

REFERENCES

- Abd El-Ghani, M. M., Huerta-Martínez, F. M., Hongyan, L., & Qureshi, R. (2017). *Plant responses to hyperarid desert environments*: Springer.
- Abdulaha-Al Baquy, M., Li, J.-Y., Jiang, J., Mehmood, K., Shi, R.-Y., & Xu, R.-K. (2018). Critical pH and exchangeable Al of four acidic soils derived from different parent materials for maize crops. *Journal of soils sediments*, 18(4), 1490-1499.
- Abebe, A., Pathak, H., Singh, S. D., Bhatia, A., Harit, R. C., & Kumar, V. (2016). Growth, yield and quality of maize with elevated atmospheric carbon dioxide and temperature in north-west India. *Agriculture, Ecosystems & Environment*, 218, 66-72.
- Agarwal, C. (2002). A review and assessment of land-use change models: dynamics of space, time, and human choice.
- Akinbile, C. O. (2020). Crop water requirements, biomass and grain yields estimation for upland rice using CROPWAT, AQUACROP and CERES simulation models. *Agricultural Engineering International: CIGR Journal*, 22(2), 1-20.
- Alderman, P. D. (2020). A comprehensive R interface for the DSSAT Cropping Systems Model. *Computers and electronics in agriculture*, 172, 105325.
- An Giang Province Portal. (2019). Report on socio-economic situation of Cho Moi district. *People's Committee of An Giang province*.
- An Giang Hydrometeorological Station. (2020). Summary of meteorological, hydrological and agricultural statistics of An Giang province.
- An Giang Statistical Yearbook. (2021). General statistical report for the whole year An Giang province. *An Giang Statistical Office*.
- Andarzian, B., Bannayan, M., Steduto, P., Mazraeh, H., Barati, M. E., Barati, M. A., & Rahnama, A. (2011). Validation and testing of the AquaCrop model under full and deficit irrigated wheat production in Iran. *Agricultural Water Management*, 100(1), 1-8.
- Tong Anh, V. T. (2020). Revised and supplemented land map of An Giang province at scale 1: 100,000. *Faculty of Agriculture and Natural Resources, An Giang University*.
- Asseng, Zhu, Y., Basso, B., Wilson, T., & Cammarano, D. (2014). Simulation Modeling: Applications in Cropping Systems. In N. K. Van Alfen (Ed.), *Encyclopedia of Agriculture and Food Systems* (pp. 102-112). Oxford: Academic Press.
- Asseng, S., Foster, I., & Turner, N. (2011). The impact of temperature variability on wheat yields. *17(2)*, 997-1012. doi:10.1111/j.1365-2486.2010.02262.x
- Baker, J. (2004). Yield responses of southern US rice cultivars to CO₂ and temperature. *Agricultural Forest Meteorology*, 122(3-4), 129-137.
- Black, C. K., Davis, S. C., Hudiburg, T. W., Bernacchi, C. J., & DeLucia, E. H. (2017). Elevated CO₂ and temperature increase soil C losses from a soybean–maize ecosystem. *Global change biology*, 23(1), 435-445.

- Boote, Jones, J. W., & Hoogenboom, G. (2018). Simulation of crop growth: CROPGRO model. In *Agricultural Systems modeling and Simulation* (pp. 651-692): CRC Press.
- Boote, Prasad, V., Allen Jr, L., Singh, P., & Jones, J. (2018). Modeling sensitivity of grain yield to elevated temperature in the DSSAT crop models for peanut, soybean, dry bean, chickpea, sorghum, and millet. *European Journal of Agronomy*, *100*, 99-109.
- Coche, A. G. (1985). *Soil and freshwater fish culture: simple methods for aquaculture*.
- Confalonieri, R., Bellocchi, G., Tarantola, S., Acutis, M., Donatelli, M., & Genovese, G. (2010). Sensitivity analysis of the rice model WARM in Europe: Exploring the effects of different locations, climates and methods of analysis on model sensitivity to crop parameters. *Environmental Modelling & Software*, *25*(4), 479-488. doi:<https://doi.org/10.1016/j.envsoft.2009.10.005>
- Cu, N. X., Hiep, B. K., & Tran, C. V. (2000). *Analyze the mineral composition of soil (chapter 6) - Methods of analysis of crop fertilizer*: Education Publishing House.
