

REFERENCE LIST

- Andréa, M. M. d., Peres, T. B., Luchini, L. C., Bazarin, S., Papini, S., Matallo, M. B., et al. (2003). Influence of repeated applications of glyphosate on its persistence and soil bioactivity. *Pesquisa Agropecuaria Brasileira*, 38(11), 1329-1335.
- Annett, R., Habibi, H. R., & Hontela, A. (2014). Impact of glyphosate and glyphosate-based herbicides on the freshwater environment. *Journal of Applied Toxicology*, 34(5), 458-479.
- Aparicio, V. C., De Gerónimo, E., Marino, D., Primost, J., Carriquiriborde, P., & Costa, J. L. (2013). Environmental fate of glyphosate and aminomethylphosphonic acid in surface waters and soil of agricultural basins. *Chemosphere*, 93(9), 1866-1873.
- APHA. (2012). *Standard Methods for examination of water and wastewater* (22 ed.): American Public Health Association, American Water works Association, Water Environment Federation.
- Assalin, M. R., De Moraes, S. G., Queiroz, S. C. N., Ferracini, V. L., & Duran, N. (2009). Studies on degradation of glyphosate by several oxidative chemical processes: Ozonation, photolysis and heterogeneous photocatalysis. *Journal of Environmental Science and Health, Part B*, 45(1), 89-94.
- ASTM D2487-11, A. (2011). Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System). West Conshohocken: ASTM International.
- ASTM D4318-17, A. (2017). Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils. West Conshohocken: ASTM International.
- ASTM D7928-17, A. (2017). Standard Test Method for Particle-Size Distribution (Gradation) of Fine-Grained Soils Using the Sedimentation (Hydrometer) Analysis. West Conshohocken: ASTM International.
- Ayoola, S. O. (2008). Histopathological effect of glyphosate on Juvenile African Catfish(*Clarias gariepinus*). *Am Eurasian J Agric Environ Sci*, 4.
- Bandarage, A. (2013). Political Economy of Epidemic Kidney Disease in Sri Lanka. . *Sage Journal* , 3-4.
- Battaglin, W., Meyer, M., Kuivila, K., & Dietze, J. (2014). Glyphosate and its degradation product AMPA occur frequently and widely in US soils, surface

- water, groundwater, and precipitation. *Journal of the American Water Resources Association*, 50(2), 275-290.
- Borggaard, O. K., & Gimsing, A. L. (2008). Fate of glyphosate in soil and the possibility of leaching to ground and surface waters: a review. *Pest Management Science*, 64(4), 441-456.
- Bourgeois, A., Klinkhamer, E., & Price, J. (2012). *Pesticide Removal from Water* Worcester, Massachusetts Worcester Polytechnic Institute
- Coupe, R. H., Kalkhoff, S. J., Capel, P. D., & Gregoire, C. (2012). Fate and transport of glyphosate and aminomethylphosphonic acid in surface waters of agricultural basins. *Pest Management Science*, 68(1), 16-30.
- Daouk, S., De Alencastro, L. F., & Pfeifer, H.-R. (2013). The herbicide glyphosate and its metabolite AMPA in the Lavaux vineyard area, western Switzerland: Proof of widespread export to surface waters. Part II: The role of infiltration and surface runoff. *Journal of Environmental Science and Health, Part B*, 48(9), 725-736.
- de Jonge, H., de Jonge, L. W., Jacobsen, O. H., Yamaguchi, T., & Moldrup, P. (2001). Glyphosate sorption in soils of different ph and phosphorus content. *Soil Science*, 166(4), 230-238.
- Dharma-wardana, M. W. C., Amarasiri, S. L., Dharmawardene, N., & Panabokke, C. R. (2014). Chronic kidney disease of unknown aetiology and ground-water ionicity: study based on Sri Lanka. [journal article]. *Environmental Geochemistry and Health*, 37(2), 221-231.
- Dion, H. M., Harsh, J. B., & Hill, H. H. (2001). Competitive sorption between glyphosate and inorganic phosphate on clay minerals and low organic matter soils. *Journal of Radioanalytical and Nuclear Chemistry* 249(2), 385–390.
- Elrashidi, M. (2010). Selection of an appropriate phosphorus test for soils. *USDA NRCS, Lincoln, NE*.
- Fomsgaard, I. S., Spliid, N. H. H., & Felding, G. (2003). Leaching of Pesticides Through Normal-Tillage and Low-Tillage Soil—A Lysimeter Study. II. Glyphosate. *Journal of Environmental Science and Health, Part B*, 38(1), 19-35.
- Gagliardo, P., Adham, S., Trussell, R., & Olivieri, A. (1998). Water repurification via reverse osmosis. *Desalination*, 117(1-3), 73-78.

