

## **First record of Fleeting genus *Cryptorhynchia* (Brachiopoda) from the uppermost part of the Kioto limestone, Tethyan Sequence of Zanskar valley, J&K, India**

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The Tethyan sequence of Zanskar valley is bounded between the Higher Himalayan Crystallines in the south and Ladakh mountain range in the north (Singh 2011; Nanda and Singh 1976). Almost complete litho-packages from Precambrian to Eocene are exposed in the Tethyan sequence of Zanskar valley (Gaetani et al., 1986).

During fieldwork (Zanskar Expedition 2018-19) some brachiopod specimens have been recovered from the Tethyan sequence of the Zanskar valley, Jammu & Kashmir, India. The specimens show typical morphological features of coarsely costate ornamentation and sub-erect beak by which they are assigned as *Cryptorhynchia* Buckman, 1917. These specimens are recovered from the topmost unit of the Kioto limestone (15 cm below from the Callovian Ferruginous Oolite Formation) exposed on left bank of the Niri *Chu*.

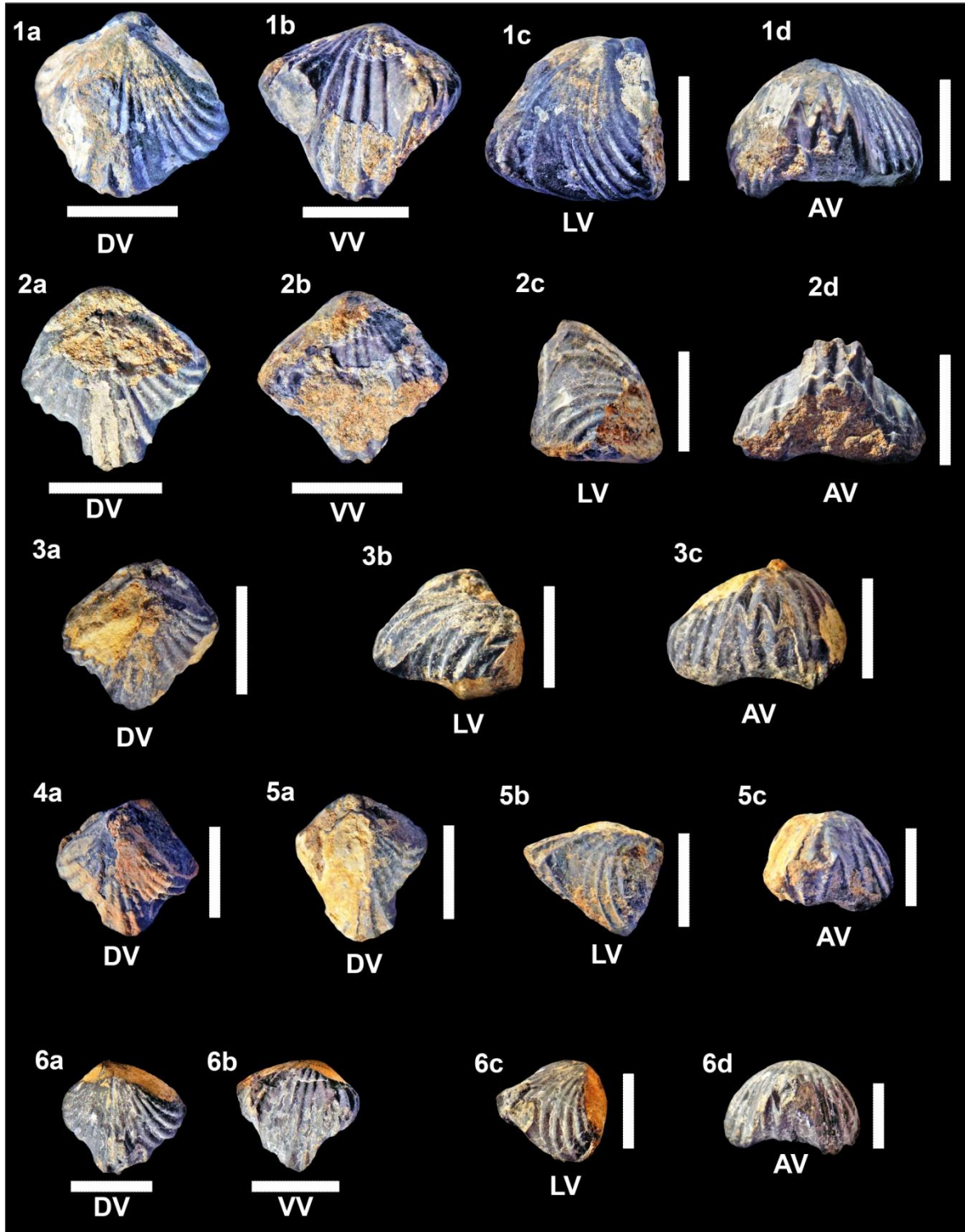
The known occurrence of brachiopod fleeting genus, *Cryptorhynchia* comes only from the Middle to Late Bathonian sequence from Europe (Buckman 1917), India (Kitchin 1900; Buckman 1917; Mitra and Ghosh 1973; Mukherjee et al., 2002), Burma (Buckman 1917), and North America (Perry 1979). The oldest known *Cryptorhynchia* species is reported from the Middle Bathonian of Jhura dome, Patcham Formation, Kutch, India. The distribution pattern of *Cryptorhynchia* reveals that it had widely spread across the diverse faunal provinces (Mukherjee et al., 2002). Mukherjee (2010) has reported *Plectoidothyris* along with the *Cryptorhynchia* from the Late Bathonian Badabag Member of the Jaisalmer Formation.

The discovery of *Cryptorhynchia* Buckman, 1917 from the Tethyan sequence of Zanskar valley is significant for the palaeogeographic distribution of the genus. Further detail studies to understand their relation with the Kutch species and establishment of palaeoecology and palaeogeographic distribution are under progress.

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Figures1-6: Different orientation views of the *Cryptorhynchia* Buckman, (1917) collected from Kioto limestone of the Tethyan Sequence of Zanskar valley; **All the scale bars are 1 cm** (Abbreviation: DV- Dorsal valve, VV- Ventral valve, LV- Lateral valve, AV- Anterior valve )