

DAFTAR PUSTAKA

- Atmaja, T., Damanik, M. M. B., & Mukhlis. (2017). Pengaruh Pemberian Pupuk Kandang Ayam, Pupuk Hijau, Dan Kapur Caco₃ Pada Tanah Ultisol Terhadap Pertumbuhan Tanaman Jagung. *Jurnal Agroekoteknologi Universitas Sumatera Utara*, 5(1), 208–215. <https://doi.org/10.32734/jaet.v5i1.15307>
- Balla, I. U. S., Sunantra, I. M., & Apzani, W. (2019). Pemberian Pupuk Hijau Dan Mol Terhadap Pertumbuhan Dan Hasil Tanaman Kacang Tanah (*Arachis Hypogaea* L.). *Ganec Swara*, 13(2), 293. <https://doi.org/10.35327/gara.v13i2.94>
- Dahlianah, I. (2014). Pupuk Hijau Salah Satu Pupuk Organik Berbasis Ekologi Dan Berkelanjutan. *Jurnal Klorofil*, 9(2), 54–56.
- Hasan, F., Nur, M. J., & Nayo, F. (2021). Aplikasi pupuk organik cair daun lamtoro (*Leucaena leucophala* (Lam. de Wit) on growth and yield of sweet corn (*Zea mays saccharata* sturt L.). *Jurnal Agercolere*, 3(2), 38–45. <https://doi.org/10.37195/jac.v3i2.129>
- Hidayat, O., & Suharyana, A. (2019). Pengaruh Dosis Pupuk Organik Cair Daun Lamtoro terhadap Pertumbuhan dan Hasil Tanaman Pakcoy (*Brassica rapa* l.) Varietas Nauli-F1. *Paspalum: Jurnal Ilmiah Pertanian*, 7(2), 57. <https://doi.org/10.35138/paspalum.v7i2.118>
- Irsyad, Y. M. M., & Kastono, D. (2019). Pengaruh Macam Pupuk Organik Cair dan Dosis Pupuk Anorganik terhadap Pertumbuhan dan Hasil Jagung (*Zea mays* L.). *Jurnal Vegetalika*, 8(4), 263. <https://doi.org/10.22146/veg.42715>
- Junialdi, R., Zein, A., & Anhar, A. (2019). Pengaruh Pemberian Bokhasi Bandotan (*Ageratum conyzoides* L.) Terhadap Pertumbuhan dan Mutu Gizi Tomat (*Lycopersium esculentum* Mill.). *UNES Journal of Scientech Research (UJSR)*, 4(1), 8–26.
- Magdalena, F., Sumarni, T., Pupuk, Penggunaan Dan, K., & Hijau, P. (2013). Penggunaan pupuk kandang dan pupuk hijau *crotalaria juncea* l. Untuk mengurangi penggunaan pupuk anorganik pada tanaman jagung (*zea mays* l.). *Jurnal Produksi Tanaman*, 1(2), 61–71.
- Muhadjir, F. (2018). Karakteristik Tanaman Jagung. *Jurnal Balai Penelitian Tanaman Pangan Bogor*, 6(13), 33–48. <http://balitsereal.litbang.pertanian.go.id/wp-content/uploads/2018/08/3karakter.pdf>
- Oviyanti, F., Syarifah, S., & Hidayah, N. (2016). Pengaruh pemberian pupuk organik cair daun gamal (*Gliricidia sepium* (Jacq.) Kunth ex Walp.) terhadap pertumbuhan tanaman sawi (*Brassica juncea* L.). *Jurnal Biota*, 2(1), 61–67. <http://jurnal.radenfatah.ac.id/index.php/biota/article/view/531>

