimmed mean	.722	2	84	.489

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Dependent variable: RASA

b. Design: Intercept + FREK

### Tests of Between-Subjects Effects

Dependent Variable: RASA

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	6.920 <sup>a</sup>	2	3.460	2.199	.117
Intercept	881.943	1	881.943	560.650	.000
FREK	6.920	2	3.460	2.199	.117
Error	132.138	84	1.573		
Total	1021.000	87			
Corrected Total	139.057	86			

a. R Squared = .050 (Adjusted R Squared = .027)

## Post Hoc Tests

### FREK

### Homogeneous Subsets

RASA		
Duncan <sup>a,b</sup>		
FREK	N	Subset
		1
F3	29	2.7931
F2	29	3.3103
F1	29	3.4483
Sig.		.063

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean

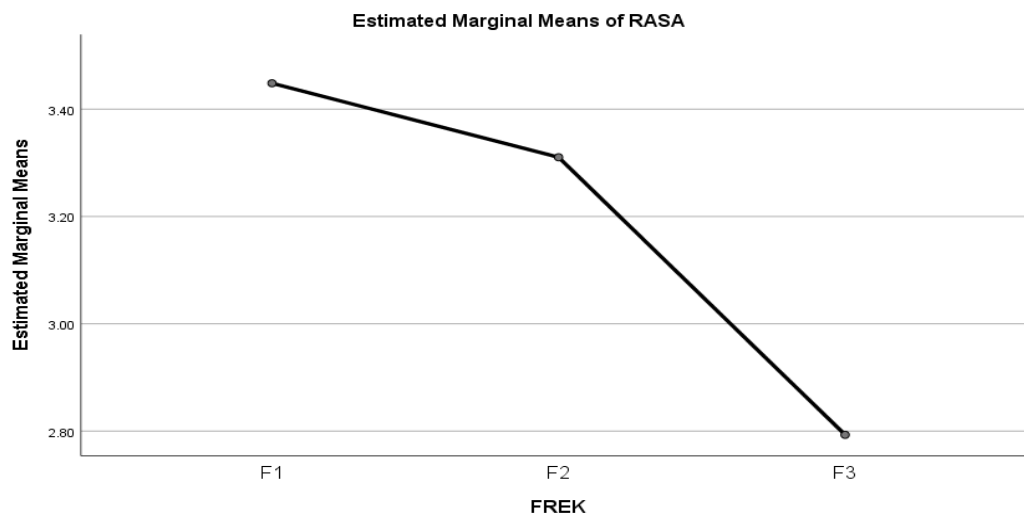
Square(Error) = 1.573.

a. Uses Harmonic Mean Sample

Size = 29.000.

b. Alpha = .05.

## Profile Plots



```
UNIANOVA TEKSTUR BY FREK
  /METHOD=SSTYPE(3)
  /INTERCEPT=INCLUDE
  /POSTHOC=FREK(DUNCAN)
  /PLOT=PROFILE(FREK) TYPE=LINE ERRORBAR=NO MEANREFERENCE=NO YAXIS=AUTO
  /PRINT DESCRIPTIVE HOMOGENEITY
  /CRITERIA=ALPHA(.05)
  /DESIGN=FREK.
```

## Univariate Analysis of Variance

### Notes

Output Created	23-MAY-2024 15:17:52	
Comments		
Input	Active Dataset	DataSet9
	Filter	<none>
	Weight	<none>
	Split File	<none>

	N of Rows in Working Data File	87
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		UNIANOVA TEKSTUR BY FREK /METHOD=SSTYPE(3) /INTERCEPT=INCLUDE /POSTHOC=FREK(DUNCAN) /PLOT=PROFILE(FREK) TYPE=LINE ERRORBAR=NO MEANREFERENCE=NO YAXIS=AUTO /PRINT DESCRIPTIVE HOMOGENEITY /CRITERIA=ALPHA(.05) /DESIGN=FREK.
Resources	Processor Time	00:00:00.05
	Elapsed Time	00:00:00.10

