

Chapter 8

8 REFERENCES

- Alves, R. D., Gitirana, G. de F. N., & Vanapalli, S. K. (2020). Evaluation of prediction models applied to the soil-water characteristic curve of ideal materials. *E3S Web of Conferences*, 195, 02024. <https://doi.org/10.1051/e3sconf/202019502024>
- Arya, L. M., & Dierolf, T. S. (1989). Predicting Soil Moisture Characteristics from Particle-Size Distributions: An Improved Method to Calculate Pore Radii from Particle Radii. *Indirect Methods for Estimating the Hydraulic Properties of Unsaturated Soils*, 115.
- Arya, L. M., & Paris, J. F. (1981a). A Physicoempirical Model to Predict the Soil Moisture Characteristic from Particle-Size Distribution and Bulk Density Data. *Soil Science Society of America Journal*, 45(6), 1023–1030. <https://doi.org/10.2136/sssaj1981.03615995004500060004x>
- Arya, L. M., & Paris, J. F. (1981b). A Physicoempirical Model to Predict the Soil Moisture Characteristic from Particle-Size Distribution and Bulk Density Data. *Soil Science Society of America Journal*, 45(6), 1023–1030. <https://doi.org/10.2136/sssaj1981.03615995004500060004x>
- ASTM D6836-02(2008)e2—*Standard Test Methods for Determination of the Soil Water Chararacteristic Curve for Desorption Using a Hanging Column, Pressure Extractor, Chilled Mirror Hygrometer, and/or Centrifuge*. (n.d.). Retrieved March 29, 2023, from <https://webstore.ansi.org/standards/astm/astmd6836022008e2>
- Aubertin, M., Mbonimpa, M., Bussière, B., & Chapuis, R. P. (2003). A model to predict the water retention curve from basic geotechnical properties. *Canadian Geotechnical Journal*, 40(6), 1104–1122. <https://doi.org/10.1139/t03-054>
- Barker, D. H. (2001). Innovative bioengineering technique for rapid slope stability. *Geotechnical Engineering, H. Li., Ed., Swets & Zeitlinger, Lisse*, 697–702.
- Bishop, A. W. (1959). The principle of effective stress. *Teknisk Ukeblad, Norwegian Geotechnical Institute*, 106, 39, 859–863.
- Böhm, M. (1980). *Methods of Studying Root Systems*. Berlin: Springer (1979), pp. 200, DM 69, Cambridge University Press.
- Croney, D., & Coleman, J. D. (1954). SOIL STRUCTURE IN RELATION TO SOIL SUCTION (pF). *Journal of Soil Science*, 5(1), 75–84. <https://doi.org/10.1111/j.1365-2389.1954.tb02177.x>
- Dobson, M. C., & Moffat, A. J. (1995). A re-evaluation of objections to tree planting on containment landfills. *Waste Management and Research*, 13(6), 579–600.
- Docker, B. B., & Hubble, T. T. C. (2001). Strength and stability of Casuarina glauca roots in relation to slope stability. *Proceeding of the 14th Southeast Asian Geotechnical Conference, Lisse*, 745–749.

