REFERENCES

REFERENCES

Abdin, M. Z., A. Ahmad, N. Khan, I. Khan, A. Jamal, and M. Iqbal. "Sulphur interaction with other nutrients." In *Sulphur in plants*, pp. 359-374. Springer, Dordrecht, 2003.

Abrol, Yash P., and Altaf Ahmad, eds. *Sulphur in plants*. Springer Science & Business Media, 2003.

Abu-Hamdeh, Nidal H. "Compaction and subsoiling effects on corn growth and soil bulk density." *Soil Science Society of America Journal* 67, no. 4 (2003): 1213-1219.

Adams, P. "Mineral nutrition." In *The tomato crop*, pp. 281-334. Springer, Dordrecht, 1986.

Anon, (1999). Subsidence studies for development of models with special reference to multi-scam mining in India. Coal S & T Project Report, Central Mining

Anon, 1975a, Subsidence Engineers' Handbook, National Coal Board, Mining Department, London, 111 pp.

Anon, 1975b, "Development of a Comprehensive Program of Insurance Protection Against Mining Subsidence and Associated Hazardous Location Risks," Report ARC-73-163-2553, A. W. Martin Associates, Inc., Prepared for Appalachian Regional Commission, Department of Environmental Resources.

Ashman, Mark, and Geeta Puri. *Essential soil science: a clear and concise introduction to soil science*. John Wiley & Sons, 2013.

Assal, Timothy J., Jason Sibold, and Robin Reich. "Modeling a historical mountain pine beetle outbreak using Landsat MSS and multiple lines of evidence." *Remote Sensing of Environment* 155 (2014): 275-288.

Bacon, P. "The risks and impacts of coal mine subsidence on irrigation areas. A report prepared for Cotton Australia. Woodlots & Wetlands Pty Ltd." (2013).

Bagheri, Mehdi, Seiyed Mossa Hosseini, Behzad Ataie-Ashtiani, Yasamin Sohani, Homa Ebrahimian, Faezeh Morovat, and Shervin Ashrafi. "Land subsidence: A global challenge." *Science of The Total Environment* (2021): 146193.

Bauer, Robert A. *Planned coal mine subsidence in Illinois: a public information booklet*. Illinois State Geological Survey, Department of Natural Resources, 2008.

Bhowmik, Avit Kumar, and Pedro Cabral. "Cyclone Sidr impacts on the Sundarbans floristic diversity." *Earth Science Research* 2, no. 2 (2013): 62.

Bieleski, R. L., and I. B. Ferguson. "Physiology and metabolism of phosphate and its compounds." In *Inorganic plant nutrition*, pp. 422-449. Springer, Berlin, Heidelberg, 1983.

Bivand, Roger S., Edzer J. Pebesma, Virgilio Gómez-Rubio, and Edzer Jan Pebesma. *Applied spatial data analysis with R*. Vol. 747248717. New York: Springer, 2008.

Booth, C. J., and L. P. Bertsch. "Groundwater geochemistry in shallow aquifers above longwall mines in Illinois, USA." *Hydrogeology Journal* 7, no. 6 (1999): 561-575.

Booth, Colin J., and Erik D. Spande. "Potentiometric and aquifer property changes above subsiding longwall mine panels, Illinois basin coalfield." *Groundwater* 30, no. 3 (1992): 362-368.

Botta, G. F., A. Tolón-Becerra, D. Rivero, D. Laureda, M. Ramírez-Roman, X. Lastra-Bravo, D. Agnes, I. M. Flores-Parra, F. Pelizzari, and V. Martiren. "Compactión produced by combine harvest traffic: Effect on soil and soybean (Glycine max L.)

yields under direct sowing in Argentinean Pampas." *European Journal of Agronomy* 74 (2016): 155-163.

Bottrill, D. E., J. V. Possingham, and P. E. Kriedemann. "The effect of nutrient deficiencies on phosynthesis and respiration in spinach." *Plant and soil* 32, no. 1 (1970): 424-438.

Bould, C. "Mineral Nutrition of Plants: Principles and Perspectives. By Epstein Emanuel. New York: John Wiley (1972), pp. 412,£ 3.85." *Experimental Agriculture* 11, no. 1 (1975): 78-78.

Bouyoucos, George John. "Hydrometer method improved for making particle size analyses of soils 1." *Agronomy journal* 54, no. 5 (1962): 464-465.

Box, Elgene O., Brent N. Holben, and Virginia Kalb. "Accuracy of the AVHRR vegetation index as a predictor of biomass, primary productivity and net CO2 flux." *Vegetatio* 80, no. 2 (1989): 71-89.

Bradshaw, Anthony David, and Michael J. Chadwick. *The restoration of land: the ecology and reclamation of derelict and degraded land*. Univ of California Press, 1980.

Brauner, G., 1973, "Subsidence Due to Underground Mining," 2 parts, US Bureau of Mines, Information Circular 8571, 56 pp., and 8572, 53 pp

Bray, Roger H., and L. Touby Kurtz. "Determination of total, organic, and available forms of phosphorus in soils." *Soil science* 59, no. 1 (1945): 39-46.

Burzyński, M., and A. Żurek. "Effects of copper and cadmium on photosynthesis in cucumber cotyledons." *Photosynthetica* 45, no. 2 (2007): 239-244.

Bussler, W. "Epstein, E.: Mineral Nutrition of Plants: Principles and Perspectives. John Wiley and Sons, Inc., New York, London, Sydney, Toronto. 1972. 412 Seiten, 23× 16 cm, zahlreiche Abbildungen,£ 4.85." (1972): 158-159.

Cakmak, Ismail, and Atilla M. Yazici. "Magnesium: a forgotten element in crop production." *Better crops* 94, no. 2 (2010): 23-25.

CCRS, Canada Centre for Remote Sensing, Canada

Champion, Harry George, and Shiam Kishore Seth. *A revised survey of the forest types of India*. Manager of publications, 1968.

Chaturvedi, R. K., and A. S. Raghubanshi. "Species composition, distribution, and diversity of woody species in a tropical dry forest of India." *Journal of Sustainable Forestry* 33, no. 8 (2014): 729-756.

Chekan, Gregory J., and Rudy J. Matetic. "Interactions between multiple seam longwall and room-and-pillar operations: a cse study in Boone County, WV." (1990).

Chen, C.Y., Chen, Y.N., and Gaffney, D.V., 1974, "Architectural Measures to Minimize Subsidence Damage," Final Report for Appalachian Regional Commission, Contract No. ARC-2551, Report No. ARC-73-111-2551, Dec., 130 pp.

Chen, Guangjie, Junting Guo, Ziheng Song, Hao Feng, Shi Chen, and Min Li. "Soil water transport and plant water use patterns in subsidence fracture zone due to coal mining using isotopic labeling." *Environmental Earth Sciences* 81, no. 11 (2022): 1-8.

Chen, Q. J., and Q. Hao. "Effects of mining subsidence on niche suitability of cultivated land." *Legislation, Technology and Practice of Mine Land Reclamation* 1 (2014): 105.

Choubey, Vishnu D. "Hydrogeological and environmental impact of coal mining, Jharia coalfield, India." *Environmental Geology and Water Sciences* 17, no. 3 (1991): 185-194.

