DAFTAR PUSTAKA

Abbas, S., Daud, I. D., & Ngatimin, S. N. A. (2023). Population Fluctuations of Scirpophaga innotata and Nilaparvata lugens In Various Varieties and Growing Age of Rice Plants. *Jurnal Biologi Tropis*, *23*(1), 313–318. https://doi.org/10.29303/jbt.v23i1.4645

Adotey, N., Kongchum, M., Li, J., Whitehurst, G. B., Sucre, E., & Harrell, D. L. (2017). Ammonia volatilization of zinc sulfate-coated and NBPT-treated urea fertilizers. *Agronomy Journal*, *109*(6), 2918–2926. https://doi.org/10.2134/agronj2017.03.0153

Akhmad. (2020). Impact of Import Tariff Policies on Rice Demand and Supply in Indonesia. *Advances in Social Sciences Research Journal*, *7*(2), 59–67. https://doi.org/10.14738/assrj.72.7773

Akiyama, H., Yan, X., & Yagi, K. (2010). Evaluation of effectiveness of enhanced-efficiency fertilizers as mitigation options for N2O and NO emissions from agricultural soils: Meta-analysis. *Global Change Biology*, *16*(6), 1837–1846. https://doi.org/10.1111/j.1365-2486.2009.02031.x

Akmalia, H. A. (2022). The Impact Of Climate Change On Agriculture In Indonesia And It Strategies: A Systematic Review. *AGRITEPA: Jurnal Ilmu Dan Teknologi Pertanian*, *9*(1), 145–160. https://doi.org/10.37676/agritepa.v9i1.1691

Arrobas, M., Decker, J. V, Casali, C. A., Correia, C. M., & Rodrigues, M. Â. (2021). Biochar and biozeolites did not improve phosphorus uptake or crop productivity in a field trial performed in an irrigated intensive farming system. *Soil Use and Management*, *38*(1), 1–12. https://doi.org/10.1111/sum.12704

Balasubramanian, S., Nelson, A., Koloutsou-Vakakis, S., Lin, J., Rood, M. J., Myles, L. T., & Bernacchi, C. (2017). Evaluation of DeNitrification DeComposition model for estimating ammonia fluxes from chemical fertilizer application. *Agricultural and Forest Meteorology*, *237–238*, 123–134. https://doi.org/10.1016/j.agrformet.2017.02.006

Banik, C., Bakshi, S., Laird, D. A., Smith, R. G., & Brown, R. C. (2023). Impact of biochar-based slow-release N-fertilizers on maize growth and nitrogen recovery efficiency. *Journal of Environmental Quality*, *52*(3), 630–640. https://doi.org/10.1002/jeq2.20468

Bayu Murti Petrus, H. T., Pratama Putera, A. D., Wangi, I. P., Ramadhian, M. A., Setiawan, H., & Prasetya, A. (2020). Characterization of Nitrogen Release in Modified Controlled-Release-Fertilizer using Rice Husk Biochar. *International Journal of Technology*, *11*(4), 774–783. https://doi.org/10.14716/ijtech.v11i4.3520

Betriani, R., Sutarno, S., Kartini, I., & Budiarta, J. (2023). Synthesis of Zeolite/NPK Coated with Cu-Alginate-PVA-Glutaraldehyde as a Slow-Release Fertilizer. *Indonesian Journal of Chemistry*, *23*(1), 184–199. https://doi.org/10.22146/ijc.76205

Bin Rahman, A. N. M. R., & Zhang, J. (2023). Trends in rice research: 2030 and beyond. *Food and Energy Security*, *12*(2), 1–17. https://doi.org/10.1002/fes3.390

Chen, S., Yang, M., Ba, C., Yu, S., Jiang, Y., Zou, H., & Zhang, Y. (2018). Preparation and characterization of slow-release fertilizer encapsulated by biochar-based waterborne copolymers. *Science of the Total Environment, 615*, 431–437. https://doi.org/10.1016/j.scitotenv.2017.09.209

Deng, Z., Hung, H. chun, Carson, M. T., Oktaviana, A. A., Hakim, B., & Simanjuntak, T. (2020). Validating earliest rice farming in the Indonesian Archipelago. In *Scientific Reports* (Vol. 10, Issue 1). Nature Publishing Group UK. https://doi.org/10.1038/s41598-020-67747-3

