

DAFTAR PUSTAKA

- Agus, F., dan Subiksa, I.G., 2008. *Lahan Gambut: Potensi untuk Pertanian dan Aspek Lingkungan*. Balai Penelitian Tanah Badan Penelitian dan Pengembangan Pertanian, Bogor.
- Asaoka, A., 1978. Observational Procedure of Settlement Prediction. *Soil and Foundations*, 18(4), pp.87-101.
- ASTM D 4427-92, 2002. *Standard Classification of peats Sampels by Laboratory Testing*. Annual Book of ASTM Standards, Philadelphia, USA.
- Balasubramaniam, A.S., Cai, H., Zhu, D., Surarak, C., dan Oh E.Y.N, 2010. Settlements of Embankments in Soft Soils. *Geotechnical Engineering Journal*, 41(21), pp.1-19.
- Barchia, M.F., 2012. *Gambut Agroekosistem dan Transformasi Karbon*. Gadjah Mada Univercity Press, Cetakan kedua, Yogyakarta.
- Blackwood, T.W., dan Vulova, C.V., 2006. Geogrid Reinforced Embankment Constructed over Peat Soils in Clark Country, Washington: Design and Field Performance. In *Airfield and Highway Pavement: Meeting Today's Challenges with Emerging Technologies* (pp. 317-328).
- Boiko, I.L., Alhassan, M., dan Adejumo, T.W., 2013. Load-Settlement Test of Full-Scale Foundation on Concrete-Grid Reinforced Soil. *Academic Journal, Journal of Civil Engineering and Construction Technology*, 4(6), pp.211-216.
- Boobathiraja, S., Balamurugan, P., Dhansheer, M., dan Adhikari, A., 2014. Study on Strength of Peat Soil Stabilised with Cement and Other Pozzolanic Materials. *International, Journal of Civil Engineering Research*, 5(4), pp.431-438.
- Bowles, J.E., 1997. *Foundation Analysis and Design*. Edisi 5, McGraw-Hill, New York, USA.
- Brinkgreve, R.B.J., 2002. *PLAXIS 2D – Version 8*. A.A. Balkema Publishers, Netherlands.
- Cappa, R. dan Yniesta, S., 2015. Settlement Estimations of Peat during Centrifuge Experiments. In *IFCEE 2015* (pp. 152-160).
- Carchedi, D.R., Monaghan, J., dan Parra, J., 2006. Innovative Stabilization of Peat Soils for Railroad Foundation Using Rammed Aggregate Piers. In *Ground Modification and Seismic Mitigation* (pp. 127-134).
- Casagrande, A., 1948. Classification and Identification of Soils. *Transaction, ASCE*, 113, pp.901-930.
- Chung, S. G., Lee, N. K., dan Kim, S. R., 2009. Hyperbolic Method for Prediction of Prefabricated Vertical Drains Performance. *Journal of Geotechnical and Geoenvironmental Engineering*, 135(10), pp.1519-1528.

- Chu, J. dan Yan, S.W., 2005. Estimation of Degree of Consolidation for Vacuum Preloading Projects. *International Journal of Geomechanics*, 5(2), pp.158-165.
- Demir, A., Yildiz, A., Laman, M., dan Ornek, M., 2014. Experimental and Numerical Analyses of Circular Footing on Geogrid-Reinforced Granular Fill Underlain by Soft Clay. *Acta Geotechnica*, 9(4), 711–723.
- Diana W., Hardiyatmo, H. C., dan Suhendro, B., 2015. Uji Model Sistem Pelat Terpaku (Soil Nailing System) pada Tanah Dasar Ekspansif. *Prosiding Pertemuan Ilmiah Tahunan (PIT) HATTI 2015*, Jakarta.
- Dhowian, A.A., 1978. *Consolidation Effects on Properties of Highly Compressible Soils-Peats*. Disertasi, Civil and Environmental Engineering, University of Wisconsin – Madison.
- Duraisamy, Y., Huat, B.B.K., dan Muniandy, R., 2009. Compressibility Behavior of Fibrous Peat Reinforced with Cement Columns. *Geotech Geol Eng*, 27(5), pp.619–629.
- Farsakh, M. Y. A. dan Chen, Q., 2011. Evaluation of Geogrid Base Reinforcement in Flexible Pavement Using Cyclic Plate Load Testing. *International Journal of Pavement Engineering*, 12(3), pp.275–288.
- Filz, G., Sloan, J., Mcguire, M.P., Collin, J., dan Smith, M., 2012. Column-Supported Embankment: Settlement and Load Transfer. In *Geotechnical Engineering State of the Art and Practice: Keynote Lectures from GeoCongress 2012* (pp. 54-77).
