



## DAFTAR PUSTAKA

- Abdi, E. (2014). Effect of Oriental beech root reinforcement on slope stability (Hyrcanian Forest, Iran). *Journal of Forest Science*, 60(No. 4), 166–173. <https://doi.org/10.17221/93/2013-jSF>
- Ahmed, S., Hilmers, T., Uhl, E., Tupinambá-Simões, F., Ordóñez, C., Bravo, F., del Río, M., Peters, R. L., & Pretzsch, H. (2025). From suppressed to dominant: 3D crown shapes explain the “to grow or wait” growth behavior in close-to-nature forests. *Forest Ecology and Management*, 592, 122814. <https://doi.org/10.1016/j.foreco.2025.122814>
- Alam Mehtab, Jiang, Y.-J., Su, L., Sadiq, S., Li, J., & Rahman Md. Mahfuzur. (2020). *Scaling the Roots Mechanical Reinforcement in Plantation of Cunninghamia R. Br in Southwest China*. 12(1), 33–33. <https://doi.org/10.3390/f12010033>
- Allen, R., Pereira, L., Raes, D., & Smith, M. (1998). *Crop evapotranspiration -Guidelines for computing crop water requirements -FAO Irrigation and drainage paper 56*. [https://appgeodb.nancy.inrae.fr/biljou/pdf/Allen\\_FAO1998.pdf](https://appgeodb.nancy.inrae.fr/biljou/pdf/Allen_FAO1998.pdf)
- Ammann, M., Böll, A., Rickli, C., Speck, T., & Ottmar Holdenrieder. (2009). *Significance of tree root decomposition for shallow landslides*. 82(1), 79–94.
- Atkinson, D. (1976). Preliminary observations of the effect of spacing on the apple root system. *Scientia Horticulturae*, 4(3), 285–290. [https://doi.org/10.1016/0304-4238\(76\)90052-2](https://doi.org/10.1016/0304-4238(76)90052-2)
- Babi, K., Guittonny, M., Larocque, G. R., & Bussièrè, B. (2018). Effects of spacing and herbaceous hydroseeding on water stress exposure and root development of poplars planted in soil-covered waste rock slopes. *Ecoscience*, 26(2), 149–163. <https://doi.org/10.1080/11956860.2018.1538591>
- Bao, H., Ao, X.L., Gao, Y.S., Lan, H.X., Guo, G.M., Yan, C.G., Zheng, H. (2023). Evolution analysis of root reinforcement mechanical effect of typical plant. *China Journal of Highway and Transport*. 1–19.
- Bo, H., Wen, C., Song, L., Yue, Y., & Nie, L. (2018). Fine-Root Responses of *Populus tomentosa* Forests to Stand Density. *Forests*, 9(9), 562. <https://doi.org/10.3390/f9090562>
- Briggs, K. M., Smethurst, J. A., Powrie, W., & O'Brien, A. S. (2016). The influence of tree root water uptake on the long term hydrology of a clay fill railway embankment. *Transportation Geotechnics*, 9, 31–48. <https://doi.org/10.1016/j.trgeo.2016.06.001>
- Capilleri, P. P., Cuomo, M., Motta, E., & Todaro, M. (2019). Experimental Investigation of Root Tensile Strength for Slope Stabilization. *Indian Geotechnical Journal*, 49(6), 687–697. <https://doi.org/10.1007/s40098-019-00394-2>
- Carl, C., Biber, P., Veste, M., Landgraf, D., & Pretzsch, H. (2018). Key drivers of competition and growth partitioning among *Robinia pseudoacacia* L. trees. *Forest Ecology and Management*, 430, 86–93. <https://doi.org/10.1016/j.foreco.2018.08.002>
- Chaibva, P., McCloskey, C. S., Sizmur, T., Greenfield, L. M., Ahmed, S., & Evans, D. L. (2025). Uncovering plant root traits and mechanisms that enable penetration, exploration, and exploitation of soil parent materials: a systematic review. *Plant and Soil*. <https://doi.org/10.1007/s11104-025-07916-3>



- Chavan Ashwini Gurudeo, & Mudgundi Rajani Digambar. (2017). Pseudostatic Slope Stability Analysis. *JournalNX*, 80–83.
