RESEARCH PAPER

## First report of anthracnose disease on groundnut caused by *Colletotrichum dematium* from Allahabad (Uttar Pradesh) in India

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**Abstract:** Groundnut is most important oil seed crop which contributes about 40 per cent of total oil seed production in India. According to its nutritional value and oil production it is very valuable economical crop but several diseases like tikka, rust, peanut bud necrosis, collar rot, and anthracnose are constraints the yield and productivity. This being a new disease unreported from Allahabad, the basic symptoms and nature of the pathogen. Anthracnose of groundnut caused by *Colletotrichum dematium* was first reported by Subramanyum *et al.* (1992). In the present study the symptoms appear as wedge-shaped lesions which also developed on the leaflet margins leading to marginal blight. In severe condition fruiting body acervuli visible through hand lens the disease may also extent to stipules and stems. A new marginal leaf-spot was developed on groundnut caused by *Colletotrichum dematium* in Allahabad region which is also known Anthracnose disease of groundnut.

Key Words: Groundnut, Anthracnose, Leaf spot, Colletotrichum dematium

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## Introduction

Groundnut is believed to be native of Brazil and belongs to family Fabaceae. It is grown widely between latitudes 40°N and 40°S in the semi-arid tropics and is cultivated on a variety of soils pH ranging between 6.0-6.5 are more preferable. On the world scene, groundnut is grown in several parts of India, China, Asia, Africa Australia, America, Indonesia, Brazil, and Argentina. Groundnut is an annual oil seed crop of *Kharif* season but also grown in the *Rabi* season where winter is not sever. World groundnut production stood at 34.43 Million tonnes in 2009-10 and India with 6.25 million tonnes which is the second largest producer after China with 14.30 million tonnes followed by the United States of America with 2.34 million tonnes. In India 75 per cent of the production are concentrated in the four states of Gujarat, Andhra Pradesh, Tamil Nadu and Karnataka (Anonymous 2009-10). In 2010-11

all over India, more than 22 states where groundnut is grown in *Kharif/Rabi* or in both seasons. Where the area was 4.93 million hectares, production 5.64 million tones and the highest yield was 1144 kg/hectare (Anonymous 2010-11).

Fungal leaf spot diseases caused by a large number of fungi such as Alternaria, Cercospora, Colletotrichum, Gloeosporium, Helminthosporium, Sphaceloma, Phyllosticta, Septoria, and many more, which damage the plant stems, branches, leaf foliage, plant reduces the yield and in severe conditions plant dry up. The term 'Anthracnose' literally means 'like coal' and first used by Fabre and Dunal to describe a disease of grapes in which blackening of tissues was characteristic feature black lesions, usually sunken caused by certain imperfect fungi that produce conidia in acervuli those are hyaline, one-celled, that is Colletotrichum.

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