CIMFR, Environmental impact of subsidence movements caused due to caving on ground water and forest cover in Godavari Valley Coalfield, Central Institute of Mining and Fuel Research, 2007

Cohen, Shabtai, R. Sudhakara Rao, and Yehezkel Cohen. "Canopy transmittance inversion using a line quantum probe for a row crop." *Agricultural and Forest Meteorology* 86, no. 3-4 (1997): 225-234.

Comptroller General of the United States, "Alternatives to Protect Property Owners from Damage Caused by Mine Subsidence," U.S. General Accounting Office, Washington, D. C., (1979).

Coops, Nicholas C., and Christine Stone. "A comparison of field-based and modelled reflectance spectra from damaged Pinus radiata foliage." *Australian Journal of Botany* 53, no. 5 (2005): 417-429.

Cortis, S. E. "Coal mining and protection of surface structures are compatible." In Mining Congress Journal, vol. 55, no. 6, p. 84. 1920 N ST NW, WASHINGTON, DC 20036: J ALLEN OVERTON JR, 1969.

Coste, Sabrina, Christopher Baraloto, Céline Leroy, Éric Marcon, Amélie Renaud, Andrew D. Richardson, Jean-Christophe Roggy, Heidy Schimann, Johan Uddling, and Bruno Hérault. "Assessing foliar chlorophyll contents with the SPAD-502 chlorophyll meter: a calibration test with thirteen tree species of tropical rainforest in French Guiana." *Annals of Forest Science* 67, no. 6 (2010): 607-607.

Cramer, Wolfgang, Alberte Bondeau, F. Ian Woodward, I. Colin Prentice, Richard A. Betts, Victor Brovkin, Peter M. Cox et al. "Global response of terrestrial ecosystem structure and function to CO2 and climate change: results from six dynamic global vegetation models." *Global change biology* 7, no. 4 (2001): 357-373.

Dadhich, Pran Nath, and Shinya Hanaoka. "Spatio-temporal urban growth modeling of Jaipur, India." *Journal of Urban Technology* 18, no. 3 (2011): 45-65.

Dam, R. F., B. B. Mehdi, M. S. E. Burgess, C. A. Madramootoo, G. R. Mehuys, and I. R. Callum. "Soil bulk density and crop yield under eleven consecutive years of corn with different tillage and residue practices in a sandy loam soil in central Canada." *Soil and Tillage Research* 84, no. 1 (2005): 41-53.

Darling, Peter, ed. *SME mining engineering handbook*. Vol. 1. SME, 2011.

Darmody, R. G. "Reclamation of agricultural land after planned coal mine subsidence." *Reclamation of Drastically Disturbed Lands* 41 (2000): 513-536.

Darmody, R. G., I. J. Jansen, S. G. Carmer, and J. S. Steiner. *Agricultural impacts of coal mine subsidence: effects on corn yields*. Vol. 18, no. 3. American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America, 1989.

Darmody, Robert G., R. Bauer, D. Barkley, S. Clarke, and D. Hamilton. "Agricultural impacts of longwall mine subsidence: The experience in Illinois, USA and Queensland, Australia." *International Journal of Coal Science & Technology* 1, no. 2 (2014): 207-212.

De Bruijn, Frans J. "Biological nitrogen fixation." In *Principles of plant-microbe interactions*, pp. 215-224. Springer, Cham, 2015.

Dejun, Yang, Bian Zhengfu, and Lei Shaogang. "Impact on soil physical qualities by the subsidence of coal mining: a case study in Western China." *Environmental Earth Sciences* 75, no. 8 (2016): 1-14.

Delalieux, Stephanie, Ben Somers, Sander Hereijgers, W. W. Verstraeten, W. Keulemans, and Pol Coppin. "A near-infrared narrow-waveband ratio to determine Leaf Area Index in orchards." *Remote Sensing of Environment* 112, no. 10 (2008): 3762-3772.

Díaz, B. Meza, and George Alan Blackburn. "Remote sensing of mangrove biophysical properties: evidence from a laboratory simulation of the possible effects of background variation on spectral vegetation indices." *International Journal of Remote Sensing* 24, no. 1 (2003): 53-73.

Didier, Christophe, J. N. Van Der Merwe, M. Betournay, Mark Mainz, O. Aydan, W. K. Song, A. Kotyrba, and Jean-Pierre Josien. "Presentation of the ISRM Mine Closure State-of-the-art Report." In *ISRM International Symposium on Rock Mechanics-SINOROCK 2009*. OnePetro, 2009.

Dijkshoorn, W., and A. L. Van Wijk. "The sulphur requirements of plants as evidenced by the sulphur-nitrogen ratio in the organic matter a review of published data." *Plant and soil* 26, no. 1 (1967): 129-157.

DLWC (2001). Submission to the commission of inquiry into the proposed dendrobium underground coal mine project by BHP Steel(AIS) Pvt.Ltd, Wollongong Wingecarribee & Wollondilly Local Government Arcas. July. Depatment of Land and Water Conservation.

Dobrota, C. "The biology of phosphorus." *Phosphorus in Environmental Technology: Principles and Applications, IWA Publishers, London* (2004): 51-77.

Dubovyk, Olena, Gunter Menz, Christopher Conrad, Elena Kan, Miriam Machwitz, and Asia Khamzina. "Spatio-temporal analyses of cropland degradation in the irrigated lowlands of Uzbekistan using remote-sensing and logistic regression

modeling." *Environmental monitoring and assessment* 185, no. 6 (2013): 4775-4790.

Dunrud, C. Richard, and Frank W. Osterwald. *Effects of coal mine subsidence in the Sheridan, Wyoming, area*. No. 1164. US Govt. Print. Off.,, 1980.

Dyne, Laura Anne. "The prediction and occurrence of chimney subsidence in southwestern Pennsylvania." PhD diss., Virginia Tech, 1998.

Edurev.in, https://edurev.in/course/quiz/attempt/-1_Mining-Engineering-MN-2013-GATE-Paper--Practice-Te/58c49d33-32ed-4ee9-bab1-637446f5baa6, Accessed on 6 December, 2021

Elhacham, Emily, Liad Ben-Uri, Jonathan Grozovski, Yinon M. Bar-On, and Ron Milo. "Global human-made mass exceeds all living biomass." *Nature* 588, no. 7838 (2020): 442-444.

Engelbrecht, Jeanine. "Parameters affecting interferometric coherence and implications for long-term operational monitoring of mining-induced surface deformation." (2013).

Epstein, Emanuel. *Mineral nutrition of plants: principles and perspectives*. 1972.

Esaki, Tetsuro, Tsuyoshi Kimura, and Koichi Shikata. "Subsidence and environmental impacts in Japanese coal mining." In *The 30th US Symposium on Rock Mechanics (USRMS)*. OnePetro, 1989.

Farhat, Nejia, Amine Elkhouni, Walid Zorrig, Abderrazak Smaoui, Chedly Abdelly, and Mokded Rabhi. "Effects of magnesium deficiency on photosynthesis and carbohydrate partitioning." *Acta physiologiae plantarum* 38, no. 6 (2016): 145.

Favaro, Simone Palma, Adelaide Beléia, Nelson da Silva Fonseca Junior, and Keith William Waldron. "The roles of cell wall polymers and intracellular components in the thermal softening of cassava roots." *Food Chemistry* 108, no. 1 (2008): 220-227.

