Abstract

Kinta valley was a focus of interest in search of geological resources for the last ten decades. Most of those studies were oriented to reveal the genesis of tin mineralization. Few workers including the current authors have identified some micro faunal (bivalves, gastropods, rugose corals, foraminifera, crinoids) records for relative dating of the limestone sequences. Even though present day accessibility of the reported fossiliferous sites is limited; areas which are dated based on the fossil records in Chemor (Silurian to Devonian), near Batu Gajah (Devonian), Malim Nawar (Carboniferous), Tualang limestone (Carboniferous to Permian), Kampar (Permian), and Kampung Sungai Keruh (Permian), are part of the Kinta valley limestone. The age difference in the limestones is interpreted as a result of migration of the coral reefs in the palaeodepositional setting. This current study will review the fossil collections of the JMG in Ipoh in order to test these original age determinations. We will demonstrate how these historic collections and macrofossil will contribute to our new research project. Furthermore, we will outline how these data will contribute to our ongoing research into defining a reference stratigraphic section that will enable correlation between scattered outcrops in the western Belt of Peninsular Malaysia.

This current study will review the fossil collections of the JMG collections Ipoh in order to test these original age determinations. We will also include new fossil data including crinoid stems from Kantan of the Kinta limestone. These are partially recrystallized, but retain some internal structures to identify them as crinoids. They are identifiable in hand specimen and thin section.

This part of the research will underpin the previously contributed efforts and refine the prevailing stratigraphic discrepancies in the Palaeozoic sequences of Kinta. We will demonstrate how these historic
collections and macrofossil will contribute to our new research project. Furthermore, we will outline how these data will contribute to our ongoing research into defining a reference stratigraphic section that will enable correlation between scattered outcrops in the western Belt of Peninsular Malaysia. And how macrofossil data needs to be supplemented by stable isotope, major and trace element analyses to work out the chemical signature of the carbonate and associated clastic sequences to define the diagenetic and/or metamorphic alteration in the Kinta valley formations.

References