D.K. Bhatt and **Ravindra Kumar**, Palaeontology Division, Geological Survey of India, 15-16, Jhalana Institutional Area, Jaipur - 302 004 reply:

1 The basic theme of the paper was to place on record the presence of a post-Palaeogene microfaunal facies in Rajasthan, consisting of foraminifera, ostracoda and micro-molluscs, which makes it the first such record from that part of India. Whereas Kathal apparently agrees with the main theme of the paper, he presumes that the paper projects a proposal for the revision of chronostratigraphic status of Bilara Group, as was attempted in a recent previous publication (Raghav, 2000).

2 In recent papers of the area (GSI, 1985), the host strata of microfauna are mapped as parts of Bilara Group (Eocambrian), but precise lithostratigraphic status of the host samples was not emphasized in the text of the paper. This is the main reason why the biostratigraphic/ chronostratigraphic status of Bilara Group (or Marwar Supergroup) was not commented upon. It would have been very appealing, however, to have gone in for such a discussion in the face of the presumed scenario of samples coming from the Bilara Group (*see* Raghav, 2000).

3 The well-illustrated index microfossil taxa (*see* SEM micrographs) preclude the unnecessary exercise of giving details of taxonomy/palaeontological techniques, for the sake of crispness and brevity of the text in the first report.

4 It is consistently believed throughout the text that the microfauna reported is post-Palaeogene in age, based not only on index foraminiferal genera but also one index ostracode genus that are present in the recovered assemblage, contrary to what Kathal states. The foraminiferal genus *Quinqueloculina* is present in the assemblage reported (p.454-455 and 457), in contrast to the statement made by Kathal. It is pertinent to state that the enigmatic *Rotorboides granulosum*, a supposed amendation of an earlier report of *?Discorbis* - a taxonomic endeavour casually made by Kathal (2000) through the examination of the not so well-printed photographs in Raghav (2000, Figs.3a, b) and re-emphasised herein by him, is not present in the recovered assemblage.

5 It is unequivocally reported by us that only the clay/ marl/siltstone samples yielded the microfossils (p.453) and not 'hard-carbonate'.

6 Based on the data presented in the text, the available microfossil assemblage and its palaeobiological/ preservational attributes, the palaeoenvironmental framework has been visualized. With additional and more precise observations in future, it can be modified, if required.

1 ON THE DISCOVERY OF MIDDLE EOCENE LARGER FORAMINIFERA FROM LIMESTONE BED IN CHURU DISTRICT, RAJASTHAN by K.S. Raghav, Jour. Geol. Soc. India, v.55, pp.269-274.

2 DISCOVERY OF FORAMINIFERA FROM BILARA GROUP, JODHPUR DISTRICT, RAJASTHAN by K.S. Raghav, Jour. Geol. Soc. India, v.55, 2000, pp.395-397.

Vivek Laul, Department of Geology, M.L.S. University, Udaipur, Rajasthan - 313 002 comments:

I congratulate the author for making a significant discovery in the Trans-Aravalli Vindhyan or Marwar Supergroup that will encourage future studies for solving the problem of age of the Vindhyan or Marwar Supergroup. I have a feeling that only a part of Marwar Supergroup, i.e., Bilara Group from where the fossils have been reported should be called as Tertiary in age. The relation of Bilara Group with the Jodhpur and Nagaur Groups needs to be reconstructed through future work.

Secondly, it is also possible that the whole Marwar Supergroup is younger in age as recent geochronological studies indicate. For example, the Rb/Sr and Ar/Ar systematics of Malani igneous suite (Rathore et al. 1996), which is overlain by Marwar Supergroup, indicates that there are younger post crystallization thermal events in the Malani igneous suite. The time span of Malani phase of magmatism even in Precambrian ranges from 780 Ma to

670 Ma i.e., over 100 Ma (Rathore et al. 1999). These data support the idea that only the Bilara Group of Marwar Supergroup Bilara may be Tertiary in age.

K.S. Raghav, 228, Shreeji Nagar, Durgapura, Jaipur - 302 018 replies:

I am thankful to Vivek Laul for supporting the discovery of Tertiary foraminifera from the rocks known as lower Cambrian/Eocambrian. Raghav (2000a, b) has mentioned very clearly in both the papers that discovery of Tertiary foraminifera fossils is confined to the rocks mapped as part of Bilara Group that was earlier assigned a Eocambrian/lower Cambrian age (GSI, 1980, 1997). The present find of Raghav (2000b) and subsequent discussion on the papers by Raghav (2000c) and Kathal (2000) have revealed that the rocks mapped as Gotan Formation in Barna area of Bilara Group are not older than Mid-Miocene.

These finds have raised a doubt about the stratigraphic status assigned to MSG. I reiterate however that I have stated nowhere that the entire MSG is of Tertiary age. Surely some part of the MSG is of Tertiary age

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(No further discussion on the above paper will be published pending further detailed work)