- Chen, B., Shui, W., Liu, Y., & Deng, R. (2023). Analysis of Slope Stability with Different Vegetation Types under the Influence of Rainfall. *Forests*, 14(9), 1865. <https://doi.org/10.3390/f14091865>
- Chen, S., Hua, J., Liu, W., Yang, S., Wang, X., & Ji, W. (2023). Effects of Artificial Restoration and Natural Recovery on Plant Communities and Soil Properties across Different Temporal Gradients after Landslides. *Forests*, 14(10), 1974. <https://doi.org/10.3390/f14101974>
- Cheng, C.-H., Hung, C.-Y., Chen, C.-P., & Pei, C.-W. (2013). Biomass carbon accumulation in aging Japanese cedar plantations in Xitou, central Taiwan. *Botanical Studies*, 54(1). <https://doi.org/10.1186/1999-3110-54-60>
- Chiatante, D., Scippa, S. G., Di Iorio, A., & Sarnataro, M. (2002). The Influence of Steep Slopes on Root System Development. *Journal of Plant Growth Regulation*, 21(4), 247–260. <https://doi.org/10.1007/s00344-003-0012-0>
- Chirico, G. B., Borga, M., Tarolli, P., Rigon, R., & Preti, F. (2013). Role of Vegetation on Slope Stability under Transient Unsaturated Conditions. *Procedia Environmental Sciences*, 19, 932–941. <https://doi.org/10.1016/j.proenv.2013.06.103>
- Chok, Y. H., Jaksa, M. B., Kaggwa, W. S., & Griffiths, D. V. (2015). Assessing the influence of root reinforcement on slope stability by finite elements. *International Journal of Geo-Engineering*, 6(1). <https://doi.org/10.1186/s40703-015-0012-5>
- Cohen, D., & Schwarz, M. (2017). Tree-root control of shallow landslides. *Earth Surface Dynamics*, 5(3), 451–477. <https://doi.org/10.5194/esurf-5-451-2017>
- Cruden, D. M. (1996). Cruden, D.M., Varnes, D.J., 1996, Landslide Types and Processes, Special Report , Transportation Research Board, National Academy of Sciences, 247:36-75. Special Report - National Research Council, Transportation Research Board, 247, 76. [https://www.researchgate.net/publication/269710355\\_CrudенDM\\_Varnes\\_DJ\\_1996\\_Landslide\\_Types\\_and\\_Processes\\_Special\\_Report\\_Transportation\\_Research\\_Board\\_National\\_Academy\\_of\\_Sciences\\_24736-75](https://www.researchgate.net/publication/269710355_CrudенDM_Varnes_DJ_1996_Landslide_Types_and_Processes_Special_Report_Transportation_Research_Board_National_Academy_of_Sciences_24736-75)
- Dahle, G., James, K., Kane, B., Grabosky, J., & Detter, A. (2017). A Review of Factors That Affect the Static Load-Bearing Capacity of Urban Trees. *Arboriculture & Urban Forestry*, 43(3). <https://doi.org/10.48044/jauf.2017.009>
- Dainese, R., Tedeschi, G., Fourcaud, T., & Tarantino, A. (2020). Measurement of xylem water pressure using High-Capacity Tensiometer and benchmarking against Pressure Chamber and Thermocouple Psychrometer. *E3S Web of Conferences*, 195, 03014. <https://doi.org/10.1051/e3sconf/202019503014>
- Dhakal, A. S., & Sidle, R. C. (2003). Long-term modelling of landslides for different forest management practices. *Earth Surface Processes and Landforms*, 28(8), 853–868. <https://doi.org/10.1002/esp.499>
- Ding Xuekun, Zhang Shouhong, Wang Yujie, Wang Yunqi, & Yunpeng, L. (2017). On the inter-annual variability of vegetated slope stability. *Zhongguo Shuitu Baochi Kexue*, 15(2), 18–24. [https://jglobal.jst.go.jp/en/detail?JGLOBAL\\_ID=201702275347349728](https://jglobal.jst.go.jp/en/detail?JGLOBAL_ID=201702275347349728)