- Chenu, K., Porter, J. R., Martre, P., Basso, B., Chapman, S. C., Ewert, F., Bindi, M., & Asseng, S. (2017). Contribution of Crop Models to Adaptation in Wheat. *Trends in Plant Science*, *22*(6), 472-490. doi:<https://doi.org/10.1016/j.tplants.2017.02.003>
- Cheng, W., Sakai, H., Yagi, K., & Hasegawa, T. (2009). Interactions of elevated [CO₂] and night temperature on rice growth and yield. *Agricultural and Forest Meteorology*, *149*(1), 51-58. doi:10.1016/j.agrformet.2008.07.006
- Chou, J., Xu, Y., Dong, W., Xian, T., & Wang, Z. (2019). Research on the variation characteristics of climatic elements from April to September in China's main grain-producing areas. *Theoretical Applied Climatology*, *137*(3-4), 3197-3207.
- Chouichi Yoshida. (1981). Fundamental of rice crop science. *International Rice Research Institute*.
- Dixon, B. L., Hollinger, S. E., Garcia, P., & Tirupattur, V. (2004). Estimating corn yield response models to predict impacts of climate change. *Journal of Agricultural resource economics*, 58-68.
- Du, T. T., Tri, L. Q., Minh, V. Q., Khoa, L. V., Dung, T. V., Vu, P. T., & Nguyen, P. C. (2019). Soil classification characteristics and soil distribution in An Giang province classified according to WRB 2006 scale 1:100,000. *Journal of the Vietnam Soil Science Association*(56), 5-10.
- Dwiartama, A., Rosin, C., & Campbell, H. (2016). Understanding agri-food systems as assemblages: Worlds of rice in Indonesia. In *Biological economies* (pp. 82-94): Routledge.
- Eckstein, D., Hutfils, M.-L., & Winges, M. (2018). Global climate risk index 2019. *Who suffers most from extreme weather events*, 36.
- Eilers, V. H. M., Carter, R. C., & Rushton, K. R. (2007). A single layer soil water balance model for estimating deep drainage (potential recharge): An

- application to cropped land in semi-arid North-east Nigeria. *Geoderma*, 140(1), 119-131. doi:<https://doi.org/10.1016/j.geoderma.2007.03.011>
- Eitzinger, A., Läderach, P., Rodriguez, B., Fisher, M., Beebe, S., Sonder, K., & Schmidt, A. (2017). Assessing high-impact spots of climate change: spatial yield simulations with Decision Support System for Agrotechnology Transfer (DSSAT) model. *Mitigation and Adaptation Strategies for Global Change*, 22(5), 743-760. doi:10.1007/s11027-015-9696-2
- Elhakeem, M., & Papanicolaou, A. N. (2009). Estimation of the Runoff Curve Number via Direct Rainfall Simulator Measurements in the State of Iowa, USA. *Water Resources Management*, 23(12), 2455-2473. doi:10.1007/s11269-008-9390-1
- Gardner, F. P., Pearce, R. B., & Mitchell, R. L. (2017). *Physiology of crop plants*: Scientific publishers.
- Gaydon, D. S., Balwinder, S., Wang, E., Poulton, P. L., Ahmad, B., Ahmed, F., Akhter, S., Ali, I., Amarasingha, R., Chaki, A. K., Chen, C., Choudhury, B. U., Darai, R., Das, A., Hochman, Z., Horan, H., Hosang, E. Y., Kumar, P. V., Khan, A. S. M. M. R., Laing, A. M., Liu, L., Malaviachichi, M. A. P. W. K., Mohapatra, K. P., Muttaleb, M. A., Power, B., Radanielson, A. M., Rai, G. S., Rashid, M. H., Rathanayake, W. M. U. K., Sarker, M. M. R., Sena, D. R., Shamim, M., Subash, N., Suriadi, A., Suriyagoda, L. D. B., Wang, G., Wang, J., Yadav, R. K., & Roth, C. H. (2017). Evaluation of the APSIM model in cropping systems of Asia. *Field Crops Research*, 204, 52-75. doi:<https://doi.org/10.1016/j.fcr.2016.12.015>
- General agricultural report. (2020). An Giang Department of Agriculture.
