

## 7. APPENDICES

### Appendice 1. Consumer Test Questionnaire

#### Uji Konsumen dan Evaluasi Sensori

#### *Geplak Waluh*

Yth. Bapak/Ibu/Saudara,

Di tempat

Dengan hormat,

Untuk memenuhi persyaratan dalam penyelesaian pendidikan di Program Studi Teknologi Pangan, Fakultas Teknologi Pertanian, Unika Soegijapranata, saya melakukan penelitian mengenai evaluasi sensori konsumen terhadap produk *geplak waluh*. Penelitian ini merupakan bagian dari skripsi saya yang berjudul “**Hubungan antara *Hedonic Score* dan *Preference Choice* dalam Formulasi *Geplak Waluh* berdasarkan Karakteristik Sensori menurut Konsumen**”. Penelitian mengenai *geplak waluh* ini didasarkan pada kesadaran serta dorongan untuk mengembangkan pangan lokal sehingga dapat sesuai dengan keinginan konsumen untuk kemudian diharapkan dapat bertahan dalam dunia perindustrian. Penelitian ini, secara khusus, bertujuan untuk mengetahui karakteristik *geplak waluh* yang terbaik menurut konsumen, yang akan berguna dalam pengembangan produk *geplak waluh*.

Maka dari itu, saya memohon partisipasi dari Anda untuk melakukan evaluasi sensori terhadap produk *geplak waluh*. Evaluasi yang obyektif, jujur, serta apa adanya sangat diharapkan dalam penelitian ini. Untuk partisipasi serta keikutsertaan Anda, saya mengucapkan banyak terima kasih.

Peneliti,

Paulina Gandhes D. K.

11.70.0096

### Identitas Konsumen

**Nomor** : **Tanggal:**  
**Nama** :  
**Usia** :  
**Jenis Kelamin** : L/P  
**Pekerjaan** : a. pelajar d. Wiraswasta  
                   b. mahasiswa e. Pegawai negeri  
                   c. karyawan swasta f. Lainnya:.....  
**Pendidikan Terakhir** : a. Lulus SD c. Lulus SMA e. S2  
                               b. Lulus SMP d. S1 f. S3

**Berapa kali Anda pernah mencoba *Geplak Waluh* sebelumnya?**

- a. Belum pernah
- b. 1-3 kali
- c. >3 kali

**Jika pernah mencoba *geplak waluh*, kapan terakhir kali Anda mencobanya?**

- a. < 1 bulan
- b. 1-3 bulan
- c. 3-6 bulan
- d. Lainnya .....

#### Instruksi umum:

- Di hadapan Anda telah tersedia 2 sampel *Geplak Waluh* beserta kode sampel masing-masing. Anda diminta untuk memberikan penilaian/evaluasi pada sampel berdasarkan karakteristik-karakteristik yang telah ditentukan.
- Silakan mengamati dan mencicipi tiap sampel, kemudian menuliskan angka kode dan berikan penilaian Anda. Anda diperbolehkan untuk melakukan pengulangan dalam mengamati ataupun mencicipi sampel sebanyak yang Anda butuhkan.
- Air putih disediakan untuk menetralkan indra perasa setelah mencicipi masing-masing sampel.



**Rasa Waluh**

A. Penilaian intensitas rasa *waluh*

Kode

.....

Sangat lemah Sangat kuat

.....

Sangat lemah Sangat kuat

B. Penilaian tingkat kesukaan terhadap rasa *waluh*

Kode

.....

Sangat tidak suka Sangat suka

.....

Sangat tidak suka Sangat suka

**Aroma Waluh**

A. Penilaian intensitas aroma *waluh*

Kode

.....

Sangat lemah Sangat kuat

.....

Sangat lemah Sangat kuat

B. Penilaian tingkat kesukaan terhadap aroma *waluh*

Kode

.....

Sangat tidak suka Sangat suka

.....

Sangat tidak suka Sangat suka

Warna

A. Penilaian intensitas warna

Kode

.....