Ferguson, R., Rundquist, D., Shannon, D. K., Clay, D. E., & Kitchen, N. R. (2018). Remote sensing for site-specific crop management. *Precision agriculture basics*.

Frassinetti, Stefania, Giorgio L. Bronzetti, Leonardo Caltavuturo, Marco Cini, and Clara Della Croce. "The role of zinc in life: a review." *Journal of environmental pathology, toxicology and oncology* 25, no. 3 (2006).

Gan, Y. T., P. R. Miller, B. G. McConkey, R. P. Zentner, P. H. Liu, and C. L. McDonald. "Optimum plant population density for chickpea and dry pea in a semiarid environment." *Canadian Journal of Plant Science* 83, no. 1 (2003): 1-9.

Gawkowska, Diana, Justyna Cybulska, and Artur Zdunek. "Structure-related gelling of pectins and linking with other natural compounds: A review." *Polymers* 10, no. 7 (2018): 762.

Geological Survey Circular, U.S. Department of the Interior, Geological Survey, Issues 876-881, 1982

Gill, David Robert. *Hydrogeologic analysis of streamflow in relation to underground mining in northern West Virginia*. West Virginia University, 2000.

Gong, Qin, Ling Wang, Tongwei Dai, Jingyi Zhou, Qun Kang, Hongbin Chen, Kun Li, and Zhaohua Li. "Effects of copper on the growth, antioxidant enzymes and photosynthesis of spinach seedlings." *Ecotoxicology and environmental safety* 171 (2019): 771-780.

Goslee, Sarah C. "Analyzing remote sensing data in R: the landsat package." *Journal of Statistical Software* 43, no. 4 (2011): 1-25.

Gray, R. E., R. W. Bruhn, and R. J. Turka. *Study and analysis of surface subsidence over the mined Pittsburgh coalbed. Open file report*. No. PB-281511. GAI Consultants, Inc., Monroeville, PA (USA), 1977.

Gregor, M. "Metal availability, uptake, transport and accumulation in plants." *Heavy metal stress in plants-from biomolecules to ecosystems. Spinger-verlag, Berlin* (2004): 1-27.

Grossnickle, Steven C. Ecophysiology of northern spruce species: the performance of planted seedlings. NRC Research Press, 2000.

Gu, Gang, Ai Guo Wang, Chen Cheng Hu, and Hai Chao Liang. "The Impact Analysis of Subsidence on Vegetation Growth in Songzao Mining." In *Applied Mechanics and Materials*, vol. 448, pp. 805-809. Trans Tech Publications Ltd, 2014.

Guo, Wanli, Hussain Nazim, Zongsuo Liang, and Dongfeng Yang. "Magnesium deficiency in plants: An urgent problem." *The Crop Journal* 4, no. 2 (2016): 83-91.

Guo, Xiao-ming, Tong-qian Zhao, Wen-ke Chang, Chun-yan Xiao, and Yu-xiao He. "Evaluating the effect of coal mining subsidence on the agricultural soil quality using principal component analysis." *Chilean journal of agricultural research* 78, no. 2 (2018a): 173-182.

Gupta, Dileep Kumar, Rajendra Prasad, Pradeep Kumar, and Varun Narayan Mishra. "Estimation of crop variables using bistatic scatterometer data and artificial neural network trained by empirical models." *Computers and Electronics in Agriculture* 123 (2016): 64-73.

Ham, B. W. "The Impact of Undergoing Coal Mining in Farming, Mining and Environment: A Professional Approach." (1987).

Hanway, J. J., and H. Heidel. "Soil analysis methods as used in Iowa state college soil testing laboratory." *Iowa agriculture* 57 (1952): 1-31.

Hatfield, Jerry L., and John H. Prueger. "Temperature extremes: Effect on plant growth and development." Weather and climate extremes 10 (2015): 4-10.

Hatfield, P. L., & Pinter Jr, P. J. (1993). Remote sensing for crop protection. *Crop protection*, *12*(6), 403-413.

Heltewell, E. G. "The influence of faulting on ground movement due to coalmining: the UK and European experience." *Min. Eng.(London);(United Kingdom)* 147, no. 316 (1988).

Henry, F.D.C., *The Design and Construction of Engineering Foundations,* E. & F.N. Spon, Ltd., London, UK, pp. 547. 1957.

Henry, W. B., Shaw, D. R., Reddy, K. R., Bruce, L. M., & Tamhankar, H. D. (2004). Remote sensing to detect herbicide drift on crops. *Weed Technology*, *18*(2), 358-368.

Heydari, Mohammad Mirzaei, Robert M. Brook, and David L. Jones. "The role of phosphorus sources on root diameter, root length and root dry matter of barley (Hordeum vulgare L.)." *Journal of plant nutrition* 42, no. 1 (2019): 1-15.

Hochmuth, George. "Iron (Fe) nutrition of plants." *EDIS* 2011, no. 8 (2011).

Hopkins, William G. *Introduction to plant physiology*. John Wiley & Sons, 2009.

Hu, Zhenqi, Feng Hu, Jiuhai Li, and Huixin Li. "Impact of coal mining subsidence on farmland in eastern China." *International Journal of Surface Mining, Reclamation and Environment* 11, no. 2 (1997): 91-94.

Ishaq, M., M. Ibrahim, A. Hassan, M. Saeed, and R. Lal. "Subsoil compaction effects on crops in Punjab, Pakistan." *Soil and Tillage Research* 60, no. 3-4 (2001): 153-161.

KARFAKIS, MARIO G. "Residual subsidence over abandoned coal mines." In *Surface and Underground Project Case Histories*, pp. 451-476. Pergamon, 1993.

Karol, Reuben H. *Chemical grouting and soil stabilization*. Crc Press, 2003.

Kebeish, Rashad, Yassin El-Ayouty, and Asmaa Husain. "Effect of copper on growth, bioactive metabolites, antioxidant enzymes and photosynthesis-related gene transcription in Chlorella vulgaris." *World Journal of Biology and Biological Sciences* 2, no. 2 (2014): 34-43.

Khair, A. W., M. K. Quinn, and R. D. Chaffins. "Effect of topography on ground movement due to longwall mining." *Min. Eng.(Littleton, Colo.);(United States)* 40, no. 8 (1988).

Kilic, S., F. Evrendilek, S. Ü. H. A. Berberoglu, and A. C. Demirkesen. "Environmental monitoring of land-use and land-cover changes in a Mediterranean region of Turkey." *Environmental monitoring and assessment* 114, no. 1 (2006): 157-168.

King, H. J., and J. T. Whetton. "Mechanics of mine subsidence." In Proceedings European congress on ground movement, University of Leeds, Leeds, UK, pp. 27-38. 1957.

Kirsch, Justin L., Dylan G. Fischer, Alexandra N. Kazakova, Abir Biswas, Rachael E. Kelm, David W. Carlson, and Carri J. LeRoy. "Diversity-carbon flux relationships in a northwest forest." *Diversity* 4, no. 1 (2011): 33-58.

Kleczkowski, Leszek A., and Abir U. Igamberdiev. "Magnesium signaling in plants." *International Journal of Molecular Sciences* 22, no. 3 (2021): 1159.

Konings, Alexandra G., Sassan S. Saatchi, Christian Frankenberg, Michael Keller, Victor Leshyk, William RL Anderegg, Vincent Humphrey et al. "Detecting forest response to droughts with global observations of vegetation water content." *Global change biology* 27, no. 23 (2021): 6005-6024.