Eghbali Babadi, F., Yunus, R., Abdul Rashid, S., Mohd Salleh, M. A., & Ali, S. (2015). New *coating* formulation for the slow release of urea using a mixture of gypsum and dolomitic limestone. *Particuology*, *23*, 62–67. https://doi.org/10.1016/j.partic.2014.12.011

Enesi, R. O., Dyck, M., Chang, S., Thilakarathna, M. S., Fan, X., Strelkov, S., & Gorim, L. Y. (2023). Liming remediates soil acidity and improves crop yield and pro fi tability - a meta-analysis. *Frontiers in Agronomy*, *7*(1), 1–13. https://doi.org/10.3389/fagro.2023.1194896

Floody, M. C., Medina, J., Richardson, A. E., Javiera, M., Reyes, G., Villegas, P., Isidora, P., Lecaros, Z., Mora, L., Humberto, P., & Knicker, H. (2024). Enhancing Soil Carbon Sequestration with C - Rich Carrier Materials from Spent Mushroom Substrate and Composted Wheat Straw : Implications for Smart Fertilizer Design. *Journal of Soil Science and Plant Nutrition*, *24*(4), 6691–6706. https://doi.org/10.1007/s42729-024-01997-2

Fu, J., Wang, C., Chen, X., Huang, Z., & Chen, D. (2018). Classification research and types of slow controlled release fertilizers (SRFs) used - a review. *Communications in Soil Science and Plant Analysis*, *49*(17), 2219–2230. https://doi.org/10.1080/00103624.2018.1499757

Gamage, A., Basnayake, B., De Costa, J., & Merah, O. (2022). Effects of rice husk biochar coated urea and anaerobically digested rice straw compost on the soil fertility, and cyclic effect of phosphorus. *Plants*, *11*(1). https://doi.org/10.3390/plants11010075

Gunawan, H., Sugiarti, Rianti, A., & Sihombing, V. S. (2016). Diversity of faunal communities in the Biodiversity Park of Ciherang, Bogor, West Java, Indonesia. *Biodiversitas*, *17*(2), 479–486. https://doi.org/10.13057/biodiv/d170212

Hasegawa, T., & Matsuoka, Y. (2015). Climate change mitigation strategies in agriculture and land use in Indonesia. *Mitigation and Adaptation Strategies for Global Change*, *20*(3), 409–424. https://doi.org/10.1007/s11027-013-9498-3

Herliana, S., Ratnaningtyas, S., Aina, Q., Zuraida, U., & Sutardi, A. (2025). *Comparison Between Food Security in Indonesia and Thailand : Rice Export and Import* (Vol. 8, Issue 1).

Herlina, N., Nuryani, S., Utami, H., & Wulandari, C. (2022). Effects of nano guano, nano phosphate rock, and SP?36 fertilizers on maize growth and phosphorus uptake in inceptisol Nia. *Ilmu Pertanian*, *7*(2), 99–111. doi.org/10/22146/ipas.71373

Huang, Y. X., Liu, M. J., Chen, S., Jasmi, I. I., Tang, Y., & Lin, S. (2019). Enhanced adsorption and slow release of phosphate by dolomite–alginate composite beads as potential fertilizer. *Water Environment Research*, *91*(8), 797–804. https://doi.org/10.1002/wer.1122

Khan, H. A., Naqvi, S. R., Mehran, M. T., Khoja, A. H., Khan Niazi, M. B., Juchelková, D., & Atabani, A. (2021). A performance evaluation study of nano-biochar as a potential slow-release nano-fertilizer from wheat straw residue for sustainable agriculture. *Chemosphere*, *285*. https://doi.org/10.1016/j.chemosphere.2021.131382

Kundzewicz, Z. W., Krysanova, V., Benestad, R. E., Hov, Piniewski, M., & Otto, I. M. (2018). Uncertainty in climate change impacts on water resources. *Environmental Science and Policy*, *79*(June 2017), 1–8. https://doi.org/10.1016/j.envsci.2017.10.008

Kusumastuti, Y., Istiani, A., Rochmadi, & Purnomo, C. W. (2019). Chitosan-Based Polyion Multilayer *Coating* on NPK Fertilizer as Controlled Released Fertilizer. *Advances in Materials Science and Engineering*, *2019*. https://doi.org/10.1155/2019/2958021

Lateef, A., Nazir, R., Jamil, N., Alam, S., Shah, R., Khan, M. N., Saleem, M., & Rehman, S. ur. (2019). Synthesis and characterization of environmental friendly corncob biochar based nano-composite – A potential slow release nano-fertilizer for sustainable agriculture. *Environmental Nanotechnology, Monitoring and Management*, *11*, 1–12. https://doi.org/10.1016/j.enmm.2019.100212

Li, Z., & Zhang, M. (2023). Progress in the Preparation of Stimulus-Responsive Cellulose. *Polymers*, *15*(3643), 1–28.