- Gavrilescu, M. (2005). Fate of pesticides in the environment and its bioremediation. *Engineering in Life Sciences*, 5(6), 497-526.
- Gerritse, R., Beltran, J., & Hernandez, F. (1996). Adsorption of atrazine, simazine, and glyphosate in soils of the Gnangara Mound, Western Australia. *Soil Research*, 34(4), 599-607.
- Gimsing, A. L., & Borggaard, O. K. (2002). Competitive adsorption and desorption of glyphosate and phosphate on clay silicates and oxides. *Clay Minerals*, 37(3), 509-515.
- Gimsing, A. L., Borggaard, O. K., & Bang, M. (2004). Influence of soil composition on adsorption of glyphosate and phosphate by contrasting Danish surface soils. *European Journal of Soil Science*, 55(1), 183-191.
- Glass, R. L. (1987). Adsorption of glyphosate by soils and clay minerals. *Journal of Agricultural and Food Chemistry*, 35(4), 497-500.
- Grant, S., Mortimer, M., Stevenson, G., Malcolm, D., & Gaus, C. (2010). Facilitated transport of dioxins in soil following unintentional release of pesticide-surfactant formulations. *Environmental science & technology*, 45(2), 406-411.
- Gunten, U. v. (2003). Ozonation of drinking water: Part I. Oxidation kinetics and product formation. *Water Research*, 37(7), 1443-1467.
- Haigh, S. D. (1996). A review of the interaction of surfactants with organic contaminants in soil. *Science of the Total Environment*, 185(1-3), 161-170.
- Herath, I., Kumarathilaka, P., Al-Wabel, M. I., Abduljabbar, A., Ahmad, M., Usman, A. R., et al. (2016). Mechanistic modeling of glyphosate interaction with rice husk derived engineered biochar. *Microporous and mesoporous materials*, 225, 280-288.
- Herrmann, K. M., & Weaver, L. M. (1999). The shikimate pathway. *Annual review of plant biology*, 50(1), 473-503.
- Illeperuma, O., Dharmagunawardhane, H., & Herarh, K. (2009). Dissolution of aluminum from substandard utensils under high fluoride stress: A possible risk factors for chronic renal failures in the North-Central Province. *Journal of the National Science Foundation of Sri Lanka*, 37(3), 219-222.
- Jayasumana, C., Gunatilake, S., & Senanayake, P. (2014). Glyphosate, hard water and nephrotoxic metals: are they the culprits behind the epidemic of chronic kidney disease of unknown etiology in Sri Lanka? *International journal of environmental research and public health*, 11(2), 2125-2147.

- Jayasumana, C., Paranagama, P., Agampodi, S., Wijewardane, C., Gunatilake, S., & Siribaddana, S. (2015). Drinking well water and occupational exposure to Herbicides is associated with chronic kidney disease, in Padavi-Sripura, Sri Lanka. [journal article]. *Environmental Health*, 14(1), 6.
- Jayatilake, N., Mendis, S., & Maheepala, P. M. (2013). Chronic kidney disease of uncertain aetiology: prevalence and causative factors in a developing country. *BMC Nephrol* 14:180.
- Jiraungkoorskul, W., Upatham, E. S., Kruatrachue, M., Sahaphong, S., Vichasri-Grams, S., & Pokethitiyook, P. (2003). Biochemical and histopathological effects of glyphosate herbicide on Nile tilapia (*Oreochromis niloticus*). *Environ Toxicol*, 18.
- Jönsson, J., Camm, R., & Hall, T. (2013). Removal and degradation of glyphosate in water treatment: a review. *Journal of Water Supply: Research and Technology*, 62 (7), 395-408.
- Katagi, T. (2008). Surfactant effects on environmental behavior of pesticides. *Reviews of environmental contamination and toxicology*, 194, 71.
- Kjær, J., Ernstsén, V., Jacobsen, O. H., Hansen, N., de Jonge, L. W., & Olsen, P. (2011). Transport modes and pathways of the strongly sorbing pesticides glyphosate and pendimethalin through structured drained soils. *Chemosphere*, 84(4), 471-479.
- Kjær, J., Olsen, P., Barlebo, H. C., Juhler, R. K., Plauborg, F., Grant, R., et al. (2004). *The Danish pesticide leaching assessment programme: monitoring results 1999–2003*, Copenhagen: Geological Survey of Denmark and Greenland
- Klinger, J., Lang, M., Sacher, F., Brauch, H. J., Maier, D., & Worch, E. (1998). Formation of Glyphosate and AMPA During Ozonation of Waters Containing Ethylenediaminetetra(methylenephosphonic acid). *Ozone: Science & Engineering*, 20(2), 99-110.
- Kollman, W., & Segawa, R. (1995). Interim report of the pesticide chemistry database—Environmental Hazards Assessment Program. *California Department of Pesticide Regulation, Sacramento (USA)*.
- Knuutila, P., & Knuutila, H. (1979). The crystal and molecular structure of N-(phosphonomethyl) glycine (glyphosate). *Acta Chemica Scandinavica*, 33, 623-626.