- Docker, B. B., & Hubble, T. T. C. (2008). Quantify root-reinforcement of river bank soils by four Australian tree species. *Geomorphology*, 100(3–4), 401–418.
- Docker, B. B., & Hubble, T. T. C. (2009). Modelling the distribution of enhanced soil shear strength beneath riparian trees of south-eastern Australia. *Ecological Engineering*, 35(2009), 921–924.
- Eab, K. H., Likitlersuang, S., & Takahashi, A. (2015). Laboratory and modelling investigation of root-reinforced system for slope stabilisation. *Soils Found.*, 55(5), 1270–1281.
- Escario, V., & Juca, J. F. T. (1989). Shear strength and deformation of partly saturated soils. *Proceedings of the Twelfth International Conference on Soil Mechanics and Foundation Engineering, Rio de Janeiro*, 1, 43–46.
- Fahati, B., Indraratna, B., & Khabbaz, M. H. (2007). Soft soil improvement induced by tree root suction: Report online. *Australian Geomechanics Journal*, 42(4), 13–18.
- Fatahi, B., Khabbaz, H., & Indraratna, B. (2009). Parametric studies on bioengineering effects of tree root-based suction on ground behavior. *Ecological Engineering*, 35, 1415–1426.
- Feddes, R. A., Bresler, E., & Neuman, S. P. (1974). Field Test of Modified Numerical Model for Water Uptake by Root System. *Water Resources and Research*, 10(6), 1199–1206.
- Feddes, R. A., Kowalik, K., Kolinska-Malinka, K., & Zaradny, H. (1976). Simulation of field water uptake by plants using a soil water dependent root extraction function. *Journal of Hydrology*, 31(1–2), 13–26.
- Fredlund, D. G. (1996). *The scope of unsaturated soil mechanics- An overview*.
- Fredlund, D. G., & Morgenstern, N. R. (1977). Stress state variables for unsaturated soils. *Journal of Geotechnical and Geo-Environmental Engineering*, 103, 447–466.
- Fredlund, D. G., Rahardjo, H., & Fredlund, M. D. (2012). Soil-Water Characteristic Curves for Unsaturated Soils. In *Unsaturated Soil Mechanics in Engineering Practice* (pp. 184–272). John Wiley & Sons, Ltd. <https://doi.org/10.1002/9781118280492.ch5>
- Fredlund, D. G., & Ranhardjo, H. (1993). *Soil Mechanics for Unsaturated Soils*. Wiely.
- Fredlund, D. G., Ranhardjo, H., & Fredlund, M. D. (2012a). Measurement and Estimation of State Variables. In *Unsaturated Soil Mechanics in Engineering Practice* (pp. 109–183). John Wiley & Sons, Ltd. <https://doi.org/10.1002/9781118280492.ch4>
- Fredlund, D. G., Ranhardjo, H., & Fredlund, M. D. (2012b). Theory to practice of unsaturated soil mechanics. In *Unsaturated Soil Mechanics in Engineering Practice* (pp. 1–28). John Wiley & Sons, Ltd. <https://doi.org/10.1002/9781118280492.ch1>

- Fredlund, D. G., & Xing, A. (1994). Equations for the soil-water characteristic curve. *CANADIAN GEOTECHNICAL JOURNAL*, 31(4), 521–532.
- Fredlund, M. D., Fredlund, D. G., Wilson, G. W., & Sillers, W. S. (1996). Design of a knowledge-based system for unsaturated soil properties. *Proceedings of the Third Canadian Conference on Computing in Civil and Building Engineering, Montreal, QC*, 659–677.
- Gan, J. K.-M., & Fredlund, D. G. (1988). Multistage direct shear testing of unsaturated soils. *Geotechnical Testing Journal, ASTM*, 11(2), 132–138.
- Gardner, W. R. (1960). Dynamic aspects of water availability to plants. *Soil Science*, 89(2), 63–73.
- Gee, G. W., Campbell, M. D., Campbell, G. S., & Campbell, J. H. (1992). Rapid Measurement of Low Soil Water Potentials Using a Water Activity Meter. *Soil Science Society of America Journal*, 56(4), 1068–1070. <https://doi.org/10.2136/sssaj1992.03615995005600040010x>
- Ghestem, M., Sidle, R. C., & Stokes, A. (2011). The influence of plant root systems on subsurface flow: Implications for slope stability. *Bio Science*, 61(11), 869–879.
- Gilmen, E. F. (1980). *An Illustrated Guide to Pruning, Environmental Horticulture Department, IFAS, University of Florida*.
- Gonzalez-Ollauri, A., & Mickovski, S. B. (2017). Plant-soil reinforcement response under different soil hydrological regimes. *Geoderma*, 285, 141–150.
- Green, S. R. (1992). Radiation balance, transpiration and photosynthesis of an isolated tree. *Agricultural and Forest Meteorology*, 64(1993), 201–221.
- Greenway, D. R. (1987). Vegetation and slope stability. *Geotechnical Engineering and Geomorphology*, 187–230.
- Haverkamp, R., & Parlange, J.-Y. (1986). PREDICTING THE WATER-RETENTION CURVE FROM PARTICLE-SIZE DISTRIBUTION: 1. SANDY SOILS WITHOUT ORGANIC MATTER: 1. *Soil Science*, 142(6), 325.
- Hillel, D., Talpaz, H., & Van Keulen, H. (1976). A Macroscopic Sacle model for water uptake by an non uniform root system and of water and salt movement in the soil profile. *Soil Science Society of America Proceedings*, 121, 242–255.
- Indraratna, B., Fahati, B., & Khabbaz, H. (2006). Numerical analysis of matric suction effects of tree roots. *Proceedings of the Institution of Civil Engineers: Geotechnical Engineering*, 159(2), 77–90.
- Iskandar, D. T. (1978). A new species of Barbourula: First record of a discoglossid anuran in Borneo. *Copeia*, 564–566.
- Jones, D. E., & Holtz, W. G. (1973). *Expansive Soils—The Hidden Disaster*. 139–153.
- Jotisankasa, A., Mairaing, W., & Tansamrit, S. (2014). Infiltration and stability of soil slope with vetiver grass subjected to rainfall from numerical modeling. *Proceedings of the 6th International Conference on Unsaturated Soils, UNSAT*