- Guo, B., Dai, S., Wang, R., Guo, J., Ding, Y., & Xu, Y. (2015). Combined effects of elevated CO₂ and Cd-contaminated soil on the growth, gas exchange, antioxidant defense, and Cd accumulation of poplars and willows. *Environmental and Experimental Botany*, 115, 1-10.
- Hanh, N. T. M. (2012). Applying CropWat model to evaluate rice yield in the Agust dike in An Giang province under changing conditions of meteorological and hydrological factors.
- Hao, X., Gao, J., Han, X., Ma, Z., Merchant, A., Ju, H., Li, P., Yang, W., Gao, Z., & Lin, E. (2014). Effects of open-air elevated atmospheric CO₂ concentration on yield quality of soybean (*Glycine max* (L.) Merr). *Agriculture, Ecosystems & Environment*, 192, 80-84. doi:<https://doi.org/10.1016/j.agee.2014.04.002>
- Harrison, L., Michaelsen, J., Funk, C., & Husak, G. (2011). Effects of temperature changes on maize production in Mozambique. *Climate Research*(46), 3.
- Hartmann, J., Gill, R., Opperman, J., & Harrison, D. (2013). *The new frontier of hydropower sustainability: planning at the system scale*: Inter-American Development Bank.
- Quang, P. V. (2019). Understanding farmer production strategies in context of policies for adaptation to floods in Vietnam. *The Swedish University of Agricultural Sciences*.
- Hoogenboom, G., Porter, C. H., Boote, K. J., Shelia, V., Wilkens, P. W., Singh, U., White, J. W., Asseng, S., Lizaso, J. I., & Moreno, L. P. (2019). The DSSAT

- crop modeling ecosystem. In *Advances in crop modelling for a sustainable agriculture* (pp. 173-216): Burleigh Dodds Science Publishing.
- Huang, M., Wang, J., Wang, B., Liu, D. L., Feng, P., Yu, Q., Pan, X., & Waters, C. (2021). Assessing maize potential to mitigate the adverse effects of future rising temperature and heat stress in China. *Agricultural and Forest Meteorology*, 311, 108673. doi: <https://doi.org/10.1016/j.agrformet.2021.108673>
- Ines, A. V. M., & Hansen, J. W. (2006). Bias correction of daily GCM rainfall for crop simulation studies. *Agricultural Forest Meteorology*, 138(1), 44-53.
- Iticha, B., & Takele, C. (2019). Digital soil mapping for site-specific management of soils. *Geoderma*, 351, 85-91.
- Jamieson, P. D., Porter, J. R., & Wilson, D. R. (1991). A test of the computer simulation model ARCWHEAT1 on wheat crops grown in New Zealand. *Field Crops Research*, 27(4), 337-350.
- Jeong, S., Ko, J., Kang, M., Yeom, J., Ng, C. T., Lee, S.-H., Lee, Y.-G., & Kim, H.-Y. (2020). Geographical variations in gross primary production and evapotranspiration of paddy rice in the Korean Peninsula. *Science of The Total Environment*, 714, 136632.
- Jiang, Z., Raghavan, S. V., Hur, J., Sun, Y., Liong, S.-Y., Nguyen, V. Q., & Van, P. D. T. (2019). Future changes in rice yields over the Mekong River Delta due to climate change—Alarming or alerting? *Theoretical and Applied Climatology*, 137(1), 545-555.
- Jing, L., Wang, J., Shen, S., Wang, Y., Zhu, J., Wang, Y., & Yang, L. (2016). The impact of elevated CO₂ and temperature on grain quality of rice grown under open-air field conditions. *Journal of the Science of Food Agriculture and Agricultural Science Procedia*, 96(11), 3658-3667.