- Docker, B. B., & Hubble, T. C. T. (2008). Quantifying root-reinforcement of river bank soils by four Australian tree species. *Geomorphology*, 100(3-4), 401–418. <https://doi.org/10.1016/j.geomorph.2008.01.009>
- Drew, T. J., & Flewelling, J. W. (1979). Stand Density Management: an Alternative Approach and Its Application to Douglas-fir Plantations. *Forest Science*, 25(3), 518–532. <https://doi.org/10.1093/forestscience/25.3.518>
- Emadi-Tafti, M., & Ataie-Ashtiani, B. (2019). A Modeling Platform for Landslide Stability: A Hydrological Approach. *Water*, 11(10), 2146. <https://doi.org/10.3390/w11102146>
- Fan, Y., Miguez-Macho, G., Jobbágy, E. G., Jackson, R. B., & Otero-Casal, C. (2017). Hydrologic regulation of plant rooting depth. *Proceedings of the National Academy of Sciences of the United States of America*, 114(40), 10572–10577. <https://doi.org/10.1073/pnas.1712381114>
- Gautam, M. K., Mead, D. J., Clinton, P. W., & Chang, S. X. (2003). Biomass and morphology of *Pinus radiata* coarse root components in a sub-humid temperate silvopastoral system. *Forest Ecology and Management*, 177(1-3), 387–397. [https://doi.org/10.1016/s0378-1127\(02\)00411-5](https://doi.org/10.1016/s0378-1127(02)00411-5)
- Genet, M., Kokutse, N., Stokes, A., Fourcaud, T., Cai, X., Ji, J., & Mickovski, S. (2008). Root reinforcement in plantations of *Cryptomeria japonica* D. Don: effect of tree age and stand structure on slope stability. *Forest Ecology and Management*, 256(8), 1517–1526. <https://doi.org/10.1016/j.foreco.2008.05.050>
- Genet, M., Stokes, A., Fourcaud, T., & Norris, J. E. (2010). The influence of plant diversity on slope stability in a moist evergreen deciduous forest. *Ecological Engineering*, 36(3), 265–275. <https://doi.org/10.1016/j.ecoleng.2009.05.018>
- Genet, M., Stokes, A., Salin, F., Mickovski, S. B., Fourcaud, T., Dumail, J.-F., & van Beek, R. (2005). The Influence of Cellulose Content on Tensile Strength in Tree Roots. *Plant and Soil*, 278(1-2), 1–9. <https://doi.org/10.1007/s11104-005-8768-6>
- Ghestem, M., Sidle, R. C., & Stokes, A. (2011). The Influence of Plant Root Sypohon on Subsurface Flow: Implications for Slope Stability. *BioScience*, 61(11), 869–879. <https://doi.org/10.1525/bio.2011.61.11.6>
- Ghestem, M., Veylon, G., Bernard, A., Vanel, Q., & Stokes, A. (2013). Influence of plant root system morphology and architectural traits on soil shear resistance. *Plant and Soil*, 377(1-2), 43–61. <https://doi.org/10.1007/s11104-012-1572-1>
- Giadrossich, F., Schwarz, M., Cohen, D., Cislighi, A., Vergani, C., Hubble, T., Phillips, C., & Stokes, A. (2017). Methods to measure the mechanical behaviour of tree roots: A review. *Ecological Engineering*, 109, 256–271. <https://doi.org/10.1016/j.ecoleng.2017.08.032>
- Giadrossich, F., Schwarz, M., Cohen, D., Preti, F., & Or, D. (2012). Mechanical interactions between neighbouring roots during pullout tests. *Plant and Soil*, 367(1-2), 391–406. <https://doi.org/10.1007/s11104-012-1475-1>