- Rachman, A., Dariah, A., & Santoso, J. (2012). Pupuk Hijau. *Jurnal Pupuk Organik Dan Pupuk Hayati*, 1(2), 41–57.
- Riwandi, H. (2014). *teknik budidaya jagung dengan sistem organik di lahan marjinal* (Suhendra (ed.); 2014th ed., p. 67). LPPM UNIB, Bengkulu.
- Rosadi, A. N., & Mappanganro, N. (2022). Pertumbuhan dan Produksi Tanaman Selada (*Lactuca sativa* L.) Pada Berbagai Dosis Pupuk Kascing dan Konsentrasi Pupuk Organik Cair Daun Gamal. *Jurnal Ilmiah Multi Disiplin Indonesia*, 2(1), 163–173. <https://katadata.co.id/berita/2020/01/06/baru-83-peserta-bpjs-kesehatan-per-akhir-2019->
- Safitri, T., Yelianti, U., & Muswita. (2018). Pengaruh pemberian berbagai dosis pupuk hijau lamtoro gung (*Leucaena leucocephala* L.) terhadap pertumbuhan bibit gaharu (*Aquilaria malaccensis* Lam.) sebagai pengayaan pratikum mata kuliah fisiologi tumbuhan. *Artikel Ilmiah*, 413005(1), 1–12.
- Santos, I. P. Dos, Kartini, N. L., & Wijana, D. G. (2017). Pengaruh Dosis dan Waktu Aplikasi Pupuk Hijau Lamtoro (*Leucaena leucocephala* (Lam.) de Wit) terhadap Sifat Kimia Tanah dan Hasil Tanaman Jagung (*Zea mays* L.) di Suco Mauboke, Distrik Liquiça Timor Leste. *Jurnal Agrotrop*, 7(1), 69–78.
- Saptorini, S., & Sutiknjo, T. D. (2021). Pertumbuhan Dan Hasil Empat Varietas Jagung Semi (Baby Corn) Pada Berbagai Populasi. *Jurnal Agrinika : Jurnal Agroteknologi Dan Agribisnis*, 5(1), 95. <https://doi.org/10.30737/agrinika.v5i1.1557>
- Sasi, A. N. (2016). Pengaruh Waktu Pembenanam Pupuk Hijau dan Aplikasi Pupuk Organik Cair terhadap Pertumbuhan dan Hasil Bawang Putih Siung Tunggal (*Allium sativum* L.). *Savana Cendana*, 1(02), 81–84. <https://doi.org/10.32938/sc.v1i02.17>
- Subekti, N. A., Syafruddin, Efendi, R., & Sunarti, S. (2007). Morfologi Tanaman Dan Fase Pertumbuhan Jagung. *Jurnal Balai Penelitian Tanaman Serealia, Maros*, 1(1), 17–27.
- Suryana, A., & Agustian, A. (2016). Analisis Daya Saing Usaha Tani Jagung di Indonesia. *Jurnal Analisis Kebijakan Pertanian*, 12(2), 143. <https://doi.org/10.21082/akp.v12n2.2014.143-156>
- Wahid, Kaihatu, S., Sebayang, H. T., Sumarni, T., & Yusron, M. (2020). Pengaruh pupuk kandang dan pupuk hijau gamal (*Gliricidia sepium*) terhadap produktivitas tanaman jagung (*Zea mays* L.). *Jurnal Pengkajian Dan Pengembangan Teknologi Pertanian*, 23(3), 309–319.
- Yermias Windi, Uska Peku Jawang, & Melycorianda H. Ndapamuri. (2022). The Quality Test of Bokasi Fertilizer a Combination of Local Ingredients from the Leaves of Gamal, Kirinyuh and Lamtoro Plant Leaves. *Asian Journal of Healthcare Analytics*, 1(2), 119–132. <https://doi.org/10.55927/ajha.v1i2.1673>

Lampiran 1 Sidik Ragam Tinggi Tanaman dan Hasil Uji Duncan

Sumber keragaman	Derajat bebas	Jumlah kuadrat	Kuadrat tengah	F.hitung	F.tabel
Perlakuan	6	8252.667	1375.444	28.716	2.35
Kontrol vs kombinasi	1	5062.500	5062.500	105.693348	4.10
Kombinasi perlakuan	5	3190.167	638.033	28.7182338	2.46
Macam pupuk	2	2038.067	1019.033	45.8672638	3.24
Volume	1	1068.033	1068.033	48.0727821	4.10
Macam x Volume	2	84.067	42.033	0.877552299	3.24
Eror	24	533.200	22.217		
Eror	38	1820.133	47.898		
Total	44	10072.800			

TINGGI TANAMAN

Duncan^{a,b}

MACAM_PUPOK	N	Subset	
		1	2
M2	10	132.2000	
M3	10		148.3000
M1	10		150.8000
Sig.		1.000	.247

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = 22.217.

a. Uses Harmonic Mean Sample Size = 10.000.

b. Alpha = 0.05.

