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# Distribution of Lithium Oxide in a weathered pegmatite in southern part of Rwanda

**DR. THEOPHILE MUGERWA SR., PHD**
University of Rwanda, College of Science and Technology

The global depletion of fossils fuel resources along with their potential environmental concerns has prompted to search for alternative clean energy resources for future industrial development (1). The use of electrical car is growing and create a major concern for future demand and supply of lithium. In Rwanda, Li-bearing pegmatite are distributed in part of southern province. Although, the Li-bearing pegmatite is distributed in those locations, the quality of lithium for industrial application is still challenging. As result, a preliminary assessment of lithium deposits was assessed along the core samples collected in 2024. The results reveal 520ppm to 730ppm, 470 ppm to 900 ppm, 190 ppm to 580ppm for borehole 1,2 and 3 respectively. The concentration of Li oxide is not evenly distributed along the core and the results highlights that the moderately weathered pegmatite has high concentration of Li oxide compared to highly weathered pegmatite.

Reference

Zhou, J., Wang, Q., Wang, H. *et al.* 2025, Pegmatite lithium deposits formed within low-temperature country rocks. *Nat Commun* **16**, 447