

of *Geotrypus* was very wide, supported by sesamoid bones. An additional prepollex is known from *G. antiquus*. Os lunatum and Os scaphoideum were not fused like in modern fossorial moles.

These rare partial *Geotrypus* skeletons show some imported characters and evolutionary details of this early mole genus. Its life-style as a highly evolved fossorial mole could be supported by analysis of its digging hand and arm skeleton.

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Freies Thema

Melanosclerites from the Shiala Formation of the Tethyan Garhwal Himalaya, India

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Eisenack discovered a rod-shaped organic-walled microfossil from the Ordovician and Silurian glacial erratics of the Baltic region in 1932 and 1934. Later he assigned a formal name to these problematic rod-shaped microfossils as melanosclerites and considered them a similarity with hydrozoans. Melanosclerite is composed of two Greek words – melanos (black) and skleros (hard). Two groups of sclerites can be differentiated: the first group forms the skeleton and the second group represents the pleuridien (appendices) of a skeleton. The specimens' size ranges from 60 to 2000 µm. Melanosclerites have been reported from the marine sediments of the Ordovician to Devonian age. The biological affinity of melanosclerites is a problematic and has not been settled so far. Similarities with cnidarians like cubomedusa or an algal origin were speculated and noted.

The first Indian melanosclerites were noted from the Shiala and Yong Formations which were poorly preserved. The present study reveals a poor to moderate occurrence of melanosclerites from the Shiala Formation. This formation is well exposed in the Garhwal-Kumaon Tethyan Himalaya and lies very near to the International boundary with Tibet (China) and the village Sumna (30° 40' N, 80° 50' E) of the Chamoli district of the Garhwal Division, Uttara Khand. The Tethys sedimentary sequence is characterized by a continuous succession from Precambrian to Cretaceous, but the Permo-Carboniferous rocks are missing in the study section. The "Shiala Series" was described as 400 to 500 m thick sandy shale with inter-

calated grayish marly limestone containing brachiopods and other fossils. Remapping the area, the formation was described as a complete succession of shales with bands of calcareous arenites with an increasing arenaceous component towards the top. It is conformably covered by the Yong Limestone Formation and resting over Garbyang Formation. Based on brachiopod or bryozoan assemblage zones, Middle to Late Ordovician age was assigned to the formation. Samples were taken from the basal part of the Shiala Formation and large number of conodont elements was recovered. They dated the formation to the Caradoc based on a conodont index species *Amorphognatus tvaerensis*. The Ordovician-Silurian boundary lies with Shiala formation itself. Subsequently, a rich assemblage of acritarchs has been found.

In this study the melanosclerites have been recorded from the basal part of the Shiala Formation which is well preserved. The greenish grey silty shale has yielded prolific melanosclerites with several forms such as *Melanoporella* and *Melanostylus*. A new species of melanosclerites proposed as *Melanosteus indica* has been described. The macerated material has also yielded several fossil groups from the Shiala Formation such as chitinozoa, acritarch, scolecodonts, echinoids, ostracodes and calcareous algae.

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Freies Thema

Taphonomie und Ökologie der frühpermischen Wirbeltierfauna von Niederhäslich (Sachsen): Amphibien, *Palaeobacteria* (Sphenacodontia) und andere Reptiliomorpha

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Primitive Sphenacodontier (Haptodonten) sind nur mit einer geringen Anzahl von Funden vom spätesten Karbon (Gzhelien) bis in das frühe Perm (Sakmarian) von Nordamerika und Europa bekannt. Etliche Funde sind unbenannt. Mit Ausnahme von *Haptodus garnettensis* (später Missourian, Kansas) basieren diagnostizierte