2014, *Unsaturated Soils: Research & Applications Sydney Australia 2-4 July 2014*, 1241–1247.

- Jotisankasa, A., & Taworn, D. (2016). Direct shear testing of clayey sand reinforced with live stake. *Geotechnical Testing Journal*, 39(4), 608–623.
- Kramer, P. J. (1995). *Water relation of plant and soil ;roots and root systems; chapter 5, academic press, London.*
- Leung, A. K., & Ng, C. W. W. (2013). Analyses of groundwater flow and plant evapotranspiration in a vegetated soil slope. *Canadian Geotechnical Journal*, 50(12), 1204–1218.
- Leung, F. T., Yan, W. M., Hau, B. C., & Tham, L. G. (2015). Root systems of native shrubs and trees in Hong Kong and their effects on enhancing slope stability. *Catena*, 125, 102–110.
- Lu, N., & Likos, W. J. (2006). Suction stress characteristic curve for unsaturated soil. *J. Geotech. Geoenviron. Eng.*, 1322, 131–142.
- Lynch, J. (1995). Root architecture and plant productivity. *Plant Physiology*, 109(1), 7.
- Mahannopkul, K., & Jotisankasa, A. (2019). Influences of root concentration and suction on Chrysopogon zizanioides reinforcement of soil. *Soils and Foundations*, 59(2), 500–516. <https://doi.org/10.1016/j.sandf.2018.12.014>
- Martin, R. P. (2001). Panelist Report-landscaping and bio-engineering of slopes in Hong Kong. *Geotechnical Engineering, H. Li.,Ed., Swets & Zeitlinger, Lisse*, 661–670.
- Martin, R. P., Li, C. O., & Pryor, M. R. (2001). Bio-engineering and landscape treatment of slopes and retaining walls in Hong Kong,s landslip preventive measures programme. *Geotechnical Engineering, H. Li.,Ed., Swets & Zeitlinger, Lisse*, 863–868.
- Mulyono, A., Subardja, A., EkaSari, I., Lailati, M., Sudiria, R., & Ningrum, W. (2018). *IOP Conf. Series: Earth and Environmental Science*. 118. <https://doi.org/doi:10.1088/1755-1315/118/1/012038>
- Ng, C. W. W., Leung, A. K., Kamchoom, V., & Garg, A. (2014). A novel root system for simulating transpiration induced soil suction in centrifuge. *Geotech. Test. J.*, 35(5). <https://doi.org/10.1520/GTJ20130116>
- Ng, C. W. W., Woon, K. X., Leung, A. K., & Chu, L. M. (2013). Experimental investigation of induced suction distribution in a grass-covered soil. *Ecological Engineering*, 52, 219–223.
- Nimah, M. H., & Hanks, R. J. (1973). Model for estimating soil water, plant and atmospheric inter relations. *Soil Science Society of America*, 37(4), 522–527.
- Nishimura, T., & Fredlund, D. G. (2001). Failure envelope of a desiccated, unsaturated silty soil. *Proceedings of the Fifteenth Internal Conference on Soil Mechanics and Foundation Engineering*, 615–618.