Lampiran 2 Sidik Ragam Jumlah Daun dan Hasil Uji Duncan

Sumber keragaman	Derajat bebas	Jumlah kuadrat	Kuadrat tengah	F.hitung	F.tabel
Perlakuan	6	43.778	2.296	2.525,85259	2.35
Kontrol vs kombinasi	1	33.611	33.611	36.9757976	4.10
Kombinasi perlakuan	5	10.167	2.033	4.51777778	2.46
Macam pupuk	2	2.467	1.233	2.74	3.24
Volume	1	7.500	7.500	16.6666667	4.10
Macam x Volume	2	200	.100	0.110011001	3.24
Eror	24	10.800	.450		
Eror	38	34.533	.909		
Total	44	78.311			

JUMLAH_DAUN

Duncan^{a,b}

MACAM_PUPUK	N	Subset	
		1	2
M2	10	13.0000	
M3	10	13.4000	13.4000
M1	10		13.7000
Sig.		.195	.327

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .450.

a. Uses Harmonic Mean Sample Size = 10.000.

b. Alpha = 0.05.

Lampiran 3 Sidik Ragam Panjang Daun dan Hasil Uji Duncan

Sumber keragaman	Derajat bebas	Jumlah kuadrat	Kuadrat tengah	F.hitung	F.tabel
Perlakuan	6	1845.244	307.541	33.9974574	2.35
Kontrol vs kombinasi	1	1424.044	1424.044	157.422507	4.10
Kombinasi perlakuan	5	421.200	84.240	8.53754941	2.46
Macam pupuk	2	66.600	33.300	3.37488598	3.24
Volume	1	346.800	346.800	35.1474612	4.10
Macam x Volume	2	7.800	3.900	0.431129781	3.24
Eror	24	236.800	9.867		
Eror	38	343.733	9.046		
Total	44	2188.978			

PANJANG_DAUN

Duncan^{a,b}

MACAM_PUPUK	N	Subset	
		1	2
M2	10	98.8000	
M1	10	99.1000	
M3	10		102.1000
Sig.		.833	1.000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = 9.867.

a. Uses Harmonic Mean Sample Size = 10.000.

b. Alpha = 0.05.

Lampiran 4 Sidik Ragam Diameter Batang dan Hasil Uji Duncan

Sumber keragaman	Derajat bebas	Jumlah kuadrat	Kuadrat tengah	F.hitung	F.tabel
Perlakuan	6	254.179	42.363	25.6434625	2.35
Kontrol vs kombinasi	1	166,873	166,873	101.012712	4.10
Kombinasi perlakuan	5	87.306	17.461	17.3741294	2.46
Macam pupuk	2	53.436	26.718	26.5850746	3.24
Volume	1	32.886	32.886	32.7223881	4.10
Macam x Volume	2	.985	.492	0.297820823	3.24
Eror	24	24.128	1.005		
Eror	38	62.758	1.652		
Total	44	316.937			

DIAMETER_BATANG

Duncan^{a,b}

MACAM_PUPOK	N	Subset		
		1	2	3
M2	10	23.3030		
M1	10		24.4080	
M3	10			26.5200
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) = 1.005.

a. Uses Harmonic Mean Sample Size = 10.000.

b. Alpha = 0.05.