- Kryuchkova, Y. V., Burygin, G. L., Gogoleva, N. E., Gogolev, Y. V., Chernyshova, M. P., Makarov, O. E., et al. (2014). Isolation and characterization of a glyphosate-degrading rhizosphere strain, *Enterobacter cloacae* K7. *Microbiological research*, *169*(1), 99-105.
- Kuchikata, M., Prill, E. J., Richardson, R. O., Sato, T., Surgant, J. M., & Wright, D. R. (2001). Glyphosate formulations: Google Patents.
- Kumar, R. S. (2002). Aral Sea: Tragedy Environmental in Central Asia. *Econ Polit Wkly*, *37*.
- Lund-Høie, K., & Friestad, H. O. (1986). Photodegradation of the herbicide glyphosate in water. *Bulletin of Environmental Contamination and Toxicology*, *36*(1), 723-729.
- Major 3rd, W. W., Grue, C. E., Gardner, S. C., & Grassley, J. M. (2003). Concentrations of Glyphosate and AMPA in Sediment Following Operational Applications of Rodeo® to Control Smooth Cordgrass in Willapa Bay, Washington, USA. *Bulletin of Environmental Contamination and Toxicology*, *71*(5), 912-918.
- Mamy, L., & Barriuso, E. (2005). Glyphosate adsorption in soils compared to herbicides replaced with the introduction of glyphosate resistant crops. *Chemosphere*, *61*(6), 844-855.
- Manual, A. M. (1984). Method 84-011, *Land Resource Research Institute: Agriculture, Canada*.
- Mesnage, R., Bernay, B., & Séralini, G. E. (2013). Ethoxylated adjuvants of glyphosate-based herbicides are active principles of human cell toxicity. *Toxicology*, *313*(2-3), 122-128.
- Morillo, E., Undabeytia, T., Maqueda, C., & Ramos, A. (2000). Glyphosate adsorption on soils of different characteristics.: Influence of copper addition. *Chemosphere*, *40*(1), 103-107.
- Munira, S., Farenhorst, A., Flaten, D., & Grant, C. (2016). Phosphate fertilizer impacts on glyphosate sorption by soil. *Chemosphere*, *153*, 471-477.
- Nash, D. M., & Halliwell, D. J. (1999). Fertilisers and phosphorus loss from productive grazing systems. *Soil Research*, *37*(3), 403-430.
- Noble, A., Amerasinghe, P., Manthrithilake, H., & Arasalingam, S. (2014). *Review of literature on chronic kidney disease of unknown etiology (CKDu) in Sri Lanka*.

- (IWMI Working Paper 158): Colombo, Sri Lanka: International Water Management Institute (IWMI).
- Norgaard, T., Moldrup, P., Ferré, T. P. A., Olsen, P., Rosenbom, A. E., & de Jonge, L. W. (2014). Leaching of Glyphosate and Aminomethylphosphonic Acid from an Agricultural Field over a Twelve-Year Period. *Vadose Zone Journal*, 13(10).
- Ololade, I., Oladoja, N., Oloye, F., Alomaja, F., Akerele, D., Iwaye, J., et al. (2014). Sorption of glyphosate on soil components: the roles of metal oxides and organic materials. *Soil and Sediment Contamination: An International Journal*, 23(5), 571-585.
- Peruzzo, P. J., Porta, A. A., & Ronco, A. E. (2008). Levels of glyphosate in surface waters, sediments and soils associated with direct sowing soybean cultivation in north pampasic region of Argentina. *Environmental Pollution*, 156(1), 61-66.
- Piccolo, A., Celano, G., Arienzo, M., & Mirabella, A. (1994). Adsorption and desorption of glyphosate in some European soils. *Journal of Environmental Science and Health, Part B*, 29(6), 1105-1115.
- Pollegioni, L., Schonbrunn, E., & Siehl, D. (2011). Molecular basis of glyphosate resistance—different approaches through protein engineering. *The FEBS journal*, 278(16), 2753-2766.
- Prata, F., Cardinali, V. C. d. B., Lavorenti, A., Tornisielo, V. L., & Regitano, J. B. (2003). Glyphosate sorption and desorption in soils with distinct phosphorus levels. *Scientia Agricola*, 60(1), 175-180.
- Rasmussen, S. B., Abrahamsen, P., Nielsen, M. H., Holm, P. E., & Hansen, S. (2015). Effects of Single Rainfall Events on Leaching of Glyphosate and Bentazone on Two Different Soil Types, using the DAISY Model. *Vadose Zone Journal*, 14(11).
- Roy, D. N., Konar, S. K., Banerjee, S., Charles, D. A., Thompson, D. G., & Prasad, R. (1989). Persistence, movement, and degradation of glyphosate in selected Canadian boreal forest soils. *Journal of Agricultural and Food Chemistry*, 37(2), 437-440.
- Rueppel, M. L., Brightwell, B. B., Schaefer, J., & Marvel, J. T. (1977). Metabolism and degradation of glyphosate in soil and water. *Journal of Agricultural and Food Chemistry*, 25(3), 517-528.