- Graf, F., Frei, M., & Böll, A. (2009). Effects of vegetation on the angle of internal friction of a moraine. *Forest Snow and Landscape Research*, 82(1), 61–77. [https://www.researchgate.net/publication/228496877\\_Effects\\_of\\_vegetation\\_on\\_the\\_angle\\_of\\_internal\\_friction\\_of\\_a\\_moraine](https://www.researchgate.net/publication/228496877_Effects_of_vegetation_on_the_angle_of_internal_friction_of_a_moraine)



- Gray, D.H. (1981). Forest Vegetation Removal and Slope Stability in the Idaho Batholith. US Department of Agriculture, Forest Service, Intermountain Forest and Range
- Greenway, D. R. (1987). Vegetation and slope stability. Slope stability: Geotechnical engineering and geomorphology. Slope Stability: Geotechnical Engineering and Geomorphology; Anderson, MG, Richards, KS, Eds, pp.187–230
- Greenwood, J. R., Norris, J. E., & Wint, J. (2004). Assessing the contribution of vegetation to slope stability. *Proceedings of the Institution of Civil Engineers - Geotechnical Engineering*, 157(4), 199–207. <https://doi.org/10.1680/geng.2004.157.4.199>
- Grima, N., Edwards, D., Edwards, F., Petley, D., & Fisher, B. (2020). Landslides in the Andes: Forests can provide cost-effective landslide regulation services. *Science of the Total Environment*, 745, 141128. <https://doi.org/10.1016/j.scitotenv.2020.141128>
- Gupta, A. (2016). *Relative effectiveness of trees and shrubs on slope stability*. 21(2), 737–753. [https://www.researchgate.net/publication/301544591\\_Relative\\_effectiveness\\_of\\_trees\\_and\\_shrubs\\_on\\_slope\\_stability](https://www.researchgate.net/publication/301544591_Relative_effectiveness_of_trees_and_shrubs_on_slope_stability)
- Hairiah, K., Widiyanto, W., Suprayogo, D., & Van Noordwijk, M. (2020). Tree Roots Anchoring and Binding Soil: Reducing Landslide Risk in Indonesian Agroforestry. *Land*, 9(8), 256. <https://doi.org/10.3390/land9080256>
- Hamza, O., A.G. Bengough, M.F. Bransby, Davies, M. C. R., & Hallett, P. D. (2007). Mechanics of root-pullout from soil: A novel image and stress analysis procedure. Springer EBooks, 213–221. [https://doi.org/10.1007/978-1-4020-5593-5\\_20](https://doi.org/10.1007/978-1-4020-5593-5_20)
- Hawley, J. G., & Dymond, J. R. (1988). How much do trees reduce landsliding? *Journal of Soil and Water Conservation*, 43(6), 495–498. <https://doi.org/10.1080/00224561.1988.12456265>
- Healey, S. P., Raymond, C. L., Lockman, I. B., Hernandez, A. J., Garrard, C., & Huang, C. (2016). Root disease can rival fire and harvest in reducing forest carbon storage. *Ecosphere*, 7(11). <https://doi.org/10.1002/ecs2.1569>
- Highland, L. M., & Bobrowsky, P. (2008). The Landslide Handbook - A Guide to Understanding Landslides. Circular. <https://doi.org/10.3133/cir1325>
- Holsworth, L., & Wu, W. (2014). *Numerical analysis of vegetation effects on slope stability 2014*. <https://www.semanticscholar.org/paper/Numerical-analysis-of-vegetation-effects-on-slope-Holsworth-Wu/cc412fd8786765944ebcfdb7964b717af1d64c2d>
- Keitaro Yamase, Toko Tanikawa, Dannoura, M., Ohashi, M., Chikage Todo, Hidetoshi Ikeno, Aono, K., & Hirano, Y. (2018). Ground-penetrating radar estimates of tree root diameter and distribution under field conditions. *Trees*, 32(6), 1657–1668. <https://doi.org/10.1007/s00468-018-1741-9>
