

# Germplasm Evaluation of Hot Pepper in Polyhouse under West Bengal Condition

Saurav Roy<sup>1</sup>, A. Bandopadhyay<sup>2</sup>

<sup>1,2</sup>Department of Spices and Plantation crops, Faculty of Horticulture,  
Bidhan Chandra Krishi Viswavidyalaya, Mohanpur, Nadia, Pin-741252  
E-mail: <sup>1</sup>souravroy2311@gmail.com, <sup>2</sup>apurba.bandopadhyay@gmail.com

---

**Abstract**—Chilli (*Capsicum annum* L.) is one of the most important spices in the world and an important part of our cultural legacy. The hot pepper or Jolokia is also known as Bih jolokia, U-morok, Ghost pepper, Ghost hot pepper, Red naga chilli, and Ghost chilli. It is an interspecies hybrid of *C. chinense* and *C. frutescens*, cultivated in Bangladesh and Indian states of Assam, Nagaland and Manipur. Among the major spices crops hot peppers share about 6.58 percent of the total area under spices cultivation and 6.6 percent of the total production (Salaria and Salaria, 2007). Hot peppers, also known as chilli peppers, owe their “heat” or pungency to a chemical substance called capsaicin. This chemical is concentrated in the cross walls of the fruit and around the developing seeds. Peppers that do not contain capsaicin, such as bell peppers, are considered “sweet.” In addition to the hot types, Different varieties of hot pepper are Bhut jalokia, Manas Jalokia, Sukhia Bulet, Dollo etc. Germplasm evaluation is an important work in hot pepper using different types of quantitative and qualitative traits. Very meagre work has been done in selection of different type of characters like Fruits /plant, fruit weight, dry yield/plant (Sahoo et al. 1990), Fruit/plant, days to first fruit harvest and fruit weight Munshi et al. (2000) and Jose et al. (2004) worked on it. Germplasm evaluation is important step for the improvement of the hot pepper.

Since it is almost a negligible crop in India, there lies a great scope to increase its acreage. India presently occupies no rank in global market (FAO: stat database) considering the marketing demand of local and foreign markets.

The present investigation was carried out to study the potentiality of hot peppers under West Bengal condition for increasing its export through pushing up its production.