- Saitúa, H., Giannini, F., & Padilla, A. P. (2012). Drinking water obtaining by nanofiltration from waters contaminated with glyphosate formulations: process evaluation by means of toxicity tests and studies on operating parameters. *Journal of hazardous materials*, 227, 204-210.
- Schuette, J. (1998). *Environmental fate of glyphosate*. Sacramento, : Department of Pesticide Regulation.
- Simonsen, L., Fomsgaard, I. S., Svensmark, B., & Spliid, N. H. (2008). Fate and availability of glyphosate and AMPA in agricultural soil. *Journal of Environmental Science and Health, Part B*, 43(5), 365-375.
- Steinrücken, H., & Amrhein, N. (1980). The herbicide glyphosate is a potent inhibitor of 5-enolpyruvylshikimic acid-3-phosphate synthase. *Biochemical and biophysical research communications*, 94(4), 1207-1212.
- Sviridov, A. V., Shushkova, T. V., Ermakova, I. T., Ivanova, E. V., Epiktetov, D. O., & Leontievsky, A. A. (2015). Microbial degradation of glyphosate herbicides (Review). [journal article]. *Applied Biochemistry and Microbiology*, 51(2), 188-195.
- Tévez, H. R., & dos Santos Afonso, M. (2015). pH dependence of Glyphosate adsorption on soil horizons. *Boletín de la Sociedad Geológica Mexicana*, 67(3).
- Thelen, K., D, Evelyn, P. J., & Donald, P. (1995). The Basis for the Hard-Water Antagonism of Glyphosate Activity. *Weed Science*, 43(4), 541-548.
- Tsui, M. T. K., & Chu, L. M. (2008). Environmental fate and non-target impact of glyphosate-based herbicide (Roundup®) in a subtropical wetland. *Chemosphere*, 71(3), 439-446.
- Tsui, M. T. K., Wang, W.-X., & Chu, L. M. (2005). Influence of glyphosate and its formulation (Roundup®) on the toxicity and bioavailability of metals to *Ceriodaphnia dubia*. *Environmental Pollution*, 138(1), 59-68.
- USEPA. (1986). Method 9080: Cation-Exchange Capacity of Soils (Ammonium Acetate), part of Test Methods for Evaluating Solid Waste, Physical/Chemical Methods
- USEPA. (1992). *Guidelines for Exposure Assessment*. Risk Assessment Forum, Washington, DC, EPA/600/Z-92/001
- USEPA. (1993). *Registration Eligibility Decision- Glyphosate*: United States Environmental Protection Agency., EPA - 738- R- 93- 014

- USEPA. (1995). National Primary Drinking Water Regulations, *Glyphosate*.
- Van Stempvoort, D. R., Spoelstra, J., Senger, N. D., Brown, S. J., Post, R., & Struger, J. (2016). Glyphosate residues in rural groundwater, Nottawasaga River Watershed, Ontario, Canada. *Pest Management Science*, 72(10), 1862-1872.
- Vereecken, H. (2005). Mobility and leaching of glyphosate: a review. *Pest Management Science*, 61(12), 1139-1151.
- Walky, A., & Black, I. (1934). An examination of Degtjareff method for determining soil organic matter and a proposed modification of the chromic acid in soil analysis. 1. Experimental. *Soil Sci*, 79, 459-465.
- Wanigasuriya, K. (2012). Aetiological factors of Chronic Kidney Disease in the North Central Province of Sri Lanka: A review of evidence to-date. *Journal of the College of Community Physicians of Sri Lanka*, 17(1), 21-42.
- WHO. (1983). *Measuring change in nutritional status; Guidelines for Assessing the Nutritional Impact of Supplementray Feeding programmes for Vulnerable Groups*.
- WHO. (2013). *Investigation and evaluation of Chronic Kidney Disease of uncertain aetiology in Sri Lanka*: WHO.
- Zhou, D. M., Wang, Y. J., Cang, L., Hao, X. Z., & Luo, X. S. (2004). Adsorption and cosorption of cadmium and glyphosate on two soils with different characteristics. *Chemosphere*, 57(10), 1237-1244.