### Between-Subjects Factors

		N
FREK	F1	29
	F2	29
	F3	29

### Descriptive Statistics

Dependent Variable: TEKSTUR

FREK	Mean	Std. Deviation	N
F1	3.6552	1.11085	29
F2	3.0000	1.30931	29
F3	1.4828	.78471	29
Total	2.7126	1.41346	87

### Levene's Test of Equality of Error Variances<sup>a,b</sup>

		Levene Statistic	df1	df2	Sig.
TEKSTUR	Based on Mean	4.523	2	84	.014
	Based on Median	4.598	2	84	.013
	Based on Median and with adjusted df	4.598	2	80.576	.013
	Based on trimmed mean	4.711	2	84	.012

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Dependent variable: TEKSTUR

b. Design: Intercept + FREK

### Tests of Between-Subjects Effects

Dependent Variable: TEKSTUR

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	72.023 <sup>a</sup>	2	36.011	30.312	.000
Intercept	640.184	1	640.184	538.869	.000
FREK	72.023	2	36.011	30.312	.000
Error	99.793	84	1.188		
Total	812.000	87			
Corrected Total	171.816	86			

a. R Squared = .419 (Adjusted R Squared = .405)

## Post Hoc Tests

### FREK

### Homogeneous Subsets

#### TEKSTUR

Duncan<sup>a,b</sup>

FREK	N	Subset		
		1	2	3
F3	29	1.4828		
F2	29		3.0000	
F1	29			3.6552
Sig.		1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

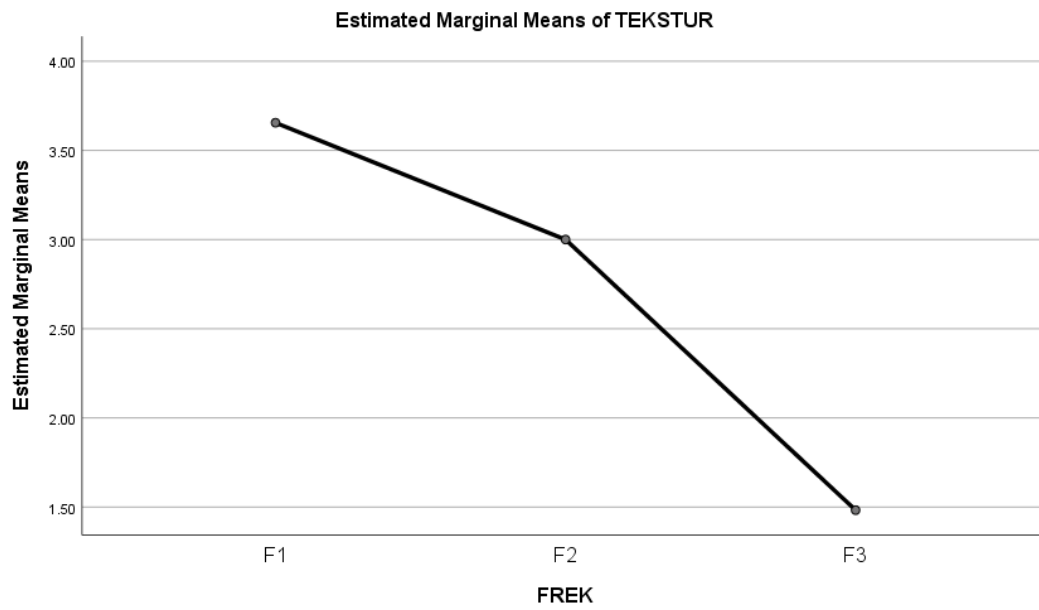
Based on observed means.

The error term is Mean Square(Error) = 1.188.



- a. Uses Harmonic Mean Sample Size = 29.000.
- b. Alpha = .05.

## Profile Plots



```
SAVE OUTFILE='C:\Users\gi2un\Downloads\amalia.sav'  
/COMPRESSED.
```