Körner, Ch. "The nutritional status of plants from high altitudes." *Oecologia* 81, no. 3 (1989): 379-391.

Kovacs, J. M., J. M. L. King, F. Flores De Santiago, and F. Flores-Verdugo. "Evaluating the condition of a mangrove forest of the Mexican Pacific based on an estimated leaf area index mapping approach." *Environmental monitoring and assessment* 157, no. 1 (2009): 137-149.

Kratzsch, Helmut. *Mining subsidence engineering*. Springer Science & Business Media, 2012.

Kumar, B. (1991). Mechanics of ground subsidence in Indian coalfields. Ph. D. Thesis, Indian School of Mines, Dhanbad, 182pp.

Kundu, Nishit K., and Mrinal K. Ghose. "Studies on, the topsoil of an underground coal-mining project." *Environmental conservation* 21, no. 2 (1994): 126-132.

Lahti, M., P. J. Aphalo, L. Finér, T. Lehto, I. Leinonen, H. Mannerkoski, and A. Ryyppö. "Soil temperature, gas exchange and nitrogen status of 5-year-old Norway spruce seedlings." Tree physiology 22, no. 18 (2002): 1311-1316.

Lal, Manju A. "Sulfur, phosphorus, and iron metabolism in plants." In *Plant physiology, development and metabolism*, pp. 481-515. Springer, Singapore, 2018.

Lara-Espinoza, Claudia, Elizabeth Carvajal-Millán, René Balandrán-Quintana, Yolanda López-Franco, and Agustín Rascón-Chu. "Pectin and pectin-based composite materials: Beyond food texture." *Molecules* 23, no. 4 (2018): 942.

Lechner, Alex Mark, Thomas Baumgartl, Phil Matthew, and Vanessa Glenn. "The impact of underground longwall mining on prime agricultural land: a review and research agenda." *Land Degradation & Development* 27, no. 6 (2016): 1650-1663.

Lee, Fitzhugh T., and John F. Abel. *Subsidence from underground mining; environmental analysis and planning considerations*. No. 876. US Geological Survey, 1983.

Lemerle, Deirdre, R. D. Cousens, G. S. Gill, S. J. Peltzer, M. Moerkerk, Clare E. Murphy, D. Collins, and Brian R. Cullis. "Reliability of higher seeding rates of wheat for increased competitiveness with weeds in low rainfall environments." *The Journal of Agricultural Science* 142, no. 4 (2004): 395-409.

Li, Fang, Xinju Li, Le Hou, and Anran Shao. "Impact of the coal mining on the spatial distribution of potentially toxic metals in farmland tillage soil." *Scientific reports* 8, no. 1 (2018a): 1-10.

Li, Li, Y. X. Wang, and W. B. Wang. "Effects of Mining subsidence on physical and chemical properties of soil in slope land in hilly-gully region of loess plateau." *Chinese Journal of Soil Science* 41, no. 5 (2010): 1237-1240.

Li, M., M. Liu, Z. P. Li, C. Y. Jiang, and M. Wu. "Soil N transformation and microbial community structure as affected by adding biochar to a paddy soil of subtropical China. J. Integrative Agric., 15 (1): 209-219." (2016).

Li, Ting, Lai Zhou, Yan Zhang, and Bo Gao. "Change characterization of dissolved organic matter in different subsidence land of a coal mine, China." *Journal of Chemical and Pharmaceutical Research* 6, no. 3 (2014): 361-366.

Li, W., L. Q. Chen, Zhang K. ZhouTJ, and L. Li. "Research progress of soil quality in china mining subsidence area." *Coal Sci Technol* 39, no. 05 (2011): 125-128.

Li, Ying, Nianpeng He, Jihua Hou, Li Xu, Congcong Liu, Jiahui Zhang, Qiufeng Wang, Ximin Zhang, and Xiuqin Wu. "Factors influencing leaf chlorophyll content in natural forests at the biome scale." *Frontiers in Ecology and Evolution* 6 (2018b): 64.

Ling, Qihua, Weihua Huang, and Paul Jarvis. "Use of a SPAD-502 meter to measure leaf chlorophyll concentration in Arabidopsis thaliana." *Photosynthesis research* 107, no. 2 (2011): 209-214.

Liu, Y., S. G. Lei, X. Y. Chen, M. Chen, X. Y. Zhang, and L. L. Long. "Disturbance mechanism of coal mining subsidence to typical plants in a semiarid area using O–J–I–P chlorophyll a fluorescence analysis." *Photosynthetica* 58, no. 5 (2020): 1178-1187.

Lokhande, D. Ritesh, Vemavarapu MSR Murthy, Venkateswarlu Vellanky, and B. Kalendra Singh. "Assessment of pot-hole subsidence risk for Indian coal mines." *International Journal of Mining Science and Technology* 25, no. 2 (2015): 185-192.

Loranty, Michael M., Sergey P. Davydov, Heather Kropp, Heather D. Alexander, Michelle C. Mack, Susan M. Natali, and Nikita S. Zimov. "Vegetation indices do not capture forest cover variation in upland Siberian larch forests." *Remote sensing* 10, no. 11 (2018): 1686.

Ma, Chao, XiaoKe Zhang, ZengZhang Guo, and LiXin Wu. "Spatial-temporal variation of vegetation index caused by mining subsidence in semi-arid mountain regions." *Research of Environmental Sciences* 26, no. 7 (2013): 750-758.

Ma, Kang, Yuxiu Zhang, Mengying Ruan, Jing Guo, and Tuanyao Chai. "Land subsidence in a coal mining area reduced soil fertility and led to soil degradation in arid and semi-arid regions." *International journal of environmental research and public health* 16, no. 20 (2019): 3929.

Ma, ShouChen, HeBing Zhang, ShouTian Ma, ChunXi Li, and Yun Shao. "Effects of tillage on water use efficiency and grain yield of summer maize in sloping farmland

in coal-mining subsidence areas." *Journal of Ecology and Rural Environment* 30, no. 2 (2014a): 201-205.

Ma, YingBin, YaRu Huang, HuaiLiang Wang, XiaoHong Dang, Ji Wang, and Yong Gao. "Effects of collapse fissures caused by coal mining on soil moisture in slope lands after rain." *Acta Pedologica Sinica* 51, no. 3 (2014b): 497-504.

Malhotra, Hina, Sandeep Sharma, and Renu Pandey. "Phosphorus nutrition: plant growth in response to deficiency and excess." In *Plant nutrients and abiotic stress tolerance*, pp. 171-190. Springer, Singapore, 2018.

Marschner, H. "General introduction to the mineral nutrition of plants." In *Inorganic plant nutrition*, pp. 5-60. Springer, Berlin, Heidelberg, 1983.

McVeagh, Pip, Ian Yule, and Miles Grafton. "Pasture yield mapping from your groundspread truck." *Advanced Nutrient Management: Gains from the Past—Goals for the Future. Occasional Re-port* 25 (2012): 1-5.

Mead, S. W., J. H. Campbell, H. C. Ganow, R. T. Langland, R. C. Greenlaw, F. T. Wang, and R. V. Homsy. *LLL environmental studies of in situ coal gasification. Annual report, fiscal year 1977*. No. UCRL-50032-78. California Univ., Livermore (USA). Lawrence Livermore Lab., 1978.

