

The eruption process of Omuroyama, Higashi Izu monogenetic volcano group, from color variation of the scoria

Tsutomu Fujiie[1], Tsukasa Ohba[2], Hirokazu Fujimaki[3]

[1] Inst. Min. Petro. and Eco., Tohoku Univ, [2] Petrol, Min, and Econ. Geol, Tohoku Univ, [3] Inst. Min. Pet. Econ. Geol., Tohoku Univ.

Mixed and colored scoria fall layers with black and orange scoria or black and gray scoria, are found from Omuroyama. Omuroyama is located in Higashi Izu monogenetic volcano group, northeastern part of Izu Peninsula, Japan. These scoria and the lava of Omuroyama contain the same phenocrysts Olivine, Plagioclase and rare Augite, and xenocrysts corroded quartz and plagioclase including dusty zone. Composition trend of these scoria is different from the lava, and does not imply fractional crystallization. The clay mineral is found from the orange scoria. The orange scoria was derived from accumulated layer in the interior of the volcano where scoria suffered hydrothermal alteration. The process of the eruption of Omuroyama is related to the hydrothermal alteration.