Lampiran 5 Sidik Ragam Umur Berbunga dan Hasil Uji Duncan

Sumber keragaman	Derajat bebas	Jumlah kuadrat	Kuadrat tengah	F.hitung	F.tabel
Perlakuan	6	30.267	5.044	7,68902439	2.35
Kontrol vs kombinasi	1	16.9	16.9	25.7621951	4.10
Kombinasi perlakuan	5	13.367	2.673	4.00749625	2.46
Macam pupuk	2	8.267	4.144	6.21289355	3.24
Volume	1	4.033	4.033	6.04647676	4.10
Macam x Volume	2	1.067	.533	0.8125	3.24
Eror	24	16.000	.667		
Eror	38	24.933	.656		
Total	44	55.200			

UMUR_BERBUNGA

Duncan^{a,b}

MACAM_PUPOK	N	Subset	
		1	2
M3	10	54.3000	
M1	10	54.5000	
M2	10		55.5000
Sig.		.589	1.000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .667.

a. Uses Harmonic Mean Sample Size = 10.000.

b. Alpha = 0.05.

Lampiran 6 Sidik Ragam Jumlah Tongkol Pertanaman dan Hasil Uji Duncan

Sumber keragaman	Derajat bebas	Jumlah kuadrat	Kuadrat tengah	F.hitung	F.tabel
Perlakuan	6	1.111	.185	2.10227273	2.35
Kontrol vs kombinasi	1	1.111	1.111	12.625	4.10
Kombinasi perlakuan	5	.000	.000		2.46
Macam pupuk	2	.000	.000		3.24
Volume	1	.000	.000		4.10
Macam x Volume	2	.000	.000		3.24
Eror	24	.000	.000		
Eror	38	3.333	.088		
Total	44	4.444	44		

JUMLAH_TONGKOL_PERTANAMAN

Duncan^{a,b}

PERLAKUAN	N	Subset for alpha = 0.05
		1
K	15	1.6667
M1D2	5	2.0000
M1D3	5	2.0000
M2D2	5	2.0000
M2D3	5	2.0000
M3D2	5	2.0000
M3D3	5	2.0000
Sig.		.112

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5.526.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Lampiran 7 Sidik Ragam Panjang Tongkol Berkelobot dan Hasil Uji Duncan

Sumber keragaman	Derajat bebas	Jumlah kuadrat	Kuadrat tengah	F.hitung	F.tabel
Perlakuan	6	411.845	68.641	11.6045647	2.35
Kontrol vs kombinasi	1	362.404	362.404	61.2686391	4.10
Kombinasi perlakuan	5	49.441	9.888	167.59322	2.46
Macam pupuk	2	3.951	1.976	33.4915254	3.24
Volume	1	42.483	42.483	720.050847	4.10
Macam x Volume	2	3.007	1.503	0.254099746	3.24
Eror	24	1.424	.059		
Eror	38	224.787	5.915		
Total	44	636.632			

PANJANG_TONGKOL_BERKELOBOT

Duncan^{a,b}

PERLAKUAN	N	Subset for alpha = 0.05		
		1	2	3
K	15	13.3833		
M2D2	5		18.0200	
M3D2	5		18.2600	18.2600
M1D2	5		18.3600	18.3600
M2D3	5		20.0400	20.0400
M1D3	5		20.2100	20.2100
M3D3	5			21.5300
Sig.		1.000	.191	.051

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5.526.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Lampiran 8 Sidik Ragam Panjang Tongkol Tidak Berkelobot dan Hasil Uji Duncan

Sumber keragaman	Derajat bebas	Jumlah kuadrat	Kuadrat tengah	F.hitung	F.tabel
Perlakuan	6	65.570	10.928	7.34902488	2.35
Kontrol vs kombinasi	1	60.27	60.27	40.531271	4.10
Kombinasi perlakuan	5	5.300	1.060	19.2727273	2.46
Macam pupuk	2	4.362	2.181	39.6545455	3.24
Volume	1	.817	.817	14.8545455	4.10
Macam x Volume	2	.120	.060	0.0403496974	3.24
Eror	24	1.312	.055		
Eror	38	56.498	1.487		
Total	44	122.068			

PANJANG_TONGKOL_TIDAK_BERKELOBOT

Duncan^{a,b}

MACAM_PUPUK	N	Subset		
		1	2	3
M2	10	8.2450		
M3	10		8.8200	
M1	10			9.1700
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) = .055.

a. Uses Harmonic Mean Sample Size = 10.000.

b. Alpha = 0.05.

