Finkoella: a sack-like Ediacaran soft-bodied fossil from the Marwar Supergroup, western Rajasthan, India

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The present study reports the well-preserved Ediacaran sack-like soft-bodied fossils assigned as *Finkoella ukrainica* and *Finkoella oblonga* from the Sonia Formation of the Jodhpur Group, Marwar Supergroup, western Rajasthan, India. The *F. ukrainica* is found in elliptical, ovate-shaped and sometimes oblong or cucumber-shaped forms with a distinct short neck, and a small circular protrusion or depression may be present on the organism. *F. oblonga* is elongated, ovate to cucumber-shaped fossil specimen with poorly preserved six longitudinal low grooves and ridges arranged parallel to the marginal ridges of the organism. Both *F. ukrainica* and *F. oblonga* are also well comparable to the type materials of Ukraine in the preservation of concave (negative relief) and convex (positive relief) with oral/atrial siphons, double marginal ridges/grooves and elevated edges in the Sonia Formation. The *Finkoella* fossil remains are believed to be the flattened bodies of tunicate organisms. Similar sack-shaped *Burykhia* fossils recorded in the White Sea of Russia contrasted to sponges and similar hollow-shaped organisms have been interpreted and compared with lichenized fungi and fungal affinity. Thus, the biological affinity of the *Finkoella* organism is still unresolved.

Keywords: Ediacaran, *Finkoella*, Marwar Supergroup, sack-like bodied fossil, tunicate organisms, western Rajasthan.

the soft-bodied sack-like fossil remains attributed to *F. ukrainica* and *F. oblonga* from medium- to fine-grained sandstone facies of the Sonia Formation (exposed in the Sursagar area) of the Jodhpur Group of the Marwar Supergroup. The studied fossil-bearing Sursagar area is located about 8 km to the north of Jodhpur district, western Rajasthan, India (Figure 1). The gathered representative samples of *Finkoella* have been housed in the Department of Geology, Jai Narain Vyas University, Jodhpur, as repositories labelled as DG/JNVU/MSG/FN-437 (Figure 2 *h*) and DG/JNVU/MSG/FN-438 (Figure 2 *i*). The present study aims to report the fossil remains of both *F. ukrainica* and *F. oblonga* species in the Sonia Formation with systematic palaeontology and correlations to the described *Finkoella* organisms from their type locality, i.e. the upper Ediacaran shallow-marine deposits of Lomozov and Yampol members of the Mogilev Formation of Ukraine[10].