Litsinger, J. A. (2009). When Is a Rice Insect a Pest : Yield Loss and the Green Revolution. *Integrated Pest Management Reviews*, *1*, 391–498. https://doi.org/10.1007/978-1-4020-8992-3

Litvinovich, A., Lavrishchev, A., Bure, V., Zhapparova, A., Kekilbayeva, G., & Saljnikov, E. (2023). Impact of dolomite rock waste on soil acidity and absorption of Ca and Mg by barley and wheat. *Agriculture Science*, *47*(3), 1–8. doi:10.1590/1413-7054202347006622

Luo, W., Qian, L., Liu, W., Zhang, X., Wang, Q., Jiang, H., Cheng, B., Ma, H., & Wu, Z. (2021). A potential Mg-enriched biochar fertilizer: Excellent slow-release performance and release mechanism of nutrients. *Science of the Total Environment*, *768*, 144454. https://doi.org/10.1016/j.scitotenv.2020.144454

Mahama, I., & Studies, I. D. (2025). Exploring the Effects of Climate Change on Rice Yields in Andhra. *Agricultural and Rural Studies*, *3*(March). https://doi.org/10.59978/ar03010004

Marzouk, S. H., Kwaslema, D. R., Omar, M. M., & Mohamed, S. H. (2025). Heliyon " Harnessing the power of soil microbes : Their dual impact in integrated nutrient management and mediating climate stress for sustainable rice crop production " A systematic review. *Heliyon*, *11*(1). https://doi.org/10.1016/j.heliyon.2024.e41158

Mulyani, A., Mulyanto, B., Barus, B., Panuju, D. R., & Husnain. (2023). Potential Land Reserves for Agriculture in Indonesia: Suitability and Legal Aspect Supporting Food Sufficiency. *Land*, *12*(5). https://doi.org/10.3390/land12050970

Nagaraju, K., Prasad, T. N. V. K. V., Chari, M. S., Ramu, Y. R., & Murthy, B. R. (2023). Synthesis and Characterization of Rice Husk Nanobiochar-Based N and K Fertilizers: Promoting Environmental Sustainability in Agriculture. *International Journal of Plant & Soil Science*, *35*(17), 254–261. https://doi.org/10.9734/ijpss/2023/v35i173205

Núñez-Gómez, D., Legua, P., Lidón, V., Conesa, A., Martínez-Nicolás, J. J., & Melgarejo, P. (2024). Evaluation of Agricultural Soil-Improving Zeolite for Improving Irrigation Water Quality. *Applied Sciences*, *14*(4), 1–16. https://doi.org/10.3390/app14010418

Purwanti, T. S., Syafrial, S., Huang, W. C., & Saeri, M. (2022). What Drives Climate Change Adaptation Practices in Smallholder Farmers? Evidence from Potato Farmers in Indonesia. *Atmosphere*, *13*(1). https://doi.org/10.3390/atmos13010113

Pusat Data dan Sistem Informasi Pertanian. (2023). *Statistik Konsumsi Pangan Tahun 2023*. Sekretariat Jenderal, Kementerian Pertanian.

Putra, D. P., nugraha, N. S., bimantio, M. P., suparyanto, T., & pardamean, B. (2024). Biological planting media as marginal land resolution with local bio introduction Soil is a planting material that has a variety of functions in it , its main function has a lot of influence on life and almost all living things on earth . The most signifi. *Commun. Math. Biol. Neurosci*, *2*(1), 1–14. https://doi.org/https://doi.org/10.28919/cmbn/8913

Putra, D. pratama, Ferhat, A., Nugraha, N. S., Prasanto, M., & Rahman, J. S. (2022). Optimalisasi lahan sawah dengan teknologi pupuk organik carbontiliser. *Seminar Nasional INSTIPER*, 94–104. https://doi.org/10.55180/pro.v1i1.246

