

Petrology of granitic rocks along new Pos Selim to Kampung Raja highway (km 0 to km 22): identification of different granitic bodies, its field and petrographic characteristics

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Four granitic bodies have been identified along the Pos Selim-Kampung Raja Highway (0 to km 18). They are Selim granite (km 0 to km 5), Suku granite (from km 6 to km 11), Semerengol aplopegmatite (occur as granitic dykes intruded the metamorphic rocks at km 14 to km 15) and Regul granite (km 17 to km 18). The Selim granite consists of outer coarse grained porphyritic biotite granite and medium to fine grained granite. The Suku granite is characterized by the presence of xenoliths and other enclaves. Among the enclaves are biotite rich, quartz tourmaline pods and various types of xenoliths (metamorphic). The Regul granite at km 17 and 18 contains primary muscovite. The Semerengol aplopegmatite consists of tourmaline muscovite garnet granite and their aplopegmatite dykes found at km 14 and 15. Geochemical evidence showed that three granitic bodies (Selim, Suku and Regul granites) are different in term of their TiO_2 , Fe_2O_3 and P_2O_5 contents. This supports our field observation and division of the granites along Pos Selim-Kampung Raja Highway.

Empat badan granitik telah dikenalpasti di sepanjang jalan Pos Selim-Kampung Raja (km 0 ke 18). Mereka adalah Granit Selim (km 0 ke km 5), Granit Suku (km 6 ke km 11), Semerengol aplopegmatite (wujud sebagai daik-daik granite yang menerobos batuan metamorfik di km 14 ke 15) dan Granit Regul (km 17 ke km 18). Granit Selim mengandungi granit biotit porfiritik berbutir kasar dan granite berbutir halus ke sederhana. Granit Suku di cirikan oleh kehadiran berbagai jenis xenolit dan 'enclave'. Di antara 'enclave' yang hadir ialah enclave kaya biotite, pod kuarza tourmaline dan berbagai jenis xenolit metamorf. Granite Regul dijumpai antara km 17 dan 18 mengandungi muskovit primer. Semerengol aplopegmatit pula mengandungi granite tourmaline muskovit garnet dan daik-daik aplopegmatit dijumpai di km 14 dan 15. Bukti geokimia menunjukkan ketiga-tiga badan granit (Granit Selim, Suku and Regul) adalah dari magma yang berlainan berdasarkan kandungan TiO_2 , Fe_2O_3 and P_2O_5 . Ini menyokong pemerhatian lapangan dan pembahagian granit di sepanjang Jalanraya Pos Selim-Kampung Raja.