Preliminary Study of Sediment-Derived Plastiglomerate: Proposal to Classification

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Abstract : The understanding about sediment-derived plastiglomerate has a wide-range of merit in the academic realm. It can cover discussions about the Anthropocene Epoch in the scope of geoscience knowledge to even provide a solution for the environmental problem of plastic waste. Albeit its importance, very few research has been done regarding this issue. This research aims to create a classification as a pioneer for the study of sediment-derived plastiglomerate. This research was done in Bantul Regency, Daerah Istimewa Yogyakarta Province as an analogue of plastic debris sedimentation process. Observation is carried out in five observation points that shows three different depositional environments, which are terrestrial, fluvial, and transitional environment. The resulting classification uses three parameters and forms in a taxonomical manner. These parameters are composition, degree of lithification, and abundance of matrix respectively in advancing order. There is also a compositional ternary diagram which should be followed before entering the plastiglomerate nomenclature classification.