Sangat terang Sangat gelap

.....

Sangat terang Sangat gelap

B. Penilaian tingkat kesukaan terhadap warna

Kode

.....

Sangat tidak suka Sangat suka

.....

Sangat tidak suka Sangat suka

## Tingkat Kekerasan

### A. Penilaian intensitas kekerasan

Kode

.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Sangat empuk								Sangat keras
.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Sangat empuk								Sangat keras

### B. Penilaian tingkat kesukaan terhadap kekerasan

Kode

.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Sangat tidak suka								Sangat suka
.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Sangat tidak suka								Sangat suka

**Terima kasih untuk kesediaan Bapak/Ibu/Saudara berpartisipasi dalam evaluasi sensorial ini.**

## Appendice 2. Data Analysis

### Hedonic Rating Data

- Sweetness

**Group Statistics**

sweetness		N	Mean	Std. Deviation	Std. Error Mean
data_sweet	sweetness_A	397	5.0327	2.04407	.10259
	sweetness_B	393	6.2570	2.02349	.10207

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
data_sweet	Equal variances assumed	.076	.782	-8.459	788	.000	-1.22425	.14472	-1.50834	-.94016
	Equal variances not assumed			-8.460	788.000	.000	-1.22425	.14472	-1.50833	-.94018

**Ranks**

sweetness		N	Mean Rank	Sum of Ranks
data_sweet	sweetness_A	397	329.84	130947.00
	sweetness_B	393	461.83	181498.00
	Total	790		

**Test Statistics<sup>a</sup>**

	data_sweet
Mann-Whitney U	51944.000
Wilcoxon W	130947.000
Z	-8.203
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable:  
sweetness

- Flavor

**Group Statistics**

flavor		N	Mean	Std. Deviation	Std. Error Mean
data_flavor	flavor_A	393	4.8626	2.04202	.10301
	flavor_B	391	5.6829	1.94190	.09821

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
data_flavor	Equal variances assumed	.395	.530	-5.763	782	.000	-.82027	.14234	-1.09968	-.54086
	Equal variances not assumed			-5.764	780.411	.000	-.82027	.14232	-1.09964	-.54090

**Ranks**

flavor	N	Mean Rank	Sum of Ranks
data_flavor flavor_A	393	347.46	136550.00
flavor_B	391	437.77	171170.00
Total	784		

**Test Statistics<sup>a</sup>**

	data_flavor
Mann-Whitney U	59129.000
Wilcoxon W	136550.000
Z	-5.642
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: flavor

- Aroma

**Group Statistics**

aroma	N	Mean	Std. Deviation	Std. Error Mean
data_aroma aroma_A	396	5.0328	1.96074	.09853
aroma_B	394	5.5178	1.80920	.09115

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
data_aroma	Equal variances assumed	.333	.564	-3.612	788	.000	-.48494	.13425	-.74847	-.22141
	Equal variances not assumed			-3.613	783.568	.000	-.48494	.13422	-.74842	-.22146

**Ranks**

aroma		N	Mean Rank	Sum of Ranks
data_aroma	aroma_A	396	368.74	146022.50
	aroma_B	394	422.39	166422.50
	Total	790		

**Test Statistics<sup>a</sup>**

	data_aroma
Mann-Whitney U	67416.500
Wilcoxon W	146022.500
Z	-3.349
Asymp. Sig. (2-tailed)	.001

a. Grouping Variable: aroma

- **Color**

**Group Statistics**

color		N	Mean	Std. Deviation	Std. Error Mean
data_color	color_A	398	5.5653	1.97962	.09923
	color_B	394	5.4213	1.81179	.09128

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
data_color	Equal variances assumed	4.269	.039	1.068	790	.286	.14401	.13489	-.12077	.40878
	Equal variances not assumed			1.068	785.188	.286	.14401	.13483	-.12065	.40867

**Ranks**

color	N	Mean Rank	Sum of Ranks
data_color color_A	398	407.42	162152.50
color_B	394	385.47	151875.50
Total	792		

