

## Geology of the Semenyih Granite

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The Semenyih Granite is located in Mukim Semenyih, Hulu Langat. It was tectonically emplaced during the Late Mesozoic period. This granite intrudes Jelebu Schist in the northeast and Kajang Formation in the southwest. The mineral composition of the Semenyih Granite consists of 60–70% potash feldspar; 15–20% quartz; 5–15% plagioclase (oligoclase); 5–10% mica and 5% accessory minerals. The Semenyih Granite is divided into the Semenyih and Beroga Granites. Beroga Granite has medium to coarse grain texture and dark grey in color while Semenyih Granite has fine to medium grain texture and pale grey to light brown in color. The second texture formation due to tectonic events such as rotation of the crystal lattice, slip and rearrangement at grain boundaries, micro fractures and faults and fluid-filled micro fracture was observed under microstructure study. The microscopic evidence of deformation is compared with the macroscopic phenomenon of the Semenyih Granite. The northeastern area rock is characterized by cataclasites, strike –slip faults and highly fracture zones. It may be due to deformation after cooling or due to latest emplacement of this granite body, but the impact was lesser in the southwestern area. Field observations that the Semenyih Granite is highly weathered and severely eroded with landslides and rock falls occurrence locally, especially from Semenyih town to Sg. Lui road.

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