

## A NEW LEAF SPOT DISEASE IN GREEN AMARANTH

Green amaranth (*Amaranthus tricolor* L.) is a leafy vegetable grown extensively in southern part of India. Recently, incidence of leaf spot disease's has become a serious constraint in the cultivation of amaranth during monsoon period, which reduces yield, quality and market value of the crop. Suharban *et al.* (1994) reported a leaf spot of amaranth caused by *Colletotrichum gloeosporioides* (Penz) Sacc. and Nayar *et al.* (1996) reported another leaf blight disease caused by *Rhizoctonia solani* Kuhn. in red amaranth.

The investigation on the occurrence of a new leaf spot disease and its causal organism in green amaranth was conducted. The disease symptom is characterized by the appearance of small chlorotic spot, which later turned into brown, surrounded by a yellow halo. Size of the spot ranged from 2 mm to 5 mm. As the disease advanced, the spot enlarged and became papery white with a distinct brown

margin. Later, the centre of the lesions fell off, showing shot hole symptoms. Rarely, lesions coalesced leading to blighting of the leaves. The extent of damage varied from 0.13 to 88.24 per cent.

The fungus was isolated on potato dextrose agar (PDA) and its pathogenicity was established. Colonies on PDA were dense, white at first and rapidly turned grey; reverse of the colony black; abundant acervuli with dark setae. Setae were dark brown, septate, rigid, swollen at the base slightly and tapered to the paler acute apex. Conidia were hyaline, fusiform, gradually tapering towards each end and measuring  $21.36 - 24.92\mu \times 3.56\mu$  in size.

The fungus was identified as *Colletotrichum capsici* (Syd) Butler & Bisby based on the morphological description of Mordue (1971) and this is the first report of the fungus causing leaf spot disease in green amaranth.

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## REFERENCES

- Suharban, M., Das, L. and Gopinath, P.S. 1994. A new leaf spot of amaranthus. *Indian Phytopath.* 47 : 115
- Nayar, K., Gokulapalan, C. and Nair, M.C. 1996. A new foliar blight of amaranthus caused by *Rhizoctonia solani*. *Indian Phytopathology* 49: 407
- Mordue, J.E.M. 1971. *Colletotrichum capsici*. Description of Plant Pathogenic Fungi No.317, Common Wealth Mycological Institute, Kew