**Test Statistics<sup>a</sup>**

	data_color
Mann-Whitney U	74060.500
Wilcoxon W	151875.500
Z	-1.367
Asymp. Sig. (2-tailed)	.172

a. Grouping Variable: color

- **Hardness**

**Group Statistics**

hardness	N	Mean	Std. Deviation	Std. Error Mean
data_hard hardness_A	395	5.2380	1.93920	.09757
hardness_B	394	5.7716	1.85714	.09356

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
data_hard	Equal variances assumed	.554	.457	-3.947	787	.000	-.53360	.13519	-.79897	-.26823
	Equal variances not assumed			-3.947	785.700	.000	-.53360	.13518	-.79896	-.26824

### Ranks

	hardness	N	Mean Rank	Sum of Ranks
data_hard	hardness_A	395	363.34	143519.50
	hardness_B	394	426.74	168135.50
	Total	789		

### Test Statistics<sup>a</sup>

	data_hard
Mann-Whitney U	65309.500
Wilcoxon W	143519.500
Z	-3.955
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: hardness

### Preference Choice

```
Results for the 2-AC protocol with data c(99, 268, 34):
      Estimate Std. Error
tau      1.4552    0.07261
d.prime  -0.4874    0.08604

Two-sided 95% confidence interval for d-prime based on the
likelihood root statistic:
      Lower      Upper
d.prime -0.6572  -0.3198

Significance test:
Likelihood root statistic = -5.759386 p-value = 8.442e-09
Alternative hypothesis: d-prime is different from 0
```

## Chi Square Test

- Sweetness

### sweetness \* pref\_sweetness Crosstabulation

Count

		pref_sweetness		Total
		no	pref	
sweetness	A	25	183	208
	B	7	136	143
	C	2	47	49
Total		34	366	400

### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.932 <sup>a</sup>	2	.031
Likelihood Ratio	7.251	2	.027
N of Valid Cases	400		

a. 1 cells (16,7%) have expected count less than 5. The minimum expected count is 4,17.

### Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.132	.031
	Cramer's V	.132	.031
	Contingency Coefficient	.131	.031
N of Valid Cases		400	

- Flavor

**flavor \* pref\_flavor Crosstabulation**

Count		pref_flavor		Total
		non	pref	
flavor	A	26	235	261
	B	5	95	100
	C	3	36	39
Total		34	366	400

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.325 <sup>a</sup>	2	.313
Likelihood Ratio	2.542	2	.281
N of Valid Cases	400		

a. 1 cells (16,7%) have expected count less than 5. The minimum expected count is 3,32.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.076	.313
	Cramer's V	.076	.313
	Contingency Coefficient	.076	.313
N of Valid Cases		400	

- Aroma

**aroma \* pref\_aroma Crosstabulation**

Count		pref_aroma		Total
		non	pref	
aroma	A	28	255	283
	B	3	85	88
	C	3	26	29
Total		34	366	400

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.766 <sup>a</sup>	2	.152
Likelihood Ratio	4.517	2	.105
N of Valid Cases	400		

a. 1 cells (16,7%) have expected count less than 5. The minimum expected count is 2,47.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.097	.152
	Cramer's V	.097	.152
	Contingency Coefficient	.097	.152
N of Valid Cases		400	

- Color

**color \* pref\_color Crosstabulation**

Count

		pref_color		Total
		non	pref	
color	A	25	249	274
	B	6	93	99
	C	3	24	27
Total		34	366	400

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.131 <sup>a</sup>	2	.568
Likelihood Ratio	1.187	2	.552
N of Valid Cases	400		

a. 1 cells (16,7%) have expected count less than 5. The minimum expected count is 2,30.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.053	.568
	Cramer's V	.053	.568
	Contingency Coefficient	.053	.568
N of Valid Cases		400	

- Hardness

**hardness \* pref\_hardness Crosstabulation**

Count		pref_hardness		Total
		non	pref	
hardness	A	26	249	275
	B	4	84	88
	C	4	33	37
Total		34	366	400

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.346 <sup>a</sup>	2	.309
Likelihood Ratio	2.648	2	.266
N of Valid Cases	400		

a. 1 cells (16,7%) have expected count less than 5. The minimum expected count is 3,15.