MeitY, Ministry of Electronics and Information Technology, https://anuppur.nic.in/en/about-district/, accessed on 17 November 2021

Mishra, Varun Narayan, and Praveen Kumar Rai. "A remote sensing aided multi-layer perceptron-Markov chain analysis for land use and land cover change prediction in Patna district (Bihar), India." *Arabian Journal of Geosciences* 9, no. 4 (2016): 249.

Mishra, Varun Narayan, Praveen Kumar Rai, and Kshitij Mohan. "Prediction of land use changes based on land change modeler (LCM) using remote sensing: a case study of

Muzaffarpur (Bihar), India." *Journal of the Geographical Institute" Jovan Cvijic", SASA* 64, no. 1 (2014): 111-127.

Monje, Oscar A., and Bruce Bugbee. "Inherent limitations of nondestructive chlorophyll meters: a comparison of two types of meters." HortScience 27, no. 1 (1992): 69-71.

MSME, Brief Industrial Profile of Anuppur District. By Br. MSME Development Institute, Ministry of Micro, Small and Medium Enterprises, Rewa, Govt. of India, 2012

Mukhopadhyay, Madhumita Joardar, and Archana Sharma. "Manganese in cell metabolism of higher plants." *The botanical review* 57, no. 2 (1991): 117-149.

Mundia, Charles N., and Masamu Aniya. "Analysis of land use/cover changes and urban expansion of Nairobi city using remote sensing and GIS." *International journal of Remote sensing* 26, no. 13 (2005): 2831-2849.

Nandy, Paramita, Sauren Das, Monoranjan Ghose, and Robert Spooner-Hart. "Effects of salinity on photosynthesis, leaf anatomy, ion accumulation and photosynthetic nitrogen use efficiency in five Indian mangroves." *Wetlands Ecology and Management* 15, no. 4 (2007): 347-357.

NASA, National Aeronautics and Space Administration, Washington, D.C., United States

Nawaz, Muhammad Farrakh, Guilhem Bourrie, and Fabienne Trolard. "Soil compaction impact and modelling. A review." *Agronomy for sustainable development* 33, no. 2 (2013): 291-309.

NCB. Subsidence Engineer's Handbook. National Coal Board, London, 1975, 111 pp.

Oerke, E. C. Remote sensing of diseases. *Annual Review of Phytopathology (*2020), *58*, 225-252.

Onwuka, Brownmang, and B. Mang. "Effects of soil temperature on some soil properties and plant growth." Adv. Plants Agric. Res 8, no. 1 (2018): 34-37.

Padmanaban, Rajchandar, Avit K. Bhowmik, and Pedro Cabral. "A remote sensing approach to subsidence and vegetation degradation in a reclaimed mine area." (2017).

Padmanaban, Rajchandar. "Integrating of urban growth modelling and utility management system using spatio temporal data mining." *Int. J. Adv. Earth Sci. Eng* 1 (2012): 13-15.

Pal, A. K., Jain, M. K. and Paul, B., Jharia coal field: a retrospection, MINENVIS, June-September 2011, no. 69–70, pp. 1–6.

Pandey, Girdhar K., and Swati Mahiwal. *Role of Potassium in Plants*. Springer, 2020.

Pandey, Jitendra, Dheeraj Kumar, Virendra Kumar Singh, and Niroj Kumar Mohalik. "Environmental and socio-economic impacts of fire in Jharia coalfield, Jharkhand, India: an appraisal." Curr Sci 110, no. 9 (2016): 1639.

Papahadjopoulos, Demetrios. "Cholesterol and cell membrane function: a hypothesis concerning the etiology of atherosclerosis." *Journal of theoretical biology* 43, no. 2 (1974): 329-337.

Pearson, Helen. "What is a gene?." *Nature* 441, no. 7092 (2006): 398-402.

Peng, S. "Single-leaf and canopy photosynthesis of rice." In *Studies in Plant Science*, vol. 7, pp. 213-228. Elsevier, 2000.

Peng, Shaobing, Felipe V. Garcia, Rebecca C. Laza, and Kenneth G. Cassman. "Adjustment for specific leaf weight improves chlorophyll meter's estimate of rice leaf nitrogen concentration." Agronomy Journal 85, no. 5 (1993): 987-990.

Peng, Syd S. "Surface Subsidence Engineering. Society for Mining, Metallurgy, and Exploration." *Inc., Littleton, Colorado* (1992).

Pennsylvania Department of Environmental Protection Home Page (PADEP) (1997): http://www.dep.state.pa.us.html

Pequerul, A., C. Perez, P. Madero, J. Val, and E. Monge. "A rapid wet digestion method for plant analysis." In *Optimization of plant nutrition*, pp. 3-6. Springer, Dordrecht, 1993.

Peterson, P. J. "Mineral nutrition of plants: principles and perspectives." (1974): 163-165.

Pinter Jr, P. J., Hatfield, J. L., Schepers, J. S., Barnes, E. M., Moran, M. S., Daughtry, C. S., & Upchurch, D. R. (2003). Remote sensing for crop management. *Photogrammetric Engineering & Remote Sensing*, *69*(6), 647-664.

Porra, R. J., W. A. Thompson, and P. E. Kriedemann. "Determination of accurate extinction coefficients and simultaneous equations for assaying chlorophylls a and b extracted with four different solvents: verification of the concentration of chlorophyll standards by atomic absorption spectroscopy." Biochimica et Biophysica Acta (BBA)-Bioenergetics 975, no. 3 (1989): 384-394.

Prescott, C. E., L. Vesterdal, J. Pratt, K. H. Venner, LM de Montigny, and J. A. Trofymow. "Nutrient concentrations and nitrogen mineralization in forest floors of single species conifer plantations in coastal British Columbia." *Canadian Journal of Forest Research* 30, no. 9 (2000): 1341-1352.

Qing-jun, Meng, Feng Qi-yan, Wu Qing-qing, Meng Lei, and Cao Zhi-yang. "Distribution characteristics of nitrogen and phosphorus in mining induced subsidence wetland in Panbei coal mine, China." *Procedia Earth and Planetary Science* 1, no. 1 (2009): 1237-1241.

Raj Chandar, P., and P. Rejeesh Kumar. "Mapping and analysis of marine pollution in Tuticorin coastal area using remote sensing and GIS." *International Journal of Advanced Remote Sensing and GIS* 1 (2012): 34-48.

Raju, K., and R. Anil Kumar. "Land use changes in udumbanchola taluk, idukki district—Kerala: An analysis with the application of remote sensing data." *Journal of the Indian society of Remote Sensing* 34, no. 2 (2006): 161-169.

Ramalingam, Poornima, Akihiko Kamoshita, Vivek Deshmukh, Sousuke Yaginuma, and Yusaku Uga. "Association between root growth angle and root length density of a near-isogenic line of IR64 rice with DEEPER ROOTING 1 under different levels of soil compaction." *Plant Production Science* 20, no. 2 (2017): 162-175.

Reddish, D. J., and B. N. Whittaker. *Subsidence: occurrence, prediction and control*. Elsevier, 2012.

Rellensmann, O., and Wagner, E., 1957, "The Effect on Railways of the Ground Movements Due to Mining," *Proceedings European Congress on Ground Movement,* University of Leeds, Leeds, UK, pp. 74–82.