- Kim, J. H., Fourcaud, T., Jourdan, C., Maeght, J.-L., Mao, Z., Metayer, J., Meylan, L., Pierret, A., Rapidel, B., Roupsard, O., de Rouw, A., Sanchez, M. V., Wang, Y., & Stokes, A. (2017). Vegetation as a driver of temporal variations in slope stability: The impact of hydrological processes. *Geophysical Research Letters*, 44(10), 4897–4907. <https://doi.org/10.1002/2017gl073174>
- Kong, K., Deng, Z., Chen, F., Wang, Z., & Chen, Y. (2025). Numerical analysis of the effect of vegetation root reinforcement on the rainfall-induced instability of loess slopes. *Scientific Reports*, 15(1). <https://doi.org/10.1038/s41598-025-06400-3>



- Laurent Saint-André, Armel Thongo M'Bou, André Mabilia, Mouvondy, W. J., Jourdan, C., Olivier Rouspard, Philippe Deleporte, Hamel, O., & Yann Nouvellon. (2005). Age-related equations for above- and below-ground biomass of a Eucalyptus hybrid in Congo. *Forest Ecology and Management*, 205(1-3), 199–214. <https://doi.org/10.1016/j.foreco.2004.10.006>
- Lee, D., Siipilehto, J., & Hynynen, J. (2025). Comparison and analysis of self-thinning models based on diameter-based maximum size-density relationships. *Forest Ecology and Management*, 575, 122374. <https://doi.org/10.1016/j.foreco.2024.122374>
- Liu, Q., Su, L., Xia, Z., Liu, D., Xu, W., & Xiao, H. (2019). Effects of Soil Properties and Illumination Intensities on Matric Suction of Vegetated Soil. *Sustainability*, 11(22), 6475. <https://doi.org/10.3390/su11226475>
- Lotfalian, M., Nasiri, M., Modarres, A., & Wu, W. (2019). Slope Stability Analysis Considering Weight Of Trees And Root Reinforcement. *Journal of Environmental Engineering and Landscape Management*, 27(4), 201–208. <https://doi.org/10.3846/jeelm.2019.11292>
- Lwila, A. S., Ammer, C., Gailing, O., Ludger Leinemann, & Mund, M. (2024). Root overlap and allocation of above- and belowground growth of European beech in pure and mixed stands of Douglas fir and Norway spruce. *Forest Ecology and Management*, 11, 100217–100217. <https://doi.org/10.1016/j.fecs.2024.100217>
- Mao, Z., Bourrier, F., Stokes, A., & Fourcaud, T. (2014). Three-dimensional modelling of slope stability in heterogeneous montane forest ecosystem. *Ecological Modelling*, 273, 11–22. <https://doi.org/10.1016/j.ecolmodel.2013.10.017>
- Marchi, L., Mologni, O., Byrne, K., Grigolato, S., & Roeser, D. (2024). Cyclic loading effects and stability assessment of trees and stumps used as anchors in cable yarding operations. *European Journal of Forest Research*, 143(5), 1593–1609. <https://doi.org/10.1007/s10342-024-01714-9>
- María Barciela-Rial, Rémon Saaltink, Thijs van Kessel, Chassagne, C., Dekker, S. C., Hugo, Griffioen, J., Wassen, M. J., & Winterwerp, J. C. (2023). A new setup to study the influence of plant growth on the consolidation of dredged cohesive sediment. *Frontiers in Earth Science*, 11. <https://doi.org/10.3389/feart.2023.952845>
- Masi, E. B., Segoni, S., & Tofani, V. (2021). Root Reinforcement in Slope Stability Models: A Review. *Geosciences*, 11(5), 212. <https://doi.org/10.3390/geosciences11050212>
- Masi, E. B., Tofani, V., Rossi, G., Cuomo, S., Wu, W., Salciarini, D., Caporali, E., & Catani, F. (2023). Effects of roots cohesion on regional distributed slope stability modelling. *CATENA*, 222, 106853. <https://doi.org/10.1016/j.catena.2022.106853>
