

## A record of Ichnogenus *Chondrites* from Ladakh, Jammu and Kashmir, India and its significance

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### Abstract

The ichnogenus *Chondrites* Sternberg, 1833 is recorded and described from the rocks of Tegar Formation exposed near Skampu in the Shyok Valley of Ladakh district, Jammu and Kashmir, India.

### Introduction

In the present paper an ichnogenus *Chondrites* Sternberg, 1833 has been recorded and described from the dark grey and compact shale of Tegar Formation of Cretaceous? age (Bhandari *et al.*, in press) exposed on the hill scarp southwest of Skampu (77°26' : 36°39'), district Ladakh, Jammu and Kashmir (Fig. 1). The only other reference on *Chondrites* from the Indian subcontinent is that of Kumar *et al.* (1977) who have recorded a variety of trace fossils from Malla Johar area.

Exposures of limestone-shale sequence of Tegar Formation are seen near Khalsar, Diskit and Terche in a belt along the southern side of the Shyok river. Recrystallized unidentifiable gastropods, crinoid stems and shells of bivalve are seen in the limestones near Khalsar and Skampu villages. Generally the limestones are interbedded with dark grey cherty and calcareous shale from which the present specimen was recovered.

Ichnogenus *Chondrites* Sternberg, 1833

*Chondrites* sp.

(Pl. I, figs. 1-3)

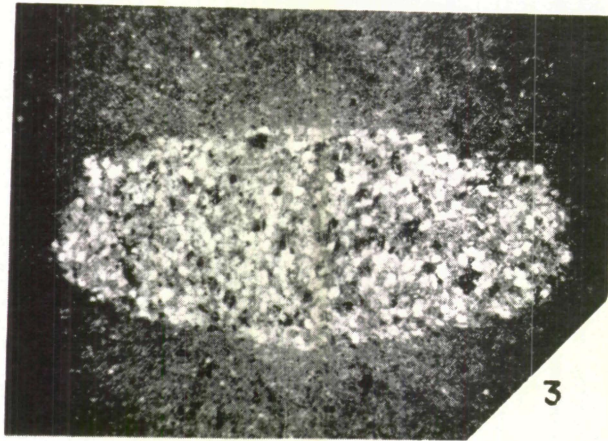
*Material*: One rock piece of about 15 × 15 cm. size.

*Description*: The fossil under discussion consists of asymmetrical ramifying worm tracks, dominantly in horizontal dendritic pattern. The worm tracks are of varying diameters ranging from 1.25 mm to 2.00 mm and found as concave and convex epirelief on bedding surface. The angle of branching varies from 45° to 60°. Under microscope it is found that the tracks are filled up with secondary material consisting of coarse angular quartz grains and clayey matter.

*Remarks*: The specimen closely resembles the *Chondrites* sp. of Frey and Howard (1970) described from the Late Cretaceous rocks of U.S.A., in having nearly similar branching pattern and diameters of the worm tracks. Associated rock types and the nature of branching pattern of these worm tracks indicate a shallow marine environment in the area.

*Repository*: Geological Survey of India, Calcutta.

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1. *Chondrites* sp.,  $\times 0.5$  (approx.)
2. Photomicrograph of the thin section of the rock showing *Chondrites* filled up with the secondary material,  $\times 8.0$  (approx.)
3. Tangential section of *Chondrites*,  $\times 17.5$  (approx.)

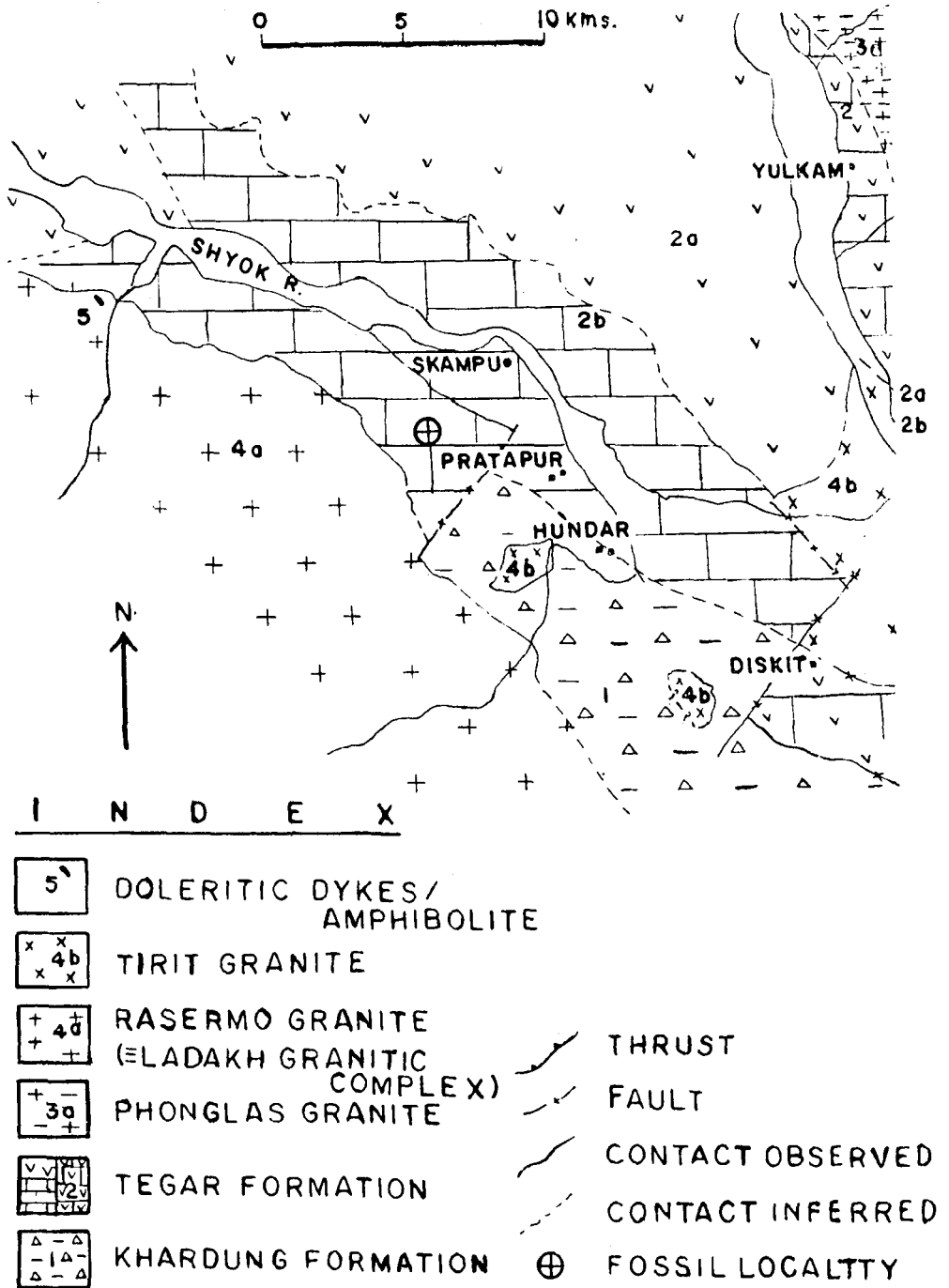


Figure 1. Geological map of the area showing fossil locality.

**References**

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