Repo, Tapani, Ilkka Leinonen, Aija Ryyppö, and Leena Finér. "The effect of soil temperature on the bud phenology, chlorophyll fluorescence, carbohydrate content and cold hardiness of Norway spruce seedlings." Physiologia Plantarum 121, no. 1 (2004): 93-100.

Ru, W., and J. T. Zhang. "Ecological study of forests dominated by endangered species, Taxus chinensis var. mairei, in Shanxi of China." *Applied Ecology and Environmental Research* 10, no. 4 (2012): 457-470.

Sarvade, Somanath, Bhupender Gupta, and Matber Singh. "Composition, diversity and distribution of tree species in response to changing soil properties with increasing

distance from water source—a case study of Gobind Sagar Reservoir in India." *Journal of Mountain Science* 13, no. 3 (2016): 522-533.

Scherer, H. Wilhelm. "Sulphur in crop production." *European Journal of agronomy* 14, no. 2 (2001): 81-111.

Schulte, H. F. "The Effects of Subsidence on the Strata. Immediately Above a Working, With Different Types of Packing and in Level Measures." *Proc. Europ. Cong. Ground Movement, Leeds* (1957): 188-198.

Seils, D. E., R. G. Darmody, F. W. Simmons, and R. E. Dunker. "The effects of coal mine subsidence on soil macroporosity and water flow." In *Proceedings of National Symposium on Prime Farmland Reclamation, St. Louis*, pp. 137-145. 1992.

Shen, J., Zed Rengel, Caixian Tang, and Fusuo Zhang. "Role of phosphorus nutrition in development of cluster roots and release of carboxylates in soil-grown Lupinus albus." *Plant and Soil* 248, no. 1 (2003): 199-206.

Shi, Xiao-Kai, Juan-Juan Ma, and Li-Jun Liu. "Effects of phosphate-solubilizing bacteria application on soil phosphorus availability in coal mining subsidence area in Shanxi." *Journal of Plant Interactions* 12, no. 1 (2017): 137-142.

Sidle, R. C., I. Kamil, A. Sharma, and S. Yamashita. "Stream response to subsidence from underground coal mining in central Utah." *Environmental Geology* 39, no. 3 (2000): 279-291.

Sinclair, John. Ground movement and control at collieries. I. Pitman, 1963.

Singh, K. B. "Causes and remedial measures of pot-hole subsidence due to coal mining." (2000).

Singh, K. B., and T. N. Singh. "Ground movements over longwall workings in the Kamptee coalfield, India." *Engineering Geology* 50, no. 1-2 (1998): 125-139.

Singh, K. B., Samanta, S., Saxena, NC and Singh B. Subsidence and its environmental impacts at Silewara. Transactions MGMI (1990), 87(1), pp. 49-59.

Singh, Kalendra B., and Bharat B. Dhar. "Sinkhole subsidence due to mining." *Geotechnical & Geological Engineering* 15, no. 4 (1997): 327-341.

Singh, M. M., and F. S. Kendorski. "Proceedings of the 1st Conference on Ground Control in Mining." (1981): 76-89.

Singh, Madan M. "Mine subsidence (Chapter 10.6) in SME Mining Engineering Handbook." (1992): 938-971.

Singh, R. S., and N. Tripathi. "UNDERGROUND COAL MINE SUBSIDENCE IMPACTS FOREST ECOSYSTEM." (2010).

Singh, Raj Shekhar, Nimisha Tripathi, and S. K. Singh. "Impact of degradation on nitrogen transformation in a forest ecosystem of India." *Environmental monitoring and assessment* 125, no. 1 (2007): 165-173.

Singh, Satyendra Kumar, Loui P. John, and Rana Bhattacharjee. "New initiatives in subsidence Engineering: Environmental Issues and Production Challenges in coal mining." *Minetech* 27, no. 1-2 (2006): 35-39.

SINGHA, SUMAN, and E. C. Townsend. "Relationship between chromaticity values and chlorophyll concentration in apple, grappe, and peach leaves." HortScience 24, no. 6 (1989).

Sofawi, A. B., M. N. Nazri, and M. Z. Rozainah. "Nutrient variability in mangrove soil: anthropogenic, seasonal and depth variation factors." *Applied Ecology and Environmental Research* 15, no. 4 (2017): 1983-1998.

Somerville, Peter D., Peter B. May, and Stephen J. Livesley. "Effects of deep tillage and municipal green waste compost amendments on soil properties and tree growth in

compacted urban soils." *Journal of environmental management* 227 (2018): 365-374.

Sossong, A. T. "Subsidence experience of Bethlehem Mines Corporation in Central Pennsylvania." In *Subsidence in mines-Proceedings of symposium, 4th, Wollongong University*, pp. 5-1. 1973.

Spiller, Susan C., Ann M. Castelfranco, and Paul A. Castelfranco. "Effects of iron and oxygen on chlorophyll biosynthesis: I. In vivo observations on iron and oxygen-deficient plants." *Plant physiology* 69, no. 1 (1982): 107-111.

Stingelin, R. W., E. T. Baker, and S. B. Cousin. *Overview of subsidence potential in Pennsylvania coal fields. Final report 25 Sep 73--30 Jun 75*. No. PB-272682; HRB-4779-F. HRB-Singer, Inc., State College, Pa.(USA), 1975.

Stout III, Ben M. "Impact of longwall mining on headwater streams in northern West Virginia." *Final report* (2004): 33.

Streiner, David L. "An introduction to multivariate statistics." *The Canadian Journal of Psychiatry* 38, no. 1 (1993): 9-13.

Subbiah, B. V., and G. L. Asija. "A rapid method for the estimation of nitrogen in soil." *Current Science* 26 (1956): 259-260.

Tang, Ning, Yan Li, and Li-Song Chen. "Magnesium deficiency–induced impairment of photosynthesis in leaves of fruiting Citrus reticulata trees accompanied by up-regulation of antioxidant metabolism to avoid photo-oxidative damage." *Journal of plant nutrition and soil science* 175, no. 5 (2012): 784-793.

Tao, WenKuang, and ShaoGang Lei. "Temporal characteristics of response of vegetation to disturbance of mining and subsidence in semi-arid coal mining area." *Journal of Ecology and Rural Environment* 32, no. 2 (2016): 200-206.

Thompson, Jeffery A., David W. Lamb, Paul S. Frazier, and Bernard Ellem. "Monitoring the effects of longwall mine-induced subsidence on vineyards." *Environmental Earth Sciences* 62, no. 5 (2011): 973-984.

Toselli, M., J. A. Flore, B. Marangoni, and A. Masia. "Effects of root-zone temperature on nitrogen accumulation by non-bearing apple trees." The Journal of Horticultural Science and Biotechnology 74, no. 1 (1999): 118-124.

Tränkner, Merle, Bálint Jákli, Ershad Tavakol, Christoph-Martin Geilfus, Ismail Cakmak, Klaus Dittert, and Mehmet Senbayram. "Magnesium deficiency decreases biomass water-use efficiency and increases leaf water-use efficiency and oxidative stress in barley plants." *Plant and Soil* 406, no. 1 (2016): 409-423.

