



## Short CV

Elmarie Kotze, PhD

Associate Professor: Soil Science



### Courses Presented

AGRI 1534 – Chemical Principles in Agriculture - Undergraduate

SOIL 2674 - Soil Fertility and Fertilization

SOIL 4844 - Soil Biology - Undergraduate

SOIL4834 - Soil Chemistry - Undergraduate

SANR5806 - Assessment and Management of Natural Resources

SANR7906 - Advanced Assessment and Management of Natural Resources

### Research Focus

Soil quality and sustainability, soil organic matter and soil carbon dynamics, soil fertility, soil degradation

### Most Recent Publications

1. Somi, Z., Kotzé, E. and Van der Watt, E. 2024. Using an Uptake Enhancer to Mitigate Nitrogen Leaching while Enhancing Uptake Efficiency. *Applied Sciences* 14, 5271. <https://doi.org/10.3390/app14125271>
2. Dlamini, L.X., Kotzé, E., Thevenot, M., Feig, G.T., Mathieu, O. and Lévêque, J. 2024. Impact of fire exclusion and aspect on soil carbon fractions in Afromontane grasslands, Cathedral Peak, South Africa. *European Journal of Soil Science* 2024;75:e13528
3. Mohren, J., Wiesel H., Amelung, W., Fifield, L.F., Sandhage-Hofmann, A., Strub, E., Binnie, S.A., Heinze, S., Kotze, E., Du Preez, C.C., Tims, S.G. and Dunai, T.J. 2024. Plutonium concentrations link soil organic matter decline to wind erosion in ploughed soils of South Africa. *Biogeosciences* 2024
4. Loke, P.F., Kotzé, E. and Du Preez, C.C. 2022. Soil organic matter storage in irrigated Tsitsikamma dairy farms with minimum tilled pasture mixtures: case studies. *Agriculture* 2022, 12, 858. <https://doi.org/10.3390/agriculture12060858>

5. Tlomatsana, L.S., Loke, P.F., Kotzé, E. and Aghoghowia. M.P. 2022. Aggregate dynamics and intra-aggregate carbon contents as influenced by long-term wheat production management in semi-arid South Africa. South African Journal of Plant and Soil 39(1), 1-8. <https://doi.org/10.1080/02571862.2021.2009049>

**Fun Fact**

Active collaboration in project with Technical University of Munich, Germany in Forest4People.

Active collaboration with University of Bonn, Germany

Active collaboration with University of Dijon, France