- Fox, P. J., Edil, T. B., dan Lan, L. T., 1992. C_{α}/C_C Concept Applied to Compression of Peat. *J. Geotech. Engrg.* 118(8), pp.1256-1263.
- Gaaver, K. E., 2013. Uplift Capacity of Single Piles and Pile Groups Embedded in Cohesionless Soil. *Alexandria Engineering Journal*, 52(3), pp.365-372.
- Hardiyatmo, H.C., 2002. *Mekanika Tanah I*. Edisi ketiga, Gadjah Mada University Press, Yogyakarta.
- Hardiyatmo, H.C., 2006. Sistem Cakar Ayam Digabungkan dengan Struktur Box untuk Menangani Penurunan Timbunan di atas Tanah Lunak. *Prosiding Seminar Sehari Teknik Jalan di atas Tanah Lunak*, 1 Februari 2006, Departemen Pekerjaan Umum, Jakarta Selatan.
- Hardiyatmo, H.C., 2008. Sistem Pelat Terpaku (Nailed Slab) untuk Perkuatan Pelat Beton pada Perkerasan Kaku (Rigid Pavement). *Prosiding Seminar Nasional Teknologi Tepat Guna Penanganan Sarana Prasarana, MPSP-FT-UGM*, April 2008, Yogyakarta.
- Hardiyatmo, H.C., 2010a. *Analisis dan Perancangan Fondasi Bagian II*. Gadjah Mada University Press, Yogyakarta.
- Hardiyatmo, H.C., 2010b. *Mekanika Tanah II*. Edisi kelima, Gadjah Mada University Press, Yogyakarta.

- Hardiyatmo, H. C., 2010c. *Perancangan Sistem Cakar Ayam Modifikasi untuk Pekerjaan Jalan Raya*. Cetakan pertama, Gajah Mada University Press, Yogyakarta.
- Hardiyatmo, H.C., 2011. *Analisis dan Perancangan Fondasi Bagian I*. Edisi kedua, Gajah Mada University Press, Yogyakarta.
- Hardiyatmo, H.C., 2013. *Geosintetik Untuk Rekayasa Jalan Raya Perancangan dan Aplikasi*. Edisi kedua, Gajah Mada University Press, Yogyakarta.
- Hardiyatmo, H.C., 2015. *Perancangan Perkerasan Jalan dan Penyelidikan Tanah*. Edisi kedua, Gajah Mada University Press, Yogyakarta.
- Hardiyatmo, H.C. dan Suhendro, B., 2003. *Fondasi Tiang dengan Pile Cap Tipis Sebagai Alternatif untuk Mengatasi Problem Penurunan Bangunan di atas Tanah Lunak*. Laporan Komprehensif Penelitian Hibah Bersaing IX Perguruan Tinggi, Lembaga Penelitian Universitas Gadjah Mada, Yogyakarta, Indonesia.
- Hermawan, Hermawan, W., dan Utami, T.E., 2009. Kajian Geoteknik Lapisan Gambut untuk Fondasi Konstruksi Bangunan. *Buletin Geologi Tata Lingkungan*, 19(2), pp.97-106.
- Holtz, R.D., dan Kovacs, W.D., 1981. *An Introduction to Geotechnical Engineering*. Prentice Hall, Englewood Cliffs, New Jersey.
- Hoque, E., Islam, M.S., Munshi, M.M.K., 2004. Performance of Preloading Applied on a Peaty Clay Deposit. In *Geotechnical Engineering for Transportation Projects* (pp.1991-1999).
- Huat, B.B.K., Asadi, A., dan Kazemian, S., 2009. Experimental Investigation on Geomechanical Properties of Tropical Organic Soils and Peat. *American J. of Engineering and Applied Sciences*, 2(1), pp.184-188.
- Huat, B.B.K., Hoe, N.C., dan Munzir, H.A., 2004. Observational Methods for Predicting Embankment Settlement. *Pertanika J. Sci. Technol.*, 12(1), pp.115-128.
- Huat, B.B.K., Kazemian, S., Prasad, A., dan Barghchi, M., 2011. A Study of The Compressibility Behavior of Peat Stabilized by DMM: Lab Model and FE Analysis. *Academic Journals*, 6(1), pp.196-204.
- Ilyas, T, Rahayu, W., dan Arifin, D.S., 2008. Studi Perilaku Kekuatan Tanah Gambut Kalimantan yang Di-Stabilisasi dengan Semen Portland. *Jurnal Teknologi*, 11(1), pp.1-8.