Tripathi, Nimisha, R. S. Singh, and J. S. Singh. "Impact of post-mining subsidence on nitrogen transformation in southern tropical dry deciduous forest, India." *Environmental Research* 109, no. 3 (2009): 258-266.

Twyman, E. S. "The iron and manganese requirements of plants." *The New Phytologist* 50, no. 2 (1951): 210-226.

Usowicz, B., J. Kossowski, and P. Baranowski. "Spatial variability of soil thermal properties in cultivated fields." *Soil and Tillage Research* 39, no. 1-2 (1996): 85-100.

Van Buren, J. P. "Function of pectin in plant tissue structure and firmness." *The chemistry and technology of pectin* (1991): 1-22.

Vantoai, T. T., Philippe Saglio, B. Ricard, and A. Pradet. "Developmental regulation of anoxic stress tolerance in maize." *Plant, Cell & Environment* 18, no. 8 (1995): 937-942.

Vibhute, A. D., & Gawali, B. W. (2013). Analysis and modeling of agricultural land use using remote sensing and geographic information system: a review. *International Journal of Engineering Research and Applications*, *3*(3), 081-091.

Vishwakarma, Ajeet Kumar, and Rajendra Prasad. "Bistatic specular scattering measurements for the estimation of rice crop growth variables using fuzzy inference system at X-, C-, and L-bands." *Geocarto International* 35, no. 13 (2020): 1433-1449.

Vishwakarma, Ajeet Kumar, Rajendra Prasad, Dileep Kumar Gupta, Pradeep Kumar, and Varun Narayan Mishra. "Ground Based Bistatic Scatterometer Measurement for the Estimation of Growth Variables of Ladyfinger Crop at X-Band." *Journal of the Indian Society of Remote Sensing* 46, no. 6 (2018a): 973-980.

Vishwakarma, Ajeet Kumar, Rajendra Prasad, Dileep Kumar Gupta, Pradeep Kumar, and Varun Narayan Mishra. "Ground based bistatic scatterometer measurement of rice crop at C-band in the specular direction." In *2018 3rd International Conference on Microwave and Photonics (ICMAP)*, pp. 1-2. IEEE, 2018b.

Vishwakarma, Ashish Kumar, Ashwani Kumar Agnihotri, Rajesh Rai, B. K. Shrivastva, and Sachin Mishra. "Impact assessment of a mine subsidence on native vegetation of South Eastern Coalfields, India." *The International Archives of Photogrammetry, Remote Sensing and Spatial Information Sciences* 42 (2018): 487-490.

Vishwakarma, Ashish Kumar, Rajesh Rai, Ashwani Kumar Sonkar, Tusarkanta Behera, and Bal Krishna Shrivastva. "Assessment of Impacts of Coal Mining–Induced Subsidence on Native Flora and Native Forest Land: A Brief Review." *Sustainable Development Practices Using Geoinformatics* (2020b): 141-152.

Vishwakarma, Ashish Kumar, Tusarkanta Behera, Rajesh Rai, Ashwani Kumar Sonkar, Anand Prakash Singh, and Bal Krishna Shrivastva. "Impact assessment of coal mining induced subsidence on native soil of South Eastern Coal Fields: India." *Geomechanics and Geophysics for Geo-Energy and Geo-Resources* 6, no. 1 (2020a): 1-21.

Vishwakarma, Ashish Kumar, Varun Narayan Mishra, Rajesh Rai, and Bal Krishna Shrivastva. "Quantitative assessment of the effect of mining subsidence on the health of native floras using remote sensing techniques." *Results in Geophysical Sciences* 8 (2021): 100031.

Vitousek, Peter M., K. E. N. Cassman, Cory Cleveland, Tim Crews, Christopher B. Field, Nancy B. Grimm, Robert W. Howarth et al. "Towards an ecological understanding of biological nitrogen fixation." In *The nitrogen cycle at regional to global scales*, pp. 1-45. Springer, Dordrecht, 2002.

Wall, Monroe E. "The role of potassium in plants: I. Effect of varying amounts of potassium on nitrogenous, carbohydrate, and mineral metabolism in the tomato plant." *Soil Science* 47, no. 2 (1939): 143-162.

Wall, Monroe E. "The role of potassium in plants: II. Effect of varying amounts of potassium on the growth status and metabolism of tomato plants." *Soil Science* 49, no. 4 (1940): 315.

Walston, Leroy J., Brian L. Cantwell, and John R. Krummel. "Quantifying spatiotemporal changes in a sagebrush ecosystem in relation to energy development." *Ecography* 32, no. 6 (2009): 943-952.

Wang, De-yu, Yan Sun, Jun-xian Zheng, Na Zhao, and Li-ying Wang. "Effects of soil compaction stress on carbohydrate metabolism of cucumber." *Plant Nutr Fert Sci* 19 (2013): 182-190.

Wang, Jinman, Ping Wang, Qian Qin, and Hongdan Wang. "The effects of land subsidence and rehabilitation on soil hydraulic properties in a mining area in the Loess Plateau of China." *Catena* 159 (2017): 51-59.

Wang, Meijiao, Ding He, Fei Shen, Jialing Huang, Rutao Zhang, Wenbo Liu, Mengjue Zhu, Li Zhou, Lihong Wang, and Qing Zhou. "Effects of soil compaction on plant growth, nutrient absorption, and root respiration in soybean seedlings." *Environmental Science and Pollution Research* 26, no. 22 (2019): 22835-22845.

Wang, Qi, ZhanJun Quan, Yu Han, MengDi Fu, and Yao Ye. "Variation of vegetation diversity and its soil relationship with soil physical and chemical property in lands of different geomorphic types in coal mining subsidence area." *Acta Botanica Boreali-Occidentalia Sinica* 34, no. 8 (2014): 1642-1651.

Wang, Rui, ShouChen Ma, HeBing Zhang, ChuanYang Xu, and ZengZhang Guo. "Effects of surface cracks caused by high intensity coal mining on soil microbial characteristics and plant communities in arid regions." *Research of Environmental Sciences* 29, no. 9 (2016): 1249-1255.

Weih, Martin, and P. Staffan Karlsson. "The nitrogen economy of mountain birch seedlings: implications for winter survival." Journal of Ecology 87, no. 2 (1999): 211-219.

Whittaker, B. N. and Reddish, D. J. (1993). Subsidence behaviour of rock structures. Comprehensive Rock Engineering, Vo.4, John A. Hudson (editor), Pergamon Press, pp. 751-780.

Wilson, Katie A., Lily Wang, Hugo MacDermott-Opeskin, and Megan L. O'Mara. "The Fats of Life: Using Computational Chemistry to Characterise the Eukaryotic Cell Membrane." *Australian Journal of Chemistry* 73, no. 3 (2019): 85-95.

Xiao, Wu, Wenkai Zhang, Yanmei Ye, Xuejiao Lv, and Wenfu Yang. "Is underground coal mining causing land degradation and significantly damaging ecosystems in semi-arid areas? A study from an Ecological Capital perspective." *Land Degradation & Development* 31, no. 15 (2020): 1969-1989.

Xiao, Wu, Wenxiu Zheng, Yanling Zhao, Jiale Chen, and Zhenqi Hu. "Examining the relationship between coal mining subsidence and crop failure in plains with a high underground water table." *Journal of Soils and Sediments* 21, no. 8 (2021): 2908-2921.