- Kivi, M. S., Blakely, B., Masters, M., Bernacchi, C. J., Miguez, F. E., & Dokoohaki, H. (2022). Development of a data-assimilation system to forecast agricultural systems: A case study of constraining soil water and soil nitrogen dynamics in the APSIM model. *Science of The Total Environment*, 820, 153192. doi:<https://doi.org/10.1016/j.scitotenv.2022.153192>
- Kontgis, C., Schneider, A., Ozdogan, M., Kucharik, C., Tri, V. P. D., Duc, N. H., & Schatz, J. (2019). Climate change impacts on rice productivity in the Mekong River Delta. *Applied Geography*, 102, 71-83. doi:<https://doi.org/10.1016/j.apgeog.2018.12.004>
- Krishnan, P., Swain, D. K., Chandra Bhaskar, B., Nayak, S. K., & Dash, R. N. (2007). Impact of elevated CO₂ and temperature on rice yield and methods of adaptation as evaluated by crop simulation studies. *Agriculture, Ecosystems & Environment*, 122(2), 233-242. doi:<https://doi.org/10.1016/j.agee.2007.01.019>
- Kham, D. V. (2011). Building crop yield forecast rice production in RRD with MODIS image. *Report on acceptance of provincial research projects*.
- Le, Q. P. T., & Minh, V. Q. (2014). Simulation of rice yield using Oryza model in Soc Trang province.

- Lhomme, J. P. (1997). A THEORETICAL BASIS FOR THE PRIESTLEY-TAYLOR COEFFICIENT. *Boundary-Layer Meteorology*, 82(2), 179-191. doi:10.1023/A:1000281114105
- Li, Angeles, O., Marcaida Iii, M., Manalo, E., Manalili, M. P., Radanielson, A., & Mohanty, S. (2017). From ORYZA2000 to ORYZA (v3): An improved simulation model for rice in drought and nitrogen-deficient environments. *Agricultural and Forest Meteorology*, 237, 246-256.
- Li, Hasegawa, T., Yin, X., Zhu, Y., Boote, K., Adam, M., Bregaglio, S., Buis, S., Confalonieri, R., Fumoto, T., Gaydon, D., Marcaida, M., 3rd, Nakagawa, H., Oriol, P., Ruane, A. C., Ruget, F., Singh, B., Singh, U., Tang, L., Tao, F., Wilkens, P., Yoshida, H., Zhang, Z., & Bouman, B. (2015). Uncertainties in predicting rice yield by current crop models under a wide range of climatic conditions. *Glob Chang Biol*, 21(3), 1328-1341. doi:10.1111/gcb.12758
- Li, Liu, W. Z., Zhang, X.-c., & Zheng, F. L. (2009). Impacts of land use change and climate variability on hydrology in an agricultural catchment on the Loess Plateau of China. *Journal of hydrology*, 377(1-2), 35-42.
- Lin, B. B. (2011). Resilience in agriculture through crop diversification: adaptive management for environmental change. *BioScience*, 61(3), 183-193.
- Liu, Rahman, T., Song, C., Su, B., Yang, F., Yong, T., Wu, Y., Zhang, C., & Yang, W. (2017). Changes in light environment, morphology, growth and yield of soybean in maize-soybean intercropping systems. *Field Crops Research*, 200, 38-46.
- Liu, Waqas, M. A., Wang, S.-h., Xiong, X.-y., & Wan, Y.-f. (2017). Effects of increased levels of atmospheric CO₂ and high temperatures on rice growth and quality. *PLoS One*, 12(11), e0187724.
- Liu, B., Asseng, S., Müller, C., Ewert, F., Elliott, J., Lobell, D. B., Martre, P., Ruane, A. C., Wallach, D., & Jones, J. W. (2016). Similar estimates of temperature impacts on global wheat yield by three independent methods. *Nature Climate Change*, 6(12), 1130-1136.
- Liu, X., He, Y., Zhao, X., Zhang, T., Zhang, L., Ma, Y., Yao, S., Wang, S., & Wei, S. (2015). Characteristics of deep drainage and soil water in the mobile sandy lands of Inner Mongolia, northern China. *Journal of Arid Land*, 7(2), 238-250. doi:10.1007/s40333-014-0095-4
- Lobell, D. B., Sibley, A., & Ortiz-Monasterio, J. I. J. N. C. C. (2012). Extreme heat effects on wheat senescence in India. 2(3), 186-189.