Salimani, S., Verma, R., Kumar, K. B., & Mehta, S. (2025). Impact of Biofertilizers and Integrated Nutrient Management on Transplanted Rice for Improving the Growth , Yield and Soil Quality : A Review. *International Journal of Plant & Soil Science*, *37*(5), 271–281. https://doi.org/https://doi.org/10.9734/ijpss/2025/v37i55451

Sikora, J., Niemiec, M., Tabak, M., Gródek-Szostak, Z., Szelag-Sikora, A., Kuboń, M., & Komorowska, M. (2020). Assessment of the efficiency of nitrogen slow-release fertilizers in integrated production of carrot depending on fertilization strategy. *Sustainability (Switzerland)*, *12*(5), 1–10. https://doi.org/10.3390/su12051982

Sim, D. H. H., Tan, I. A. W., Lim, L. L. P., & Hameed, B. H. (2021). Encapsulated biochar-based sustained release fertilizer for precision agriculture: A review. *Journal of Cleaner Production*, *303*, 127018. https://doi.org/10.1016/j.jclepro.2021.127018

Sitorus, S. R. P., & Pravitasari, A. E. (2017). Land Degradation and Landslide in Indonesia. *Geography and Geography Education*, *1*(2), 61–71. http://sjdgge.ppj.unp.ac.id

Soltys, L. M., Mironyuk, I. F., Tatarchuk, T. R., & Tsinurchyn, V. I. (2020). Zeolite-based Composites as Slow Release Fertilizers (Review). *Physics and Chemistry of Solid State*, *21*(1), 89–104. https://doi.org/10.15330/pcss.21.1.89-104

Sri, C. B., Shanmugasundaram, R., Marimuthu, S., Chitdeshwari, T., Senthil, A., & Kalaiselvi, T. (2023). Sugarcane Bagasse and Nano-zeolite based Slow Release Fe Fertiliser Hydrogel: Its Synthesis and Characterization. *Agricultural Science Digest - A Research Journal*, *Of*, 1–8. https://doi.org/10.18805/ag.d-5783

Teixeira, R. da S., Ribeiro da Silva, I., Nogueira de Sousa, R., Márcio Mattiello, E.,

& Barros Soares, E. M. (2016). Organic acid coated-slow-release phosphorus fertilizers improve P availability and maize growth in a tropical soil. *Journal of Soil Science and Plant Nutrition*, *16*(4), 1097–1112. https://doi.org/10.4067/S0718-95162016005000081

Trisna, N., Br, M., Purba, K. F., & Intan, D. R. (2024). Assessing efficiency of paddy farming in deli serdang regency , north sumatra , indonesia. *Journal Agrisep*, *23*(02), 705–720. https://doi.org/10.31186/jagrisep.23.02.705-720

Wang, C., Luo, D., Zhang, X., Huang, R., Cao, Y., Liu, G., Zhang, Y., & Wang, H. (2022). Biochar-based slow-release of fertilizers for sustainable agriculture: A mini review. *Environmental Science and Ecotechnology*, *10*, 100167. https://doi.org/10.1016/j.ese.2022.100167

Widiarta, I. N., Firmansyah, F., Yunus, M., Apriana, A., Sisharmini, A., Santoso, T. J., Terryana, R. T., Rahmini, R., Rumanti, I. A., Sitaresmi, T., Margaret, S., Chaerani, C., Widartsi, A., Nugraha, Y., & Hairmansis, A. (2025). Rice virus disease in Indonesia: epidemiology and varietal resistance. *Phytopathology Research*, *7*(1). https://doi.org/10.1186/s42483-024-00302-4

Wijayanto, B., & Puspitojati, E. (2024). Optimizing Agricultural Mechanization to Enhance The Efficiency and Productivity of Farming In Indonesia: A Review. *AJARCDE (Asian Journal of Applied Research for Community Development and Empowerment)*, *8*(3), 209–217. https://doi.org/10.29165/ajarcde.v8i3.493

Winarno, K., Sustiyo, J., Aziz, A. A., & Permani, R. (2025). Unlocking agricultural mechanisation potential in Indonesia : Barriers , drivers , and pathways for sustainable agri-food systems. *Agricultural Systems*, *226*, 1–20. https://doi.org/10.1016/j.agsy.2025.104305