- Jones, C.J.F.P., 1996. *Earth Reinforcement and Soil Structures*. ASCE Press, New York.
- Kalantari, B., 2013. Civil Engineering Significant of Peat. *Global Journal of Research in Engineering Civil And Structural Engineering*, 13(2), pp.24-28.
- Kallioglou, P., Tika, Th., Koninis, G., Papadopoulos, St., Pitilakis, K., 2009. Shear Modulus and Damping Ratio of Organic Soils. *Geotech Geol Eng*, 27(2), pp.217–235.

- Kazemian, S., Huat, B.B.K., dan Moayedi, H., 2012. Undrained Shear Characteristics of Tropical Peat Reinforced with Cement Stabilized Soil Column. *Geotech Geol Eng*, 30(4), pp.753–759.
- Kazemian, S., Huat, B.B.K., Prasad, A., dan Barghchi, M., 2011. A state of Art Review of Peat : Geotechnical Engineering Perspective. *International Journal of the Physical Sciences*, 6(8), pp.1974-1981.
- Kazemian, S., Asadi, A., Huat, B.B.K., Prasad, A., dan Rahim, I.B.A., 2009. Settlement Problems in Peat Due to Their High Compressibility and Possible Solution Using Cement Columns. In *Forensic Engineering 2009: Pathology of the Built Environment* (pp. 255-264).
- Kolay, P.K., Aminur, M.R., Taib, S.N.L., dan Zain, M.I.S., 2010. Correlation Between Different Physical and Engineering Properties of Tropical Peat Soils from Sarawak. In *Soil Behavior and Geo-Micromechanics* (pp. 56-61).
- Kokasih P.B., 2012. *Teori dan Aplikasi Metode Elemen Hingga*. Penerbit Andi, Yogyakarta.
- Li, C., 2014. A Simplified Method for Prediction of Embankment Settlement in Clays. *Journal of Rock Mechanics and Geotechnical Engineering*, 6(1), pp.61-66.
- Liu, H.L., Ng, C.W.W., dan Fei, K., 2007. Performance of a Geogrid-Reinforced and Pile-Supported Highway Embankment over Soft Clay: Case Study. *Journal of Geotechnical and Geoenvironmental Engineering*, 13(12), pp.1483-1493.
- Mesri, G., dan Ajlouni, M., 2007. Engineering Properties of Fibrous Peats. *Journal Of Geotechnical And Geoenvironmental Engineering*, 133(7), pp.850-866.
- Mesri, G., dan Ajlouni, M., 1997. Secondary Compression of Peat With or Without Surcharging. *Journal of Geotechnical and Geoenvironmental Engineering*, 23(5), pp.411-421.
- Mesri, G., Stark, T.D., dan Chen, C.S., 1994. C_{α}/C_C Concept Applied to Compression of Peat. *Journal of Geotechnical Engineering-ASCE*, 120(4), pp.764-767.
- Meyer, R.V., dan Shao, Y., 2005. Geogrid-Reinforced and Pile-Supported Roadway Embankment. In *Contemporary issues in Foundation Engineering* (pp. 1-13).
- Mochtar, N.E., Yulinato, F.E., dan Rendy T., 2014. Pengaruh Usia Stabilisasi pada Tanah Gambut Berserat yang Distabilisasi dengan Campuran CaCO_3 dan Pozolan. *Jurnal Teknik Sipil*, 21(1), pp.57-63.
- Muntohar, A.S., Rahman, M.E., Hashim, R., dan Islam, M.S., 2013. A Numerical Study of Ground Improvement Technique Using Group of Soil-Column on Peat. *Pertanika J. Sci. & Technol.*, 21(2), pp.625– 634.

- Murdiyarso, D., Dewi S., Lawrence, D., dan Seymour, F., 2011. *Moratorium Hutan Indonesia : Batu Loncatan untuk Memperbaiki Tata Kelola Hutan?*. Working Paper 77. CIFOR, Bogor, Indonesia.
- Nugroho, S.A, 2011. Studi Daya Dukung Pondasi Dangkal pada Tanah Gambut dengan Kombinasi Geotekstil dan Grid Bambu. *Jurnal Teknik Sipil*, 18(1), pp.13 – 40.
- Oh, Y.I., dan Shin, E.C., 2007. Reinforcement and Arching Effect of Geogrid-Reinforced and Pile-Supported Embankment on Marine Soft Ground. *Marine Georesources & Geotechnology*, 25(2), pp.97-118.