- Md. Azijul Islam, Mohammad Shariful Islam, & Elahi, T. E. (2020). Effectiveness of Vetiver Grass on Stabilizing Hill Slopes: A Numerical Approach. *Geo-Congress 2020*. <https://doi.org/10.1061/9780784482797.011>
- Meijer, G. J. (2021). A generic form of fibre bundle models for root reinforcement of soil. *Plant and Soil*. <https://doi.org/10.1007/s11104-021-05039-z>
- Mitchell, S. J. (2012). Wind as a natural disturbance agent in forests: a synthesis. *Forestry*, 86(2), 147–157. <https://doi.org/10.1093/forestry/cps058>
- Moos, C., Bebi, P., Graf, F., Mattli, J., Rickli, C., & Schwarz, M. (2016). How does forest structure affect root reinforcement and susceptibility to shallow landslides? *Earth*



- Surface Processes and Landforms*, 41(7), 951–960. <https://doi.org/10.1002/esp.3887>
- Moresi, F. V., Maesano, M., Matteucci, G., Romagnoli, M., Sidle, R. C., & Scarascia Mugnozza, G. (2019). Root Biomechanical Traits in a Montane Mediterranean Forest Watershed: Variations with Species Diversity and Soil Depth. *Forests*, 10(4), 341. <https://doi.org/10.3390/f10040341>
- Ngo, H. M., Filippo Giadrossich, Murgia, I., Bozin Trendafilov, Alam, M., Keitaro Yamase, Hirano, Y., Cohen, D., & Schwarz, M. (2024). Spatial Root Distribution and Root Reinforcement of *Cryptomeria Japonica* D. Don. <https://doi.org/10.2139/ssrn.5047001>
- Noviandi, R., Gomi, T., Pratama, G. M., Ritonga, R. P., & Fathani, T. F. (2025a). Understanding the role of vegetation root syphon in the initiation of rainfall-induced shallow landslides: scaling perspectives. *Journal of Forest Research*, 1–14. <https://doi.org/10.1080/13416979.2025.2482218>
- Noviandi, R., Gomi, T., Sidle, R. C., Iwasa, N., Ohtaka, N. (2025b). Controls of root-system overlap on hillslope stability. *Communications of Earth and Environment* (Accepted). <https://doi.org/10.21203/rs.3.rs-2658940/v1>
- Novotný, J., Navrátilová, B., Janoutová, R., Oulehle, F., & Homolová, L. (2020). Influence of Site-Specific Conditions on Estimation of Forest above Ground Biomass from Airborne Laser Scanning. *Forests*, 11(3), 268. <https://doi.org/10.3390/f11030268>
- O’Loughlin, C. (1974). THE EFFECT OF TIMBER REMOVAL ON THE STABILITY OF FOREST SOILS. *Journal of Hydrology (New Zealand)*, 13(2), 121–134. JSTOR. <https://doi.org/10.2307/43944309>
- Oorthuis, R., Vaunat, J., Hürlimann, M., Lloret, A., Moya, J., Puig-Polo, C., & Fraccica, A. (2020). Slope Orientation and Vegetation Effects on Soil Thermo-Hydraulic Behavior. An Experimental Study. *Sustainability*, 13(1), 14. <https://doi.org/10.3390/su13010014>
- Pollen, N., & Simon, A. (2005). Estimating the mechanical effects of riparian vegetation on stream bank stability using a fiber bundle model. *Water Resources Research*, 41(7). <https://doi.org/10.1029/2004wr003801>
- Reineke, L. H. (2022). Perfecting a stand-density index for even-aged forest. *Journal of Agricultural Research*, 46, 627–638. <https://research.SF.usda.gov/treesearch/60134>
- Reubens, B., Achten, W., Maes, W., Frederique Danjon, Aerts, R., Poesen, J., & Muys, B. (2011). More than biofuel? *Jatropha curcas* root system symmetry and potential for soil erosion control. 75(2), 201–205. <https://doi.org/10.1016/j.jaridenv.2010.09.011>