Zhao, C., Liu, G., Chen, Y., & Jiang, Y. (2022). Excessive Nitrogen Application Leads to Lower Rice Yield and Grain Quality by Inhibiting the Grain Filling of Inferior Grains. *Agriculture, 12*(7), 1–17. https://doi.org/10.3390/agriculture12070962

LAMPIRAN

Lampiran 1 Proses penghitungan gabah padi

Lampiran 2. Proses penimbangan

Lampiran 3. Pengukuran Bagan Warna Daun Padi

Lampiran 4. Pengukuran panjang Malai

Lampiran 5. Pemupukan padi

Lampiran 6. Pengukuran SPAD daun Padi

Lampiran 8. Pembersihan perakaran tanaman Padi

Lampiran 7. Padi yang telah di bersihkan

Lampiran 9. Pengukuran panjang Padi

Lampiran 10. Proses penyortiran padi berdasarkan Perlakuan

Lampiran 11. Data mentah vegetatif Padi

Jumlah Daun			Panjang Daun			BWD Daun			Lebar Daun			Jumlah Anakan			Tinggi Padi			SPAD		
30 HST	60 HST	Panen	30 HST	60 HST	Panen	30 HST	60 HST	Panen	30 HST	60 HST	Panen	30 HST	60 HST	Panen	30 HST	60 HST	Panen	30 HST	60 HST	Panen
45	42	29	71.6	77.3	82.3	4	4	1	0.4	1.5	1	14	15	13	91.5	100	108	46.4	38.8	29.4
34	37	38	51.3	69.3	81.4	3	3	2	0.5	1.4	1.2	17	17	16	77.9	83.3	90.6	43.1	21.5	30.1
24	28	27	39.6	52.4	60.2	4	4	5	0.4	1.2	1	7	12	11	67.3	79.2	91.1	39.2	43.7	28.7
36	39	22	51.2	71.2	76.8	4	4	2	0.3	1.4	1	19	13	13	75.4	87.2	95.1	37.4	53.7	26.6
38	40	21	48.6	68.4	72.3	4	4	1	0.3	1.3	1.1	22	15	13	72.0	85.7	95.4	40.2	39.1	27.7
20	29	22	41.5	70.4	59.1	4	4	4	0.4	1.3	1	8	12	14	55.4	81.2	91.6	35.2	43.8	27.3
28	35	24	56.3	72.3	81.2	4	4	1	0.2	1.4	1.2	17	16	17	82.3	90.3	97.6	41.2	34.9	29.1
33	40	28	44.6	68.9	57.6	4	4	2	0.3	1.5	1	13	14	11	66.7	80.7	96.7	39.4	36.3	26.8
29	37	21	38.3	58.3	66.6	4	4	2	0.4	1.2	0.8	14	15	10	64.0	75.4	89.2	38.3	46.2	26.5
28	35	23	51.3	67.9	60.1	4	3	3	0.6	1.6	1.5	15	13	17	70.5	83.4	93.6	39.5	24.3	27.6
33	39	25	44.7	52.3	67.2	4	4	2	0.4	1.3	1.2	14	17	14	65.9	83.2	90.5	39.8	42.2	26.9
32	44	28	49.6	59.2	66.1	4	1	3	0.3	1.4	1.2	14	17	8	63.9	78.3	85.1	38.5	8.3	26.8
32	39	23	61.3	70.6	44.1	3	3	3	0.5	1.6	1	15	16	12	83.0	102	90.6	40.8	34.6	27
33	41	36	60.4	79.1	61.4	4	4	2	0.4	1.5	1.2	15	14	15	81.1	108	91.1	40.9	37.4	26.1
40	51	27	57.6	65.2	65.3	3	4	3	0.3	1.2	1.3	18	18	12	71.6	90.6	92	39.3	30.8	28.1
29	36	23	59.6	63.7	59.4	4	4	2	0.4	1.3	1	14	13	13	78.6	104	99.6	39.6	40.7	28
33	41	24	68.7	77.1	51.1	4	4	3	0.3	1.4	1.4	16	14	12	79.4	100	93.4	40.3	35.9	27.2
28	39	0	41.8	66.8	0	4	4	0	0.5	1.4	0	12	21	0	60.7	93.4	0	40.5	36.4	0
33	41	24	61.7	74.3	52.3	4	4	2	0.4	1.5	1	16	16	13	79.2	103	96.4	39.2	45.2	27.4
28	37	28	56.3	62.9	56.4	4	4	2	0.3	1.6	1.5	14	15	14	79.3	102	98.6	37.8	39.1	26.7
34	41	32	43.6	79.3	66.4	4	3	3	0.6	1.4	0.6	22	16	14	60.8	87.7	84.6	38.9	30.1	26.4
37	48	31	61.3	76.3	61.1	4	4	5	0.7	1.4	1.4	19	16	12	80.7	103	94.8	39.2	36.3	26.3
32	43	0	64.8	79.2	0	4	4	0	0.6	1.3	0	15	17	0	87.4	102	0	38.6	38.9	0
39	49	26	43.7	74.3	65.2	4	4	3	0.6	1.2	1.3	13	18	11	65.3	94.9	91	38.8	36.2	26.6
24	33	18	51.7	72.6	62.1	4	3	2	0.3	1.4	1.1	17	19	14	73.9	97.2	93.6	42.0	27.4	27.5
26	37	28	63.2	71.4	59	4	4	4	0.4	1.3	0.9	11	18	12	77.8	100	80.8	39.5	37.6	26.4
28	39	0	48.7	62.3	0	4	4	0	0.6	1.4	0	14	14	0	70.3	91.2	0	39.2	32.5	0
37	49	16	55.7	67.4	58.9	4	4	3	0.8	1.2	1.2	15	14	11	76.2	93.4	89.6	37.5	38	26.8
23	37	23	52.3	64.7	67	3	4	4	0.6	1.5	1.3	14	15	13	74.0	91.2	92.2	44.4	41	27.5
37	51	0	53.7	66.7	0	3	4	0	0.4	1.3	0	15	16	0	71.8	92.3	0	38.8	33.9	0
36	47	24	61.3	74.8	58.1	4	4	4	0.7	1.4	1.2	20	13	15	82.6	104	93.6	37.9	34.6	18.2
26	36	32	59.3	78.2	53.6	4	4	3	0.6	1.3	1.2	9	16	12	81.3	103	96.4	42.7	45.2	28.3
31	44	23	47.5	73.4	63.3	3	4	3	0.3	1.5	1.1	19	24	11	68.9	97.6	90.6	41.2	35.4	26.4