- Long, S. P., Ainsworth, E. A., Leakey, A. D. B., & Morgan, P. B. (2005). Global food insecurity. Treatment of major food crops with elevated carbon dioxide or ozone under large-scale fully open-air conditions suggests recent models may have overestimated future yields. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 360(1463), 2011-2020.
- Martre, P., Jamieson, P. D., Semenov, M. A., Zyskowski, R. F., Porter, J. R., & Triboi, E. J. E. J. o. A. (2006). Modelling protein content and composition in relation to crop nitrogen dynamics for wheat. 25(2), 138-154.
- Masson-Delmotte, V. P., Zhai, P., Pirani, S. L., Connors, C., Péan, S., Berger, N., ... & Scheel Monteiro, P. M. (2021). Ipcc, 2021: Summary for policymakers. in: Climate change 2021: The physical science basis. contribution of working

group i to the sixth assessment report of the intergovernmental panel on climate change

- McMaster, G. S., White, J. W., Hunt, L., Jamieson, P., Dhillon, S., & Ortiz-Monasterio, J. J. A. o. b. (2008). Simulating the influence of vernalization, photoperiod and optimum temperature on wheat developmental rates. *102*(4), 561-569.
- McMaster, G. S., White, J. W., Weiss, A., Stephen Baenziger, P., Wilhelm, W., Porter, J., Jamieson, P. D. J. R. o. c. t. l. w. u., & processes, m. w. s. e. o. p. g. (2008). Simulating crop phenological responses to water deficits. *1*, 277-300.
- Meteorological and hydrological station of Cho Moi district. (2020). General Report of An Giang Department of Meteorology and Hydrology
- Minh, D. (2010). Vegetable plant *Can Tho University Publish house*, 1.
- Moldenhauer, K. A. K., Gibbons, J. H., Smith, C. W., & Dilday, R. H. (2003). *Rice morphology and development*: John Wiley & Sons, Inc.: Hoboken, New Jersey.
- Morris, M. D. (1991). Factorial sampling plans for preliminary computational experiments. *Technometrics*, 33(2), 161-174.
- Morrison, M. J., & Stewart, D. W. (2002). Heat stress during flowering in summer Brassica. *Crop Science*, 42(3), 797-803.
- Nam Thai (2019). Rice sowing calendar in An Giang. (2019). An Giang Newspaper
- Nash, J. E., & Sutcliffe, J. V. (1970). River flow forecasting through conceptual models part I—A discussion of principles. *Journal of hydrology*, 10(3), 282-290.
- National Meteorological Center. (2021). Vietnam Meteorological and Hydrological Administration.
- Nguyen, V. T., Nguyen, T. H., Tran, T., Nguyen, T. L., & Va, V. T. (2020). *Climate change and impacts in Vietnam: Science and Technology*.
- Nhut, Q. M. (2022). Analysis of profit and efficiency by production scale of the model of trial rice monoculture and dual rice - vegetable rotation at Cho Moi - An Giang, 2005. *Can Tho University Journal*(7), 167-175.
- Oteng-Darko, P., Yeboah, S., Addy, S. N. T., Amponsah, S., & Danquah, E. O. (2013). Crop modeling: A tool for agricultural research—A review.
- Paleari, L., & Confalonieri, R. (2016). Sensitivity analysis of a sensitivity analysis: We are likely overlooking the impact of distributional assumptions. *Ecological Modelling*, 340, 57-63.
- Penuelas, J., Fu, Y., Estiarte, M., Gamon, J. A., Filella, I., Verger, A., & Jannsens, I. (2017). *Photoperiod-and Warming-driven Phenological Changes and Carbon and Nutrient Cycling. Remote Sensing Assessment*. Paper presented at the AGU Fall Meeting Abstracts.
- Priestley, C. H. B., & Taylor, R. J. (1972). On the Assessment of Surface Heat Flux and Evaporation Using Large-Scale Parameters. *Monthly Weather Review*, 100, 81-92.