Lampiran 9 Sidik Ragam Diameter Tongkol Berkelobot dan Hasil Uji Duncan

Sumber keragaman	Derajat bebas	Jumlah kuadrat	Kuadrat tengah	F.hitung	F.tabel
Perlakuan	6	4.738	.790	11.1267606	2.35
Kontrol vs kombinasi	1	4.489	4.489	63.2253521	4.10
Kombinasi perlakuan	5	.249	.050	20.258	2.46
Macam pupuk	2	.126	.063	25.627	3.24
Volume	1	.120	.120	48.949	4.10
Macam x Volume	2	.003	.001	0.014084507	3.24
Eror	24	.059	.002		
Eror	38	2.709	.071		
Total	44	7.447			

DIAMETER_TONGKOL_BERKELOBOT

Duncan^{a,b}

MACAM_PUPOK	N	Subset	
		1	2
M2	10	1.9300	
M1	10		2.0500
M3	10		2.0800
Sig.		1.000	.189

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .002.

a. Uses Harmonic Mean Sample Size = 10.000.

b. Alpha = 0.05.

Lampiran 10 Sidik Ragam Diameter Tongkol Tidak Berkelobot dan Hasil Uji Duncan

Sumber keragaman	Derajat bebas	Jumlah kuadrat	Kuadrat tengah	F.hitung	F.tabel
Perlakuan	6	2.383	.397	14.7037037	2.35
Kontrol vs kombinasi	1	1.965	1.965	72.7777778	4.10
Kombinasi perlakuan	5	.418	.084	35.800	2.46
Macam pupuk	2	.376	.188	80.607	3.24
Volume	1	.040	.040	17.286	4.10
Macam x Volume	2	.001	.001	0.037037037	3.24
Eror	24	0.56	.002		
Eror	38	1.013	.027		
Total	44	3.396			

DIAMETER_TONGKOL_TIDAK_BERKELOBOT

Duncan^{a,b}

MACAM_PUPUK	N	Subset	
		1	2
M2	10	1.1500	
M1	10		1.3650
M3	10		1.4050
Sig.		1.000	.076

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .002.

a. Uses Harmonic Mean Sample Size = 10.000.

b. Alpha = 0.05.

Lampiran 11 Sidik Ragam Berat Tongkol Berkelobot dan Hasil Uji Duncan

Sumber keragaman	Derajat bebas	Jumlah kuadrat	Kuadrat tengah	F.hitung	F.tabel
Perlakuan	6	2376.787	396.131	48.6169612	2.35
Kontrol vs kombinasi	1	1917.302	1917.302	235.309524	4.10
Kombinasi perlakuan	5	459.485	91.897	302.292763	2.46
Macam pupuk	2	280.664	140.332	461.618421	3.24
Volume	1	97.669	97.669	321.279605	4.10
Macam x Volume	2	81.152	40.576	4.97987236	3.24
Eror	24	7.304	.304		
Eror	38	309.625	8.148		
Total	44	2686.412			

BERAT_TONGKOL_BERKELOBOT

Duncan^{a,b}

PERLAKUAN	N	Subset for alpha = 0.05			
		1	2	3	4
K	15	16.3427			
M2D2	5		22.0860		
M1D2	5			30.1360	
M2D3	5			30.3430	
M1D3	5			31.2620	31.2620
M3D2	5			32.9330	32.9330
M3D3	5				34.3760
Sig.		1.000	1.000	.145	.094

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5.526.

b. The group sizes are unequal. The harmonic mean of the group sizes is used.

Type I error levels are not guaranteed.