- Ojekunle, V., Chen, S., Fei, Y., Jian, L., dan Dai, Z., 2015. Deformation Characteristics and Unloading Time for Passenger-Dedicated Railway Surcharge Preloaded Subgrade. In *Innovative Materials and Design for Sustainable Transportation Infrastructure* (pp. 364-374).
- Pokharel, K., Han, J., Leshchinsky, D., Parsons, R.L., dan Halahmi, I., 2009. Behavior of Geocell-Reinforced Granular Bases under Static and Repeated Loads. In *Contemporary Topics in Ground Modification, Problem Soils, and Geo-Support* (pp. 409-416).
- Priadi, E., 2008. *Behaviour of Tiang Tongkang Foundation over Pontianak Soft Organik Soil Using 3D – Finite Element Analysis*. DR.-ING Dissertation, Technischen Universität Bergakademie Freiberg.
- Panduan Geoteknik-1, 2002. *Timbunan Jalan pada Tanah Lunak - Proses Pembentukan dan Sifat-sifat Dasar Tanah Lunak*. Departemen Permukiman dan Prasarana Wilayah, Edisi Pertama, WSP International.
- Panduan Geoteknik-4, 2002. *Timbunan Jalan pada Tanah Lunak - Desain dan Konstruksi*. Departemen Permukiman dan Prasarana Wilayah, Edisi Pertama, WSP International.
- Pedoman Konstruksi dan Bangunan Pd T-06-2004-B, 2004. *Perencanaan Konstruksi Timbunan Jalan di atas Gambut dengan Metode Prapembebanan*. Departemen Permukiman dan Prasarana Wilayah.
- Porbaha, A., Hanzawa, H., dan Kishida, T., 2000. Analysis of A Failed Embankment on Peaty Ground. In *Slope Stability*, (pp. 281-293).
- Puri A., Hardiyatmo, H.C., Suhendro, B., dan Rifa'i, A., 2013. Pile Spacing and Length Effects Due To the Additional Modulus of Sub Grade Reaction of the Nailed-Slab System on the Soft Clay. The 13th International Conference on QiR, 25-28 June 2013, Yogyakarta.
- Puri A., Hardiyatmo, H.C., Suhendro, B., dan Rifa'i, A., 2011. Studi Eksperimental Lendutan Pelat yang Diperkuat Tiang-tiang Friksi Pendek pada Lempung Lunak. Pertemuan Ilmiah Tahunan XIV HATTI, 10-11 February 2011, Yogyakarta.
- Puri A., 2015. *Perilaku Perkerasan Sistem Pelat Terpaku pada Lempung Lunak*. Disertasi, Ilmu Teknik Sipil, Universitas Gadjah Mada, Yogyakarta.

- Razali, S.N.M., Bakar, I., dan Zainorabidin, A., 2013. Behaviour of Peat Soil in Instrumented Physical Model Studies. *Procedia Engineering*, 53, pp.145-155.
- Reinert, E.T., Brandenberg, S.J., Stewart, J.P., dan Moss, R.E.S., 2012. Dynamic Field Test of a Model Levee Founded on Peaty Organic Soil Using An Eccentric Mass Shaker. *Engineering Lisbon, Portugal*.
- Ryltenius, A., 2011. *FEM Modelling of Piled Raft Foundations in Two and Three Dimensions*. Master's Dissertation, Geotechnical Engineering, Department of Construction Sciences, Lund University, Swedia.
- Rowe, R. K. dan Li, A. L., 2005. Geosynthetic-Reinforced Embankments Over Soft Foundations. *Geosynthetics International*, 12(1), pp.50-85.
- Rowe, R. K., Maclean, M. D., dan Soderman, K. L., 1984. Analysis of a Geotextile-Reinforced Embankment Constructed on Peat. *Canadian Geotechnical Journal*, 21(3), pp.563-576.
- Rowe, R.K., dan Soderman, K.L., 1985, Geotextile Reinforcement of Embankments on Peat, *Geotextiles and Geomembranes*, 2(4), pp.277-298.
- Rowe, R.K., dan Soderman, K.L., 1986, Reinforced Embankments on Very Poor Foundations, *Geotextiles and Geomembranes*, 4(1), pp.65-81.
- Satibi S., (2009), *Numerical Analysis and Design Criteria of Embankments on Floating Piles*, Dissertation, Universität Stuttgart, Germany.
- Setiawan, B., Hardiyatmo, H.C., Suhendro, B., dan Adi, A.D., 2012. Uji Pembebanan dan Pengembangan Model Small Size di Lapangan Sistem Cakar Ayam Modifikasi pada Tanah Ekspansif. *16th Annual Scientific Meeting* Jakarta, 4 December 2012 (pp. 387-391).