- Pham, Q. V., Nguyen, T. T. N., Vo, T. T. X., Le, P. H., Nguyen, X. T. T., Duong, N. V., & Le, C. T. S. (2023). Applying the SIMPLE Crop Model to Assess Soybean (*Glicine max.* (L.) Merr.) Biomass and Yield in Tropical Climate Variation. *13*(4), 1180.
- Quero, G., Bonnacarrère, V., Fernández, S., Silva, P., Simondi, S., & Borsani, O. (2019). Light-use efficiency and energy partitioning in rice is cultivar dependent. *Photosynthesis research*, *140*(1), 51-63.
- Quyên, N. T. K., Minh, T. H., Hai, T. N., Hien, T. T. T., & Dinh, T. D. (2016). Technical-economic efficiencies of snakehead seed production under impacts of climate change in the Mekong Delta, Vietnam. *Animal Review*, *3*(4), 73-82.
- Raes, D., Steduto, P., Hsiao, T. C., & Fereres, E. J. A. J. (2009). AquaCrop—the FAO crop model to simulate yield response to water: II. Main algorithms and software description. *101*(3), 438-447.
- Rani, B. A., & Maragatham, N. (2013). Effect of elevated temperature on rice phenology and yield. *Indian Journal of Science and Technology*, *6*(8), 5095-5097.
- Rauff, K. O., & Bello, R. (2015). A review of crop growth simulation models as tools for agricultural meteorology. *Agricultural Sciences*, *6*(09), 1098.
- Rezaei, E. E., Webber, H., Gaiser, T., Naab, J., & Ewert, F. J. E. J. o. A. (2015). Heat stress in cereals: mechanisms and modelling. *64*, 98-113.
- Robertson, M., & Holland, J. J. A. J. o. A. R. (2004). Production risk of canola in the semi-arid subtropics of Australia. *55*(5), 525-538.
- Robertson, M., Lilley, J. J. C., & Science, P. (2016). Simulation of growth, development and yield of canola (*Brassica napus*) in APSIM. *67*(4), 332-344.
- Roby, M. C., Fernandez, M. G. S., Heaton, E. A., Miguez, F. E., & VanLoocke, A. (2017). Biomass sorghum and maize have similar water-use-efficiency under non-drought conditions in the rain-fed Midwest US. *Agricultural Forest Meteorology*, *247*, 434-444.
- Ross, J. (2012). *The radiation regime and architecture of plant stands* (Vol. 3): Springer Science & Business Media.
- Saddique, Q., Khan, M. I., Habib ur Rahman, M., Jiatun, X., Waseem, M., Gaiser, T., Mohsin Waqas, M., Ahmad, I., Chong, L., & Cai, H. J. A. (2020). Effects of elevated air temperature and CO₂ on maize production and water use efficiency under future climate change scenarios in Shaanxi Province, China. *11*(8), 843.
- Saina, C. K., Murgor, D. K., & Murgor, F. A. C. (2013). Climate change and food security. *Environmental change and sustainability*, *10*, 55206.
- Sánchez, B., Rasmussen, A., & Porter, J. R. (2014). Temperatures and the growth and development of maize and rice: a review. *Global change biology*, *20*(2), 408-417.
- Saud, S., Yajun, C., Fahad, S., Hussain, S., Na, L., Xin, L., Alhussien, S. A. A. F. E., & Research, P. (2016). Silicate application increases the photosynthesis and its associated metabolic activities in Kentucky bluegrass under drought

- stress and post-drought recovery. *Environmental Science*, 23(17), 17647-17655.
- Shabani, A., & Sepaskhah, A. (2019). Reviewing the harvest index estimation in crop modeling. *Iran Agricultural Research*.
- Shi, W., Yin, X., Struik, P. C., Solis, C., Xie, F., Schmidt, R. C., Huang, M., Zou, Y., Ye, C., & Jagadish, S. K. (2017). High day-and night-time temperatures affect grain growth dynamics in contrasting rice genotypes. *Journal of Experimental Botany*, 68(18), 5233-5245.
