

RESEARCH ARTICLE

## Documentation and management of anthracnose - A new nursery disease of *Garcinia indica* Choice in Karnataka

■ M.S. LOKESH<sup>1\*</sup>, V. SURYANARAYANA<sup>2</sup>, S.V. PATIL<sup>3</sup>, S.B. GURUMURTHY<sup>3</sup>, M.G. PALAKSHAPPA<sup>4</sup> AND G.O. MANJUNATH<sup>2</sup>

<sup>1\*</sup> AICRP on Spices, Horticulture Research Station (U.H.S.) Sirsi, UTTARA KANNADA (KARNATAKA) INDIA

<sup>2</sup> Department of Plant Pathology, College of Forestry (UAS-D.) Sirsi, UTTARA KANNADA (KARNATAKA) INDIA

<sup>3</sup> Department of Agronomy, College of Horticulture, Sirsi, UTTARA KANNADA (KARNATAKA) INDIA

Email: sangappavpatil@gmail.com

<sup>4</sup> AICRP on Sesame and Niger, University of Agricultural Sciences, DHARWAD (KARNATAKA) INDIA

Email pal\_uasd@gmail.com

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\*Corresponding author :

lokeshsirsi@rediffmail.com

### ABSTRACT

An anthracnose disease in nursery of *Garcinia indica* was observed in Uttara Kannada of Central Ghats of Karnataka. Symptomatology and etiology of disease resulted into the observations of *Colletotrichum gloeosporioides* Penz. Pathogenicity of the fungus was established. Seven fungicides were evaluated *in vitro* for their efficacy. The fungus constitutes the new record from Karnataka on *Garcinia indica* choice causing anthracnose in nursery.

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## INTRODUCTION

Kokum (*Garcinia indica* Choice), a medicinally important spice crop, indigenous to the Western Ghats is commonly cultivated in home gardens and in arecanut based system. It is popularly used as traditional home remedy in case of flatulence, heat strokes and infections (Kirtikar and Basu, 1984). It has high medicinally valued hydroxyl citric acid (HCA) helpful in treating obesity and acidity as HCA has high antioxidant property (Peter, 2001; Wildman, 2001). So, in recent past, there is high industrial demand to extract HCA from the fruit rind (Jena *et al.*, 2002). In the eve of commercial venture through extensive nursery networks, stress affecting seedlings growth and vitality cannot be ignored. Recently, next to insect pest menace, diseases are gaining momentum in damaging seedlings especially foliar diseases. Though, no reports are available in Karnataka,

however in India, there is only one record from Maharashtra on the occurrence of leaf spot caused by *Colletotrichum gloeosporioides* Penz. and its *in vitro* management (Jadhav *et al.*, 2008). In the preliminary survey made in the forest nurseries and medicinal plants nursery raised in Sirsi, Karnataka showed anthracnose disease on foliage. As it was not under records in Karnataka and by looking to increasing seedlings demand, it was considered to work in detail about the disease.

## MATERIALS AND METHODS

Investigations on disease incidence, etiology, symptoms and lab assays with different fungicides were carried out at Horticulture Research Station, Sirsi, Uttara Kannada district during 2010.