

RESEARCH ARTICLE

# Evaluation of elephant foot yam germplasm against leaf blight caused by *Phytophthora colocasiae* Racib

■ S.K. BAIRAGI<sup>1\*</sup>, P.K. SINGH<sup>2</sup> AND H.K. SINGH<sup>3</sup>

<sup>1</sup>Department of Horticulture, Amar Singh College, Lakhaoti, BULANDSHAHR (U.P.) INDIA

<sup>2</sup>Department of Vegetable Science, Narendra Deva University of Agriculture and Technology, Kumarganj, FAIZABAD (U.P.) INDIA

<sup>3</sup>Department of Plant Pathology, Narendra Deva University of Agriculture and Technology, Kumarganj, FAIZABAD (U.P.) INDIA

---

## ARTICLE INFO

**Received** : 16.07.2013

**Revised** : 06.09.2013

**Accepted** : 13.09.2013

---

## Key Words :

Phytophthora leaf blight, *Phytophthora colocasiae*, Elephant foot yam

---

## ABSTRACT

The wide spread cultivation of acidity free and high yielding cultivars of elephant foot yam (*Amorphophallus paeoniifolius* Dennst.) has led to severe problem of leaf blight disease, throughout the country. The difficulty to control with chemical means after its outbreak, particularly in rainy season, leaves us with the only option to use resistant cultivars. Therefore, in order to find resistant sources in the available germplasm, an experiment was conducted at the Main Experiment Station of the Department of Vegetable Science, Narendra Deva University of Agriculture and Technology, Kumarganj, Faizabad, UP, during 2005-06 and 2006-07. Altogether, 49 genotypes of elephant foot yam, collected from different parts of the country, were screened against *Phytophthora* leaf blight, caused by *Phytophthora colocasiae* Racib., under artificial epiphytotic conditions. The per cent disease intensity (PDI) was recorded following the 0-5 scale, as suggested by Chester (1950), and the Area Under Disease Progress Curve (AUDPC) was also calculated. The results thus obtained indicated that none of the genotypes was found in resistant category. Out of the 49 genotypes tested, 9 genotypes namely, NDA-3, NDA-12, NDA-13, NDA-21, NDA-25, NDA-26, NDA-29, NDA-30, and NDA-45, showed moderate susceptibility.

**How to view point the article** : Bairagi, S.K., Singh, P.K. and Singh, H.K. (2013). Evaluation of elephant foot yam germplasm against leaf blight caused by *Phytophthora colocasiae* Racib. *Internat. J. Plant Protec.*, **6**(2) : 398-400.

---

\*Corresponding author:

Email: drskbairagi@gmail.com