- Shirazi, S. Z., Mei, X., Liu, B., & Liu, Y. (2021). Assessment of the AquaCrop Model under different irrigation scenarios in the North China Plain. *Agricultural Water Management*, 257, 107120. doi:https://doi.org/10.1016/j.agwat.2021.107120
- Singh, M., Mishra, G. C., & Mall, R. K. (2020). Calibration and Validation of CERES-Wheat Model in North Eastern Plain Zone (NEPZ) of India. *International Journal of Agriculture, Environment and Biotechnology*, 13(1), 99-103.
- Snigdha, G. (2022). Rice yield estimation using remote sensing and crop simulation model in Nalgonda district, Telangana.
- Son, N.-T., Chen, C.-F., Chen, C.-R., Duc, H.-N., & Chang, L.-Y. (2014). A phenology-based classification of time-series MODIS data for rice crop monitoring in Mekong Delta, Vietnam. *Remote Sensing*, 6(1), 135-156.
- Streck, N. A., Lago, I., Gabriel, L. F., & Samboranza, F. K. (2008). Simulating maize phenology as a function of air temperature with a linear and a nonlinear model. *Pesquisa Agropecuária Brasileira*, 43, 449-455.
- Tho, D. T. B. G *General report on provincial research - Ben Tre Province*.
- Thornton, P. K., Wilkens, P. W., Imamura, D. T., & Bowen, W. T. (2013). Decision support system for agrotechnology transfer: DSSAT V3. *Understanding Options for Agricultural Production*, 7, 157.
- Thuc, T., Thang, V. N., Huong, H. T. L., Khiem, V. M., Hien, N. X., & Phong, D. H. (2016). Climate change and sea level rise scenarios for Vietnam. *Ministry of Natural resources and Environment. Hanoi, Vietnam*.
- Tran, M., Eitzinger, J., & Manschadi, A. M. (2020). Response of maize yield under changing climate and production conditions in Vietnam. *Italian Journal of Agrometeorology*(1), 73-84.
- Tran, T., Nguyen, V. T., Huynh, T. L. H., Mai, V. K., Nguyen, X. H., & Doan, H. P. (2016). Climate change and sea level rise scenarios for Vietnam. *Ministry of Natural resources and Environment. Hanoi, Vietnam*.
- Trang, T. H. (2016). Effects of climate change on rice yield and rice market in Vietnam. *Journal of Agricultural and Applied Economics*, 48(4), 366-382.
- Uno, Y., Prasher, S. O., Lacroix, R., Goel, P. K., Karimi, Y., Viau, A., & Patel, R. M. (2005). Artificial neural networks to predict corn yield from Compact Airborne Spectrographic Imager data. *Computers electronics in agriculture*, 47(2), 149-161.
- Van Looy, K., Bouma, J., Herbst, M., Koestel, J., Minasny, B., Mishra, U., Montzka, C., Nemes, A., Pachepsky, Y. A., Padarian, J., Schaap, M. G., Tóth,

- B., Verhoef, A., Vanderborght, J., van der Ploeg, M. J., Weihermüller, L., Zacharias, S., Zhang, Y., & Vereecken, H. (2017). Pedotransfer Functions in Earth System Science: Challenges and Perspectives. *Reviews of Geophysics*, 55(4), 1199-1256. doi:<https://doi.org/10.1002/2017RG000581>
- Vietnam development report. (2016). Transforming Vietnamese Agriculture: Gaining more from Less. *World bank group - Hong Duc Publishing House*.
- Vu, Thang, T. T., & Minh, V. Q. (2011). Soil classification of the Mekong Delta according to the FAO-WRB annotation system (2006). *ournal of Science Can Tho University(JI8(b)*, 10-17.
- Vu, N. T., & Nguyen, T. L. T. (2017). Application of MORRIS method for analysis of sensitivity of the factors influencing flooding flows calculated from small basin. *Journal of Construction Science and Technology*, 11(2), 26-32.
- Wang, E., & Engel, T. J. A. s. (1998). Simulation of phenological development of wheat crops. 58(1), 1-24.
