



## 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 Aghoghovwia. 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