- Noraini, M. T., & Ghani, J. A. (2001). Bioengineering on slopes for landslide stabilization and prevention in Malaysia. *Geotechnical Engineering, H. Li., Ed., Swets & Zeitlinger, Lisse*, 875–879.
- Operstein, V., & Frydman, S. (2000). The influence of vegetation on soil strength. *Proceeding of the Institution of Civil Engineers-Ground Improvement*, 4(2), 81–89.
- Parker, J. C., Kool, J. B., & van Genuchten, M. Th. (1985). Determining Soil Hydraulic Properties from One-step Outflow Experiments by Parameter Estimation: II. Experimental Studies. *Soil Science Society of America Journal*, 49(6), 1354–1359. <https://doi.org/10.2136/sssaj1985.03615995004900060005x>
- Pollen-Bankhead, N., & Simon, A. (2010). Hydrologic and hydraulic effects of riparian root networks on streambank stability: Is mechanical rootreinforcement the whole story? *Geomorphology*, 116(3), 353–362.
- Rahardjo, H., Satyanaga, A., Leong, E. C., & Ng, Y. S. (2014). Performance of an instrumented slope covered with shrubs and deeprooted grass. *Soils Found.*, 54(3), 417–425.
- Sattelmacher, B., Marschner, H., & Kühne, R. (1990). Effects of the temperature of the rooting zone on the growth and development of roots of potato (*Solanum tuberosum*). *Annals of Botany*, 65(1), 27–36.
- Shao, M., & Horton, R. (1998). Integral Method for Estimating Soil Hydraulic Properties. *Soil Science Society of America Journal*, 62(3), 585–592. <https://doi.org/10.2136/sssaj1998.03615995006200030005x>
- Terzaghi, K. (1936). The shear strength of saturated soils. *The First International Conference on Soil Mechanics and Foundation Engineering, Cambridge, MA*, 1, 54–56.
- van Genuchten, M. Th. (1980). A Closed-form Equation for Predicting the Hydraulic Conductivity of Unsaturated Soils. *Soil Science Society of America Journal*, 44(5), 892–898. <https://doi.org/10.2136/sssaj1980.03615995004400050002x>
- Vanapali, S., & Fredlund, D. (2000). Comparison of different procedures to predict unsaturated soil shear strength. *Advances in Unsaturated Geotechnics*, 1995–209.
- Vanapali, S. K., Fredlund, D. G., Pufahl, D. E., & Clifton, A. W. (1996). Model for the prediction of shear strength with respect to soil suction. *CANADIAN GEOTECHNICAL JOURNAL*, 33(3), 379–392.
- Waldron, L. J., & Dakessian, S. (1981). Soil reinforcement by roots: Calculation of increased soil shear resistance from root properties. *Soil Science*, 132, 427–435.
- Wang, J.-P., Hu, N., François, B., & Lambert, P. (2017). Estimating water retention curves and strength properties of unsaturated sandy soils from basic soil gradation parameters. *Water Resources Research*, 53(7), 6069–6088. <https://doi.org/10.1002/2017WR020411>

- Whisler, F. D., Klute, A., & Milionton, R. J. (1968). Analysis of steady state evapotranspiration from a soil column. *Soil Science Society of America Proceedings*, 32, 167–174.
- Wu, T. H., McKinnell lii, W. P., & Swanston, D. N. (1979). *Strength of tree roots and landslides on Prince of Wales Island, Alaska*. 16(1), 19–33.
- Ziemer, R. R. (1981). The role of vegetation in the stability of forested slopes. *Proc. Int. XVII IUFRO World Congress*, 297–308.