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Occurrences of Nummulites Fossil in Limestone in Kohistan Island Arc an Igneous and Metamorphic Zone

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Abstract

Nummulites fossil were mostly present during the Late Paleocene to Early Oligocene time in carbonate deposits especially representing about 30 million years. Of these species large foraminifera were good indicator of shallow marine environments. *Paleonummilites thalicus* species of Nummulites were found in KIA (Sheringal area) an extremely met-igneous zone. Rock hosting these fossils were limestone.

Keywords: Nummulites; Species; Fossils; Limestone

Nummulites accumulations occur in Late Palaeocene to Early Oligocene carbonate deposits, which indicates about 30 Ma in the geological record. Large benthic foraminifers are well-thought-out to be decent pointers of shallow marine carbonate environs in fossil series. During this time, the marine micro fauna were dominated by Nummulites along the Tethys palaeomargins [1]. The Nummulites limestones, which are extended from the West Pacific, to the Central Mediterranean, and to the Atlantic form important hydrocarbon reservoirs in the northern African of provinces (Tunisia and Libya) [2]. The author found a fossil (Nummulites) rich limestone in Sheringal area Upper Dir Khyber Pakhtunkhwa which is an igneous and metamorphic zone in the Kohistan island arc. The sample was transported and was not capable to be studied in thin section for this sake the sample was studied megascopically through the use of hand lens. The limestones was arenaceous and is highly bioturbated and shows good preservation of fossils. The main objective of the study was to report the morphology of the Nummulites. The biostratigraphy and paleobiogeographical implications of this Nummulites fauna are significant. Nummulites have broad distribution covering Europe from the Pyrenees to the north Atlantic, West and North Africa, Oman and Pakistan. Paleonummilites thalicus appears to be restricted to the eastern Tethys (Pakistan and Oman), while white Planocamerinoides dantonicus is known from Italy, Afghanistan, Pakistan and Oman [3]. The Indian Paleocene foraminiferal assemblage can therefore be seen to have marked similarity with those of Oman/Pakistan, especially with respect to Nummulites assemble, but with and West Africa as well as Caribbean connection shown by the presence of Nummulites margaretae. The genus

therefore has a broad distribution covering Europe from the Pyrenees to the North Atlantic, west and North Africa, Oman and Pakistan. The taxa were previously known only from Pakistan. Now it has a broad geographical distribution, covering Europe from the Pyrenees to the North Atlantic, west and North Africa, West Africa, Oman, Pakistan, Libya and western Ireland. The identified sample was petrographically studied in the laboratory and it has been confirmed that fossils are Nummulites further the authors are being searching for the detail outcrop to represent a detail research on this fauna in extremely unique area for this fossil to be present. The only chances of this fossil in KIA is the possibly of any preserved limestone in the area.

References

1. Hallock P (1985) Future farmer of the sea. Nat Hist 94: 60-67.

2. Jorry SJ, Hasler CA, Davaud E (2006) Hydrodynamic behaviour of Nummulites: Implications for depositional models. 52(2): 221-235.

3. Malarkodi N (2012) Nummulites (Foraminifera) from Pondicherry area and aleobiogeographic Implications, International Journal of Science and Research (IJSR).