and $HgCl_2$ able to produce some remarkable change in tissues of infected banana plants. The infected samples dipped in TZC were showed light brick red colour in 60 min., which became darker after 90 min. Both healthy and infected plant samples developed colour in overnight observation in TZC. The infected plant samples also gave light blackish colour after 90 min. and overnight when dipped in 0. 5% $HgCl_2$. But after overnight healthy plant samples did not show any change in colour in $HgCl_2$ at 0.5%. Verma and Singh (1994) used clerodendrum leaf extract spray to reduce viral infection on mungbean. In present study, it was observed that the chemicals TZC and $HgCl_2$ were found suitable for the detection of the virus, but further confirmative test of the colour in infected banana samples are needed before final recommendation.

References

Akram, M., and R. Kumar (2006). Banana bunchy top disease: field diagnosis and management. *Indian Farming*, **56** : 12-14.

Ashaq, Mohd., M.S. Mantoo, N.H. Shah and Q.A. Naqvi (1996). Occurrence of broad bean bushy dwarf virus strains in U.P. *Ann. Pl. Protec. Sci.*, **4** : 76-79.

Thiribhuvanamala, G., Sabitha Doraisamy and S. Doraisamy (2001). Survey for important virus diseases of banana. *Madras Agri. J.*, **88** : 148-149.

Verma, Alpna and R.B. Singh (1994). *Clerodendrum acubatum* - A possible prophylectic agent against natural viral infection in mung bean. *Ann. Pl. Protec. Sci.*, **2** : 60-63.

Evaluation of Colocasia Cultivars against *Phytophthora* Leaf Blight

S.K. Maheshwari, R.S. Mishra*, S. Sriram and A.K. Sahu

Department of Plant Pathology, Faculty of Agriculture, SKUAST-K, Wadura, Sopore 193 201, (J&K)
**Department of Plant Pathology, C.T.C.R.I, Sreekaryum, Thiruvananthapuram-695 017, India*
<s_kmaheshwari@yahoo.co.in>

Colocasia or Taro [*Colocasia esculenta* (L.) Schott] a tropical tuber crop is affected by many fungal diseases of which *Phytophthora* leaf blight caused by *Phytophthora colocasiae* Raciborski is the most important one. It cause substantial yield losses (Gadre & Joshi, 2003). Present study was undertaken to identify resistant material available into a set of 16 colocasia lines/cultivars. The field trials were conducted in R.B.D. at Regional Centre of C.T.C.R.I., Bhubaneswar during 2000 and 2001. A total of 16 cultivars of colocasia were planted during the first week of June at a spacing of 60 x 45 cm in plots of size 3.0 x 2.25 m with three replications under natural hot spot conditions. Results revealed that six lines/cv. were found to be tolerant having 0-10% disease reaction whereas seven were moderately susceptible (Table 1). The cultivar reaction to leaf blight might be attributed to cultural and morphological variations (Singh & Dubey, 2005).

Table 1. Disease reaction of cultivars against *Phytophthora* leaf blight of colocasia

Disease reaction	Cultivars
Immune	Nil
Tolerant (0.1 to 10%)	Muktakeshi, Jhankri, Bhubaneswar local, Topi, Dhalasaru, S- 6
Moderately susceptible (10.1 to 25%)	S- 3, S- 8, KCS- 3, Badasaru, Satyabhama, Sanasaru, Shree-reshmi
Susceptible (25.1 to 50%)	Faizabad local
Highly susceptible	Kujeesaru, Telia

* On a 0-4 scale.

Acknowledgements : The authors are thankful to the ICAR, New Delhi for funding the Phytophthora Network programme, the Director, CTCRI, Thiruvananthapuram and Head of its Regional Centre at Bhubaneswar for providing the facilities.

References

Gadre, U.A. and M.S. Joshi (2003). Influence of weather factors on the incidence of leaf blight of colocasia. *Ann. Pl. Protec. Sci.*, **11** : 168-170.

Singh, B. and S.C. Dubey (2005). Cultural and morphological variability in *Phytophthora drechleri* f. sp. *cajani* causing pigeon pea blight. *Ann. Pl. Protec. Sci.*, **13** : 508-510.

Evaluation of Different Soil Amendments against Sclerotinia Blight of Brinjal

Ramesh Singh and L.B. Singh

Department of Plant Pathology, T.D.P.G. College, Jaunpur 222 002, India

Brinjal (*Solanum melengena* L.), is an important vegetable crop grown in India, which suffers greatly of several fungal diseases. Sclerotinia blight caused by *Sclerotinia sclerotiorum* (Lib.) de Bary is one of the important and serious diseases of brinjal which is soil borne in nature. Therefore, different types of soil amendments were used to manage this disease.

The study were conducted during *rabi* season of 2001-2002 and 2002-2003 in wirehouse of Department to know the impact of soil amendments on disease incidence. Seven soil amendments *viz.* pyrite and gypsum @ 2.0 ton/ha and neem cake, paddy straw, castor cake, wheat straw and mustard cake @ 20.0 ton/ha were mixed in soil before 15 days of seedling transplantation.

All the treatments significantly reduced the disease incidence as comparison to control. However, the maximum disease reduction was observed by the use of pyrite followed by neem cake which was statistically on par during both the years. Gypsum was the least effective in minimizing the disease incidence during both the years (Table 1). The present finding coincide with the observations made by Basu and Maiti (2006) who reported that stem rot of potato was reduced by the amendments of NPK + FYM, but Sharma and Haseeb (2006) did not find FYM

Table 1. Effect of soil amendments against Sclerotinia blight of brinjal

Soil amendments	Two years average disease incidence (%)
Pyrite	19.7 (26.38)
Neem cake	21.5 (27.6)
Paddy straw	21.7 (27.79)
Castor cake	24.8 (29.86)
Mustard cake	26.4 (20.91)
Wheat straw	26.5 (30.82)
Gypsum	34.5 (35.97)
Control	52.5 (46.43)
C.D. (P = 0.05)	1.93

* Angular transformed values in parentheses