- Wang, E., Martre, P., Zhao, Z., Ewert, F., Maiorano, A., Rötter, R. P., Kimball, B. A., Ottman, M. J., Wall, G. W., & White, J. W. J. N. p. (2017). The uncertainty of crop yield projections is reduced by improved temperature response functions. 3(8), 1-13.
- Wang, W., Cai, C., He, J., Gu, J., Zhu, G., Zhang, W., Zhu, J., & Liu, G. (2020). Yield, dry matter distribution and photosynthetic characteristics of rice under elevated CO₂ and increased temperature conditions. *Field Crops Research*, 248, 107605.
- Wang, W., Cai, C., Lam, S. K., Liu, G., & Zhu, J. (2018). Elevated CO₂ cannot compensate for japonica grain yield losses under increasing air temperature because of the decrease in spikelet density. *European Journal of Agronomy*, 99, 21-29.
- Whitbread, A., Robertson, M., Carberry, P., & Dimes, J. J. E. J. o. A. (2010). How farming systems simulation can aid the development of more sustainable smallholder farming systems in southern Africa. 32(1), 51-58.
- Wohling, D. L., Leaney, F. W., & Crosbie, R. S. (2012). Deep drainage estimates using multiple linear regression with percent clay content and rainfall. *Hydrol. Earth Syst. Sci.*, 16(2), 563-572. doi:10.5194/hess-16-563-2012
- Woli, P., Jones, J. W., Ingram, K. T., & Fraisse, C. W. (2012). Agricultural Reference Index for Drought (ARID). 104(2), 287-300. doi:10.2134/agronj2011.0286
- Woodward, D. E., Hawkins, R. H., Jiang, R., Allen T. Hjelmfelt, J., Mullem, J. A. V., & Quan, Q. D. (2003). Runoff Curve Number Method: Examination of the Initial Abstraction Ratio. In *World Water & Environmental Resources Congress 2003* (pp. 1-10).
- Xu, C., & Gertner, G. (2011). Understanding and comparisons of different sampling approaches for the Fourier Amplitudes Sensitivity Test (FAST). *Computational Statistics & Data Analysis*, 55(1), 184-198. doi:<https://doi.org/10.1016/j.csda.2010.06.028>

- Xu, J., Henry, A., & Sreenivasulu, N. (2020). Rice yield formation under high day and night temperatures—A prerequisite to ensure future food security. *Plant, Cell & Environment*, 43(7), 1595-1608.
- Xue, Q., Weiss, A., & Baenziger, P. S. J. E. M. (2004). Predicting leaf appearance in field-grown winter wheat: evaluating linear and non-linear models. *175*(3), 261-270.
- Yin, X., Struik, P. C., & Goudriaan, J. (2021). On the needs for combining physiological principles and mathematics to improve crop models. *Field Crops Research*, 271, 108254.
- Yu, Q., & Cui, Y. (2022). Improvement and testing of ORYZA model water balance modules for alternate wetting and drying irrigation. *Agricultural Water Management*, 271, 107802. doi:<https://doi.org/10.1016/j.agwat.2022.107802>
- Yuliawan, T., & Handoko, I. (2016). The effect of temperature rise to rice crop yield in Indonesia uses Shierary Rice model with geographical information system (GIS) feature. *Procedia Environmental Sciences*, 33, 214-220.
- Zhang, Y., Zhao, W., Ochsner, T. E., Wyatt, B. M., Liu, H., & Yang, Q. (2019). Estimating Deep Drainage Using Deep Soil Moisture Data under Young Irrigated Cropland in a Desert-Oasis Ecotone, Northwest China. *Vadose Zone Journal*, 18(1), 180189. doi:<https://doi.org/10.2136/vzj2018.10.0189>
- Zhao, C., Liu, B., Xiao, L., Hoogenboom, G., Boote, K. J., Kassie, B. T., Pavan, W., Shelia, V., Kim, K. S., Hernandez-Ochoa, I., Wallache, D., Cheryl, H. P., O., C., Stocklef, Y., & Asseng, S. (2019). A SIMPLE crop model. *European Journal of Agronomy*, 104, 97-106.
- Zhen, X. (2022). Incorporating drought and marker associated traits into the DSSAT model.

