

**GIBBERELLA ZEAЕ (SCHW.) PETCH - A NEW RECORD OF
ASCOMYCETOUS FUNGUS FOR BANGLADESH**

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Gibberella zeaе (Schw.) Petch, the teleomorph of *Fusarium graminearum* Schwabe, has been described and illustrated in the present paper as a new Ascomycetes record for Bangladesh. *Gibberella zeaе* causes a good number of diseases on various graminaceous as well as non-graminaceous host plants. Perithecial stage of *G. zeaе* was earlier recorded on *Arrhenatherum*, *Avena*, *Glyceria*, *Hordeum*, *Phragmites* and *Triticum* (Ellis and Ellis 1985).

Recently, the authors recorded *G. zeaе* on two jute species, namely *Corchorus capsularis* L. and *C. olitorius* L. from Bangladesh. Jute is therefore a new host record of the fungus. Numerous perithecia of *G. zeaе* were found on dried stems and fruits of jute along with pycnidia of *Macrophomina phaseolina* (Tassi) Goid., *Botryodiplodia theobromae* Pat. and *Cercospora corchori* Sawada.

Gibberella zeaе was isolated following “streaking” method (CAB 1968) on PDA medium (potato dextrose agar medium), but the fungus did not produce conidia or perithecia in culture. Microscopic details of the fungus were made from freshly collected samples of infected stems and fruits of *Corchorus capsularis* and *C. olitorius*. Species determination was made following Booth (1971) and Ellis and Ellis (1985).

***Gibberella zeaе* (Schw.) Petch, Anns mycol. 34: 260, 1936. (Plates 1, 2)**

Colony grayish on PDA medium at temperature between 22° and 28°C and pH 6. Hyphae grayish. Perithecia with an outer stromatic wall of 16-18 µm width, clustered around the lower nodes and basal parts of the infected stems and fruits, 145-200 µm in diameter, black, violet or bluish grey in transmitted light. Asci 65-82 × 9-12 µm, 8-spored. Ascospores pale straw-coloured, curved, fusoid, but with rounded ends, 3-septate, 16.5-27.5 × 3.5-5.0 µm.

Specimens examined: On stems and fruits of *Corchorus capsularis*, Botanical Garden, Curzon Hall Campus, University of Dhaka, Dhaka, S. Shamsi 2075, 4 December 2007; on stems and fruits of *C. olitorius*, Botanical Garden, Curzon Hall Campus, University of Dhaka, Dhaka, S. Shamsi 2095, 19 February 2008.

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Plate 1. *Gibberella zeae*. A. Infected dried stems and fruits of *Corchorus capsularis* associated with perithecia; B. Ruptured perithecia with asci and ascospores (Bar = 100 µm); C. Ascospores within asci. (Bar = 20 µm)

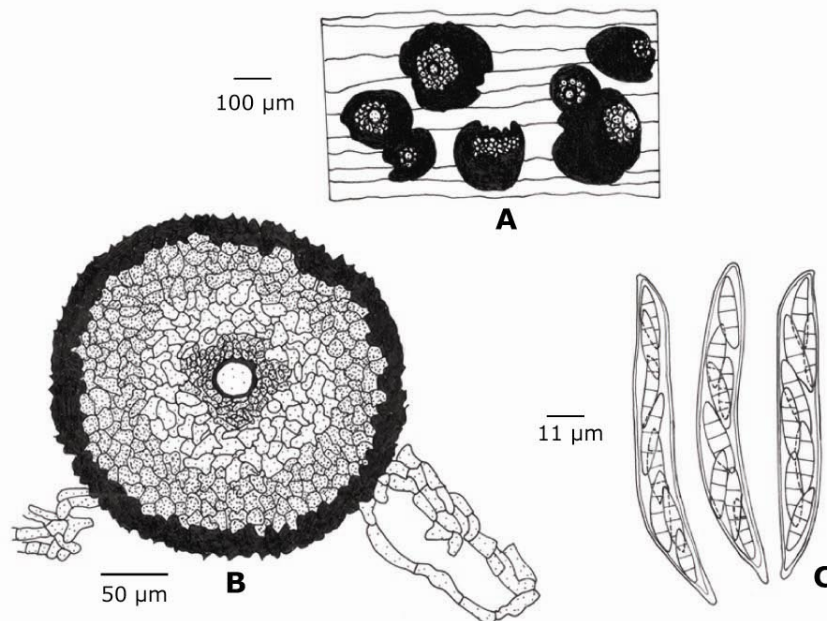


Plate 2. *Gibberella zeae*. A. Perithecia on host tissue; B. A perithecium; C. Ascospores within asci.

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