Lampiran 12 Sidik Ragam Berat Tongkol Tidak Berkelobot dan Hasil Uji Duncan

Sumber keragaman	Derajat bebas	Jumlah kuadrat	Kuadrat tengah	F.hitung	F.tabel
Perlakuan	6	109.335	18.222	38.9358974	2.35
Kontrol vs kombinasi	1	88.933	88.933	190.027778	4.10
Kombinasi perlakuan	5	20.402	4.080	16.5182186	2.46
Macam pupuk	2	17.707	8.853	35.8421053	3.24
Volume	1	2.125	2.125	8.60323887	4.10
Macam x Volume	2	.570	.285	0.608974359	3.24
Eror	24	5.926	.247		
Eror	38	17.792	.468		
Total	44	127.127			

BERAT_TONGKOL_TIDAK_BERKELOBOT

Duncan^{a,b}

MACAM_PUPOK	N	Subset	
		1	2
M2	10	5.0340	
M3	10		6.4330
M1	10		6.8235
Sig.		1.000	.092

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .247.

a. Uses Harmonic Mean Sample Size = 10.000.

b. Alpha = 0.05.

Lampiran 13 Sidik Ragam Berat Basah Tanaman dan Hasil Uji Duncan

Sumber keragaman	Derajat bebas	Jumlah kuadrat	Kuadrat tengah	F.hitung	F.tabel
Perlakuan	6	765921.111	127653.519	28.6788371	2.35
Kontrol vs kombinasi	1	502506.944	502506.944	112.893988	4.10
Kombinasi perlakuan	5	263414.167	52682.833	14.5048538	2.46
Macam pupuk	2	83731.667	41865.833	11.526673	3.24
Volume	1	150520.833	150520.833	41.4420136	4.10
Macam x Volume	2	29161.667	14580.833	3.2757525	3.24
Eror	24	87170.000	3632.083		
Eror	38	169143.333	4451.140		
Total	44	935064.444			

BERAT_BASAH_TANAMAN

Duncan^{a,b}

MACAM_PUPOK	N	Subset	
		1	2
M2	10	756.0000	
M1	10	789.5000	
M3	10		881.0000
Sig.		.226	1.000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = 3632.083.

a. Uses Harmonic Mean Sample Size = 10.000.

b. Alpha = 0.05.

Lampiran 14 Sidik Ragam Berat Kering Tanaman dan Hasil Uji Duncan

Sumber keragaman	Derajat bebas	Jumlah kuadrat	Kuadrat tengah	F.hitung	F.tabel
Perlakuan	6	343751.067	57291.844	16.7173054	2.35
Kontrol vs kombinasi	1	228916.9	228916.9	66.7961348	4.10
Kombinasi perlakuan	5	114834.167	22966.833	4.85685075	2.46
Macam pupuk	2	15561.667	7780.833	1.64543125	3.24
Volume	1	94640.833	94640.833	20.0139219	4.10
Macam x Volume	2	4631.667	2315.833	0.675741692	3.24
Eror	24	113490.000	4728.750		
Eror	38	130229.733	3427.098		
Total	44	473980.800			

BERAT_KERING_TANAMAN

Duncan^{a,b}

MACAM_PUPOK	N	Subset
		1
M2	10	375.0000
M1	10	383.5000
M3	10	427.0000
Sig.		.122

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = 4728.750.

a. Uses Harmonic Mean Sample Size = 10.000.

b. Alpha = 0.05.

Dokumentasi Penelitian



Pengisian tanah dan pupuk hijau



Pengukuran panjang daun



Pengukuran diameter batang



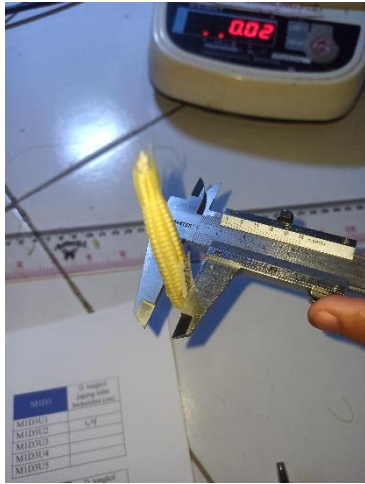
Pengukuran panjang tongkol berkelobot



Pengukuran diameter tongkol berkelobot
berkelobot



Pengukuran panjang tongkol tidak
berkelobot



Pengukuran diameter tongkol tidak berkelobot



Penimbangan berat berkelobot



Pemanenan



Penimbangan berat basah



Penimbangan berat kering