- Runyan, C. W., & D’Odorico, P. (2014). Bistable dynamics between forest removal and landslide occurrence. *Water Resources Research*, 50(2), 1112–1130. <https://doi.org/10.1002/2013wr014819>
- Sakals, M. E., & Sidle, R. C. (2004). A spatial and temporal model of root cohesion in forest soils. 34(4), 950–958. <https://doi.org/10.1139/x03-268>
- Schwarz, M., Cohen, D., & Or, D. (2012). Spatial characterization of root reinforcement at stand scale: Theory and case study. *Geomorphology*, 171-172, 190–200. <https://doi.org/10.1016/j.geomorph.2012.05.020>
- Schwarz, M., Giadrossich, F., & Cohen, D. (2013). Modeling root reinforcement using a root-failure Weibull survival function. *Hydrology and Earth System Sciences*, 17(11), 4367–4377. <https://doi.org/10.5194/hess-17-4367-2013>



- Schwarz, M., Lehmann, P., & Or, D. (2010). Quantifying lateral root reinforcement in steep slopes - from a bundle of roots to tree stands. *Earth Surface Processes and Landforms*, 35(3), 354–367. <https://doi.org/10.1002/esp.1927>
- Schwarz, M., Preti, F., Giadrossich, F., Lehmann, P., & Or, D. (2010). Quantifying the role of vegetation in slope stability: A case study in Tuscany (Italy). *Ecological Engineering*, 36(3), 285–291. <https://doi.org/10.1016/j.ecoleng.2009.06.014>
- Shrestha, M. B., Horiuchi, M., Yamadera, Y., & Miyazaki, T. (2000). A study on the adaptability mechanism of tree roots on steep slopes. *The Supporting Roots of Trees and Woody Plants: Form, Function and Physiology*, 51–57. [https://doi.org/10.1007/978-94-017-3469-1\\_5](https://doi.org/10.1007/978-94-017-3469-1_5)
- Sidle, R. C. (1992). A theoretical model of the effects of timber harvesting on slope stability. *Water Resources Research*, 28(7), 1897–1910. <https://doi.org/10.1029/92wr00804>
- Sidle, R. C., Takashi Gomi, Carlos, J., & Jarihani, B. (2017). *Hydrogeomorphic processes and scaling issues in the continuum from soil pedons to catchments*. 175, 75–96. <https://doi.org/10.1016/j.earscirev.2017.10.010>
- Smith, D. J., Wynn-Thompson, T. M., Williams, M. A., & Seiler, J. R. (2021). Do roots bind soil? Comparing the physical and biological role of plant roots in fluvial streambank erosion: A mini-JET study. *Geomorphology*, 375, 107523. <https://doi.org/10.1016/j.geomorph.2020.107523>
- Spiekermann, R. I., McColl, S., Fuller, I., Dymond, J., Burkitt, L., & Smith, H. G. (2021). Quantifying the influence of individual trees on slope stability at landscape scale. *Journal of Environmental Management*, 286, 112194. <https://doi.org/10.1016/j.jenvman.2021.112194>
- Stokes, A., Atger, C., Bengough, A. G., Fourcaud, T., & Sidle, R. C. (2009). Desirable plant root traits for protecting natural and engineered slopes against landslides. *Plant and Soil*, 324(1-2), 1–30. <https://doi.org/10.1007/s11104-009-0159-y>
- Stokes, A., Norris, J. E., van Beek, L. P. H., Bogaard, T., Cammeraat, E., Mickovski, S. B., Jenner, A., Di Iorio, A., & Fourcaud, T. (2008). How Vegetation Reinforces Soil on Slopes. *Slope Stability and Erosion Control: Ecotechnological Solutions*, 65–118. [https://doi.org/10.1007/978-1-4020-6676-4\\_4](https://doi.org/10.1007/978-1-4020-6676-4_4)