Lampiran 12. Data mentah generatif Padi

Berat Malai	Hampa/Malai	Bernas/Malai	Gabah/Malai	Panjang Malai	Berat Gabah/Tan	Anak Prodktif	Berat Kering	Berat
4.69	47.0	184	231	35.6	19.0	8.0	77.3	[illegible]
5.75	177.0	111	288	29.5	11.0	6.0	112.3	[illegible]
6.59	52.0	166	218	36.2	11.0	5.0	18.4	[illegible]
7.61	29.0	173	202	21.4	8.0	2.0	57	[illegible]
5.68	31.0	196	227	24.3	13.0	4.0	102.9	[illegible]
8.75	60.0	257	317	22.5	11.0	4.0	15.6	[illegible]
6.85	95.0	211	306	34.5	15.0	6.0	112.3	[illegible]
7.76	209.0	104	313	35.6	8.0	3.0	38.9	[illegible]
5.85	63.0	178	241	32.3	5.0	2.0	39.4	[illegible]
4.87	14.0	155	169	24.6	9.0	6.0	131.3	[illegible]
4.69	34.0	155	189	28.6	3.0	2.0	60.8	[illegible]
5.99	53.0	120	173	25.6	5.0	3.0	55.6	[illegible]
6.91	80.0	110	190	26.3	2.0	1.0	41.2	[illegible]
6.99	71.0	186	257	22.1	8.0	4.0	33.4	[illegible]
3.91	27.0	205	232	18.5	7.0	4.0	45.4	[illegible]
6.23	120.0	172	292	28.5	4.0	2.0	40.3	[illegible]
6.51	51.0	152	203	25.3	4.0	2.0	61.9	[illegible]
0.00	0.0	0	0	0.0	0.0	0.0	0	[illegible]
2.24	125.0	45	165	25.4	4.0	3.0	37	[illegible]
2.00	102.0	29	131	25.8	7.0	4.0	61.8	[illegible]
2.78	96.0	51	147	24.5	6.0	4.0	37.2	[illegible]