- Setiawan B., 2015. *Perilaku Sistem Cakar Ayam Modifikasi pada Tanah Ekspansif*. Disertasi, Ilmu Teknik Sipil, Universitas Gadjah Mada, Yogyakarta.
- Shen, Y., Tao M., Liu, H., Gao, Y., dan Cui, Y., 2013. The Performance of Super Soft Foundation Under Modified Vacuum Preloading Method. In *Forensic Engineering 2012, ASCE* (pp. 708-715).
- Sing, W. L., Hashim, R., dan Ali, F.H., 2008. Engineering Behaviour of Stabilized Peat Soil. *European Journal of Scientific Research*, 21(4), pp.581-591.
- SNI 2847, 2013. *Persyaratan Beton Struktural untuk Bangunan Gedung*. Badan Standardisasi Nasional, Jakarta.
- Suhendro B., 2000. *Metode Elemen Hingga dan Aplikasinya*. Jurusan Teknik Sipil, Fakultas Teknik, Universitas Gadjah Mada, Yogyakarta.
- Tan, T.S., Inoue, T., dan Lee, S.L. 1991. Hyperbolic Method for Consolidation Analysis. *Journal of Geotechnical Engineering*, 117(11), pp.1723-1737.
- Thamm, B.R., 1984. Field Performance of Embankment Over Soft Soil. *Journal of Geotechnical Engineering*, 110(8), pp.1126-1146.

- Tifani, E, 2014. *Kajian Perilaku Pemampatan Tanah Gambut Akibat Pembebanan dan Fluktuasi Muka Air Tanah*. Tesis, Universitas Gadjah Mada, Yogyakarta.
- Toh, C.T., Chee, S.K., Lee, C.H., dan Wee, S.H., 1994. Geotextile-Bamboo Fascine Mattress for Filling over Very Soft Soils in Malaysia. *Geotextiles and Geomembranes*, 13(6-7), pp.357-369.
- Tsushima, M., Oikawa, H., Ogino, T., dan Komatsu, J., 2011. Unconfined Compressive Strength Characteristics of Remolded and Undisturbed Peat Consolidated under Cyclic Loading. In *The Twenty-first International Offshore and Polar Engineering Conference. International Society of Offshore and Polar Engineers* (pp : 415-420).
- United States Department of Agriculture, 1999. *Soil Taxonomy, Basic System of Soil Classification for Making and Interpreting Soil Surveys*. Second Edition, Natural Resources Conservation Service Agriculture Handbook U.S. Government Printing Office Washington, DC.
- Vakher, M., 2000. Load-Deformation Performance of Peat Soil under Large Concrete Plates. In *Geotechnical Measurements: Lab and Field* (pp. 44-55).
- Vakher, M., 2004. Soil Model Selection in Earth-based Extreme Region with Peat Foundation under Large Loading Area. In *Engineering, Construction, and Operations in Challenging Environments: Earth and Space 2004* (pp. 767-774).
- Wahyunto, Ritung, S., Suparto, dan Subagjo, H., 2004. *Sebaran Gambut dan Kandungan Karbon di Sumatera dan Kalimantan*. Canadian International Development Agency, Bogor.
- Weech, C.N. dan Lister, D. R., 2009. Highway Embankment Construction Over Soft Soils in The Lower Mainland of British Columbia. In *2009 Annual Conference and Exhibition of The Transportation Association of Canada-Transportation in A Climate of Change* (pp: 1-21).
- Wetlands International, 2003. *Peta Luas Sebaran Lahan Gambut dan Kandungan Karbon di Pulau Sumatera tahun 1990-2002*. Edisi Pertama, Wetlands International – Indonesia.
- Xiao, M., Gomez, J., Adams, B., Shwiyhat, N., dan Sinco, E., 2010. Experimental Study on Subsurface Erosion of Peats. In *GeoFlorida 2010: Advances in Analysis, Modeling & Design* (pp. 672-680).
- Yan, S.W. dan Chu, J., 2005. Soil Improvement for a Storage Yard Using The Combined Vacuum and Fill Preloading Method, *Canadian Geotechnical Journal*, 42(4), pp.1094-1104.
- Yang, H., Xiao, J., dan He, Y., 2010. An Economic, Practical and Environmental Friendly Surcharge Preloading Method to Improve Soft Ground on Municipal Road. In *Ground Improvement and Geosynthetics* (pp: 31-37).