

## **MORCHELLA ELATA, A NEW RECORD FROM PAKISTAN**

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### **Abstract**

*Morchella elata* has been recorded for the first time from the Gilgit valley (Mushkin forest) Pakistan. This species is characterized by the production of brown or redish purple, elongated, cylindrical, slightly pointed globular, longitudinal pits, and colorless, ellipsoid, 20-25x13-16µm spores.

Species of *Morchella* produce fruiting body with variable shape and size that have a well developed stalk. It is a highly priced edible ascomycetous fungus. During a survey of macrofungi in the Gilgit valley, specimens belonging to genus *Morchella* were collected and brought to the Pest & Disease Research Lab., Department of Botany, University of Karachi. After the macro- and microscopic examination, the specimens were identified as *Morchella elata* after reference to Demoulin & Marriot (1981) and Surcek (1988).

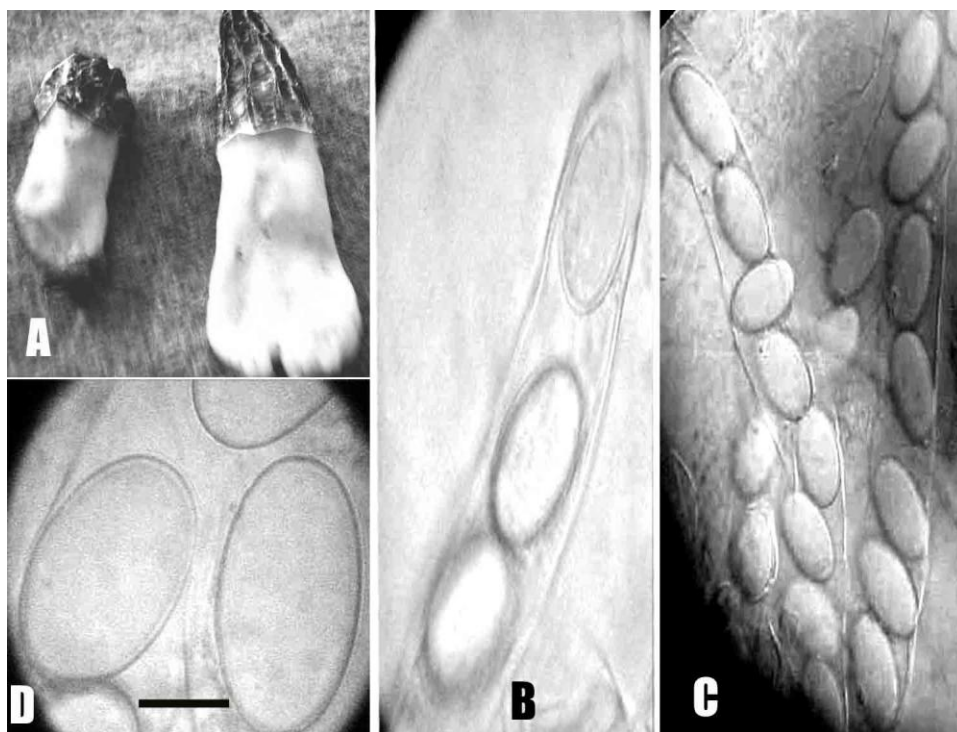


Fig. 1. *Morchella elata*, A, Fruiting body; B & C, Ascus with ascospores; D, Ascospores. (Bar = 10 µm)

*Morchella elata* is one of the largest species of the genus, the fruiting body being 10-25cm high and as much as 8 cm wide. It differs from the common *Morchella* not only in size but in its elongated to cylindrical and some time slightly pointed, globular cap. The colour of fruiting body in shades of brown or more rarely pink to reddish purple. The main ribs of the cap are rather thin and more or less parallel, connected by thin, narrow, transverse and oblique ridges. Elongate, tetragonal pits are thus formed between the ribs which are narrow at the cap margin. The stalk is usually strongly inflated into a bulbous base as much as 8cm thick. The spores are ellipsoid, colorless, 20-25x13-16µm in size (Fig. 1).

*M. elata* grows during April and May on higher grounds. The specimens were collected mostly from the coniferous forest in summer season. The fruiting bodies were often found growing near the roots of *Pinus* trees. The fungus is a good source for soup, vegetable, and used in medicine for several diseases (Surcek, 1988). This appears to be the first record of *M. elata* from Pakistan not hitherto reported (Mirza & Qureshi, 1978; Ahmad *et al.*, 1997).

#### References

- Ahmad, S., S.H. Iqbal and A.N. Kahlid. 1997. *Fungi of Pakistan*. Sultan Ahmed Mycological Society of Pakistan, Department of Botany, University of the Punjab, Quaid-e-Azam campus, Lahore 54590, Pakistan. 248pp.
- Surcek, M. 1988. *The Illustrated Book of Mushrooms and Fungi*. Octopus Book, London. 311pp.
- Demoulin, V. and J.V.R. Murrill. 1981. Key to the Gasteromycetes of Great Britain. *Bull. Brit. Mycol. Soc.*, 15(1): 37-43.
- Mirza, J.H. and M.A.R. Qureshi. 1978. *Fungi of Pakistan*. Department of Plant Pathology, University of Agriculture, Faisalabad, Pakistan.

(Received for publication 10 November 2004)