Xu, Zhanjun, Yuan Zhang, Jason Yang, Fenwu Liu, Rutian Bi, Hongfen Zhu, Chunjuan Lv, and Jian Yu. "Effect of Underground Coal Mining on the Regional Soil Organic Carbon Pool in Farmland in a Mining Subsidence Area." *Sustainability* 11, no. 18 (2019): 4961.

Yang, Yongjun, Peter D. Erskine, Shaoliang Zhang, Yunjia Wang, Zhengfu Bian, and Shaogang Lei. "Effects of underground mining on vegetation and environmental patterns in a semi-arid watershed with implications for resilience management." *Environmental Earth Sciences* 77, no. 17 (2018): 1-12.

Yao, X. L., B. N. Whittaker, and D. J. Reddish. "Influence of overburden mass behavioural properties on subsidence limit characteristics." *Mining Science and Technology* 13, no. 2 (1991): 167-173.

Yao, Xiaomeng, and Xin Cui. "Agricultural suitability assessment and rehabilitation of subsided coal mines: a case study of the Dawu coal mine in Jiangsu, Eastern China." *Geoscience Letters* 8, no. 1 (2021): 1-8.

Ye, Xin, Xu-Feng Chen, Chong-Ling Deng, Lin-Tong Yang, Ning-Wei Lai, Jiu-Xin Guo, and Li-Song Chen. "Magnesium-deficiency effects on pigments, photosynthesis and photosynthetic electron transport of leaves, and nutrients of leaf blades and veins in Citrus sinensis seedlings." *Plants* 8, no. 10 (2019): 389.

Yruela, Inmaculada. "Copper in plants." *Brazilian Journal of Plant Physiology* 17 (2005): 145-156.

Zarco-Tejada, Pablo J., C. A. Rueda, and S. L. Ustin. "Water content estimation in vegetation with MODIS reflectance data and model inversion methods." *Remote Sensing of Environment* 85, no. 1 (2003): 109-124.

Zhang, D., H. Wang, B. Ma, R. Li, and Y. Li. "Effects of post-sowing soil compaction and pre-winter irrigation on soil conditions and growth and development of winter wheat." *J Triticeae Crop* 34 (2014a): 787-794.

Zhang, H. B., S. C. Ma, C. Ding, R. Wang, G. X. Wang, and W. Z. Hu. "Effects of the surface cracks caused by coal mining on soil characteristics and wheat growth in HUANG-HUAI-HAI plain, China." *Applied Ecology and Environmental Research* 15, no. 4 (2017a): 1777-1790.

Zhang, Jianwei, Matt D. Busse, David H. Young, Gary O. Fiddler, Joseph W. Sherlock, and Jeff D. TenPas. "Aboveground biomass responses to organic matter removal, soil

compaction, and competing vegetation control on 20-year mixed conifer plantations in California." *Forest Ecology and Management* 401 (2017b): 341-353.

Zhang, Jixiong, Meng Li, Abbas Taheri, Weiqing Zhang, Zhongya Wu, and Weijian Song. "Properties and application of backfill materials in coal mines in China." *Minerals* 9, no. 1 (2019): 53.

Zhang, XiangDong, HanShuang Deng, and ZhiRui Hua. "Effects of soil compaction stress on growth, quantity and quality of Platycodon grandiflorum." *Journal of Northwest A & F University-Natural Science Edition* 41, no. 7 (2013): 177-182.

Zhang, Xiang-dong, Zhi-rui Hua, and Han-shuang Deng. "Effects of soil compaction stress on growth, quantity and quality of Scutellaria baicalensis." *Soil Fert Sci China* 16 (2014b): 7-11.

Zhao, H. M., F. W. Zhang, Y. X. Song, Enchun JING, Wen WEI, and Zhantao HAN. "Spatial variation of soil moisture content in mining subsidence areas of Daliuta, Shenmu County, Shannxi Province." *Journal of Geo-Information Science* 12, no. 6 (2010): 753-760.

Zhou, Xiu Jie, Hong Bo Zhao, Fei Liu, Qiang Zhang, and Liang Zuo Shu. "Soil Nutrient Analysis of Different Utilization Types in Coal Mining Subsidence Area." In *Applied Mechanics and Materials*, vol. 768, pp. 752-757. Trans Tech Publications Ltd, 2015.

LIST OF PUBLICATIONS

Papers in International Journals

1. **Vishwakarma, Ashish Kumar**, Tusarkanta Behera, Rajesh Rai, Ashwani Kumar Sonkar, Anand Prakash Singh, and Bal Krishna Shrivastva. "Impact assessment of coal mining induced subsidence on native soil of South Eastern Coal Fields: India." *Geomechanics and Geophysics for Geo-Energy and Geo-Resources* 6, no. 1 (2020): 1-21.
2. **Vishwakarma, Ashish Kumar**, Rajesh Rai, and B. K. Shrivastva. "Distribution characteristics of micronutrients in mining induced subsided land of an underground coal mine of South Eastern Coalfields, India." *Nature Environment and Pollution Technology* 18, no. 2 (2019): 491-496.
3. **Vishwakarma, Ashish Kumar**, Varun Narayan Mishra, Rajesh Rai, and Bal Krishna Shrivastva. "Quantitative assessment of the effect of mining subsidence on the health of native floras using remote sensing techniques." *Results in Geophysical Sciences* 8 (2021): 100031.

Papers Presented in Conferences/Seminars/Symposia

1. **Vishwakarma, Ashish Kumar**, Rajesh Rai, and B. K. Shrivastva. "Post mining subsidence impact on native soil properties due to underground coal exploitation." National seminar on soil and civilization, Institute of Agricultural Sciences, Banaras Hindu University, Varanasi, India, 05 December 2018.
2. **Vishwakarma, Ashish Kumar**, Ashwani Kumar Agnihotri, Rajesh Rai, B. K. Shrivastva, and Sachin Mishra. "Impact assessment of a mine subsidence on native vegetation of South Eastern Coalfields, India." *The International Archives of Photogrammetry, Remote Sensing and Spatial Information Sciences* 42 (2018): 487-490.
3. **Vishwakarma, Ashish Kumar**, Rajesh Rai, and B. K. Shrivastva. "A Remote Sensing Approach to Assess the Impact of Mining Subsidence on Native Vegetation." In *2019 URSI Asia-Pacific Radio Science Conference (AP-RASC)*, pp. 1-1. IEEE, 2019.
4. **Vishwakarma, Ashish Kumar**, Rajesh Rai, and B. K. Shrivastva. "The impact of underground mining on agricultural land: a review." National seminar on water & soil management approaches for climate smart agriculture (WASMACS-2018), Institute of Agricultural Sciences, Banaras Hindu University, Varanasi, India, during March 23-24, 2018.
5. **Vishwakarma, Ashish Kumar**, Rajesh Rai, and B. K. Shrivastva. "Impact of mine subsidence on native soil properties due to underground coal extraction." 2nd international conference on Engineering Science & Advance Research, Rama University, Kanpur, Uttar Pradesh, India, during 13-15 March, 2019

6. **Vishwakarma, Ashish Kumar**, Rajesh Rai, and B. K. Shrivastva. National symposium on current trends and future prospects in plant science research, Centre of Advanced Study, Department of Botany, Institute of Science, Banaras Hindu University, Varanasi, India, during February 1-3, 2019.