- Sun, C., Tang, C., Cheng, Q., Xu, J., & Zhang, D. (2022). Stability of Soil Slope under Soil-Atmosphere Interaction. *Earth Science-Journal of China University of Geosciences*, 47(10), 3701–3701. <https://doi.org/10.3799/dqkx.2022.275>
- Sun, H.-L., Li, S.-C., Xiong, W.-L., Yang, Z.-R., Cui, B.-S., & Tao-Yang. (2007). Influence of slope on root system anchorage of *Pinus yunnanensis*. *Ecological Engineering*, 32(1), 60–67. <https://doi.org/10.1016/j.ecoleng.2007.09.002>
- Taimoor Hassan Farooq, Wu, W., Mulualem Tigabu, Ma, X., He, Z., Rashid, M., Mator Mohsin Gilani, & Wu, P. (2019). Growth, Biomass Production and Root Development of Chinese fir in Relation to Initial Planting Density. *Forests*, 10(3), 236–236. <https://doi.org/10.3390/f10030236>
- Takahara, H., Ikeda, S., Sasaki, N., & Hayashi, R. (2022). Review: Vegetation history of *Cryptomeria japonica* in Japan since the last interglacial period. *Ecological Research*, 38(1), 49–63. <https://doi.org/10.1111/1440-1703.12357>



- Varnes, D. J. (1978). Slope movement types and processes. *Special Report - Transportation Research Board, National Research Council*, 176, 11–33.
- Wang, J., Patruno, L., Wang, H., Wang, P., & Li, D. (2025). Evaluation of the aerodynamic loads over isolated and clustered tree canopies using large eddy simulation. *Physics of Fluids*, 37(4). <https://doi.org/10.1063/5.0256171>
- Wang, X., Huang, Z., Hong, M. M., Zhao, Y. F., Ou, Y. S., & Zhang, J. (2019). A comparison of the effects of natural vegetation regrowth with a plantation scheme on soil structure in a geological hazard-prone region. *European Journal of Soil Science*, 70(3), 674–685. <https://doi.org/10.1111/ejss.12781>
- Waring, B. G., & Powers, J. S. (2017). Overlooking what is underground: Root:shoot ratios and coarse root allometric equations for tropical forests. *Forest Ecology and Management*, 385, 10–15. <https://doi.org/10.1016/j.foreco.2016.11.007>
- Wertz, B., Bembenek, M., Karaszewski, Z., Ochał, W., Skorupski, M., Strzeliński, P., Węgiel, A., & Mederski, P. S. (2020). Impact of Stand Density and Tree Social Status on Aboveground Biomass Allocation of Scots Pine *Pinus sylvestris* L. *Forests*, 11(7), 765. <https://doi.org/10.3390/f11070765>
- Wu, T. H., McKinnell III, W. P., & Swanston, D. N. (1979). Strength of tree roots and landslides on Prince of Wales Island, Alaska. *Canadian Geotechnical Journal*, 16(1), 19–33. <https://doi.org/10.1139/t79-003>
- Xi, W., Peet, R. K., Decoster, J. K., & Urban, D. L. (2008). Tree damage risk factors associated with large, infrequent wind disturbances of Carolina forests. *Forestry*, 81(3), 317–334. <https://doi.org/10.1093/forestry/cpn020>
- Yamase, K., Tanikawa, T., Dannoura, M., Todo, C., Yamamoto, T., Ikeno, H., Ohashi, M., Aono, K., Doi, R., & Hirano, Y. (2019). Estimating slope stability by lateral root reinforcement in thinned and unthinned stands of *Cryptomeria japonica* using ground-penetrating radar. *CATENA*, 183, 104227. <https://doi.org/10.1016/j.catena.2019.104227>
- Zhu, H., & Zhang, L. (2019). Root-soil-water hydrological interaction and its impact on slope stability. *Georisk: Assessment and Management of Risk for Engineered Sypohon and Geohazards*, 13(4), 349–359. <https://doi.org/10.1080/17499518.2019.1616098>