**Symmetric Measures**

		Value	Approx. Sig.
Nominal by Nominal	Phi	.077	.309
	Cramer's V	.077	.309
	Contingency Coefficient	.076	.309
N of Valid Cases		400	

## Simple Category Affective Test

Group Statistics

	producer	N	Mean	Std. Deviation	Std. Error Mean
sweetness	A	398	4.8291	1.59374	.07989
	B	393	6.6285	1.44434	.07286
flavor	A	396	6.0530	2.10478	.10577
	B	392	4.7526	2.00447	.10124
aroma	A	393	5.7328	2.13507	.10770
	B	388	4.6082	1.89958	.09644
color	A	399	4.7444	1.72618	.08642
	B	394	6.1548	1.62953	.08209
hardness	A	398	4.8065	1.80547	.09050
	B	394	5.0736	1.91344	.09640

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
sweetness	Equal variances assumed	3.349	.068	-16.632	789	.000	-1.79935	.10819	-2.01172	-1.58698
	Equal variances not assumed			-16.642	783.272	.000	-1.79935	.10812	-2.01159	-1.58711
flavor	Equal variances assumed	1.409	.236	8.880	786	.000	1.30048	.14645	1.01300	1.58796
	Equal variances not assumed			8.882	784.828	.000	1.30048	.14641	1.01307	1.58789
aroma	Equal variances assumed	8.036	.005	7.773	779	.000	1.12458	.14467	.84058	1.40857
	Equal variances not assumed			7.779	770.727	.000	1.12458	.14457	.84079	1.40837
color	Equal variances assumed	.782	.377	-11.829	791	.000	-1.41046	.11924	-1.64452	-1.17640
	Equal variances not assumed			-11.833	789.405	.000	-1.41046	.11919	-1.64444	-1.17648
hardness	Equal variances assumed	1.907	.168	-2.020	790	.044	-.26707	.13218	-.52654	-.00760
	Equal variances not assumed			-2.020	786.352	.044	-.26707	.13222	-.52662	-.00752

## Non Sensory Attribute Analysis

Group Statistics

	producer	N	Mean	Std. Deviation	Std. Error Mean
L	A	3	44.4567	.59138	.34143
	B	3	45.9933	1.45727	.84135
a	A	3	4.9700	.97964	.56560
	B	3	4.7833	.51003	.29447
b	A	3	12.9167	1.92511	1.11146
	B	3	13.1633	1.04314	.60226
hardness	A	3	1179.2667	72.28868	41.73589
	B	3	2514.7667	211.74995	122.25389
sweetness	A	3	40.0000	.00000 <sup>a</sup>	.00000
	B	3	80.0000	.00000 <sup>a</sup>	.00000

a. t cannot be computed because the standard deviations of both groups are 0.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
L	Equal variances assumed	3.431	.138	-1.692	4	.166	-1.53667	.90800	-4.05767	.98433
	Equal variances not assumed			-1.692	2.641	.201	-1.53667	.90800	-4.66148	1.58814
a	Equal variances assumed	1.056	.362	.293	4	.784	.18667	.63766	-1.58376	1.95710
	Equal variances not assumed			.293	3.010	.789	.18667	.63766	-1.83884	2.21217
b	Equal variances assumed	.639	.469	-.195	4	.855	-.24667	1.26414	-3.75649	3.26315
	Equal variances not assumed			-.195	3.081	.857	-.24667	1.26414	-4.21039	3.71706
hardness	Equal variances assumed	2.118	.219	-10.338	4	.000	-1335.50000	129.18165	-1694.16576	-976.83424
	Equal variances not assumed			-10.338	2.460	.004	-1335.50000	129.18165	-1802.70579	-868.29421