

## First report of Twig blight of Lalshak (*Amaranthus gangeticus* L.) caused by *Choanephora infundibulifera* (Curr.) Sacc. in India

---

SIDDHARTHA DAS<sup>1</sup>, SUBRATA DUTTA\*<sup>2</sup>, SUJIT KUMAR RAY<sup>3</sup> AND BHOLANATH MONDAL<sup>4</sup>

<sup>1,2,3</sup>Department of Plant Pathology, Bidhan Chandra Krishi Viswavidyalaya, Mohanpur 741252 West Bengal

<sup>1,4</sup> Department of Plant Protection, Visva Bharati, 731235, West Bengal

---

Received : 09.04.2018

Accepted : 13.04.2018

Published : 30.07.2018

---

*Amaranthus gangeticus* is one of the most economically important vegetable and widely cultivated in all the states of India. Due to its enriched nutritional qualities, this vegetable has the potential to play major role in combating malnutrition problem especially for the poor people of Third World countries. In August – September 2015, Twig blight associated with soft rot, was observed for the first time in “C” block farm of Bidhan Chandra Krishi Viswavidyalaya and Kalyani region (22°45'36.00° N, 88°22'12.00° E) of West Bengal, India. Twig blight symptom was characterized by blighting of leaves, blossom and shoot apical meristem (SAM). A symptom appeared with browning of the chlorophyllous tissue which gradually covered with cushiony mat of caterpillar's hair like emerging sporangiola. About 30-35% disease incidence level recorded among the entire surveyed region. Cultural and morphological characteristic clearly indicate the pathogen was *Choanephora infundibulifera*. Molecular detection of isolate A.G – 20 accurately established the causal pathogen was *Choanephora infundibulifera*. ITS – r DNA region of submitted 559 bp sequence shows 100% (JQ724498) homology with publicly available *Choanephora* database. Rainy season (June – October) with the optimum temperature range between 28-30°C and high moisture (80-90 %) level enhances the disease progress. To the based of our knowledge this is the first report of Twig blight of *Amaranthus gangeticus* caused by *Choanephora infundibulifera* in India.

**Key words:** *Amaranthus gangeticus*, Twig blight, *Choanephora infundibulifera*, ITS, India.

---