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OUTBREAK OF COLLETOTRICHUM BLIGHT OF CHICKPEA AND ESTIMATION OF DISEASE INCIDENCE IN MAJOR CHICKPEA GROWING AREAS OF ANDHRA PRADESH

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ABSTRACT

Rowing survey was conducted to record the incidence of *Colletotrichum* blight in five major chickpea growing mandals of Kurnool, Anantapur and Prakasam districts and additionally in some mandals of Kadapa and Nellore districts. The results on incidence of *Colletotrichum*blight disease ranged from 6.3 to 76.5 per cent with the lowest and the highest incidence in Anantapur and Nellore districts, respectively. The pathogen was isolated and identified as *Colletotrichumcapsici,* based on morphological and cultural characteristics.

KEYWORDS: Colletotrichum Blight, Andhra Pradesh, Disease Incidence

INTRODUCTION

Dry root rot and *Fusarium*wilt are the major diseases of chickpea prevailing in Andhra Pradesh. In addition to these two diseases, incidence of *Colletotrichum*blight was observed in severe form in Kurnool, Prakasam and Anantapur districts of Andhra Pradesh during *rabi*2009 and 2010 due to heavy unusual rains which resulted in failure of the crop in many areas and led to re-sowing of crops in some areas.survey was conducted in major chickpea growing mandals of Kurnool, Anantapur, Prakasam districts of Andhra Pradesh during *rabi*2011-12 to determine the per cent disease incidence of *Colletotrichum*blight of chickpea. In addition to the three major districts, the other two neighbouring districts *viz.,* Kadapa (three mandals) and Nellore (one mandal) were also considered to study chickpea blight disease incidence. Survey was conducted in 5 major mandals in each district and in each mandal 20 fields were selected for recording of incidence of disease incidence. In each field 5 locations of each 5m2 area were selected randomly for recording disease incidence.

Out of 19 mandals surveyed, the *Colletotrichum*blight incidence ranged from 0 to 90 per cent (Table 1). The highest mean per cent disease incidence was recorded in Nellore district (76.5%), followed by Prakasam district (41.8%) while the the lowest mean per cent disease incidence was recorded in Anantapur district (6.3%) followed by Kurnool district (7.2%).

Out of the 19 mandals surveyed, maximum per cent disease incidence was recorded in Kondapuram (76.5%) mandal in Nellore district followed by Giddalur (52.9%) mandal of Prakasam district whereas the per cent disease incidence was minimum in Guntakal (5.3%) mandal of Anantapur district followed by Banaganapalli (5.7%) mandal of Kurnool district. In Kadapa district maximum per cent disease incidence was recorded in Peddamudiummandal (31.7%).

Out of the five mandals surveyed in Kurnool district, the highest per cent disease incidence was recorded in

Kovelakuntla (8.1%) whereas the lowest incidence of disease was recorded in Banaganapalli (5.7%). Out of the five mandals surveyed in Anantapur district the highest per cent disease incidence was recorded in Vajrakarur (6.8%) whereas the lowest incidence of disease was recorded in Guntakal (5.3%). Out of the five mandals surveyed in Prakasam district, the highest per cent disease incidence was recorded in Giddalur (52.9%) whereas the lowest incidence of disease was recorded in Bestavaripet (36.7%). Out of three mandals surveyed in Kadapa district, the highest per cent disease incidence was recorded in Peddamudium (31.7%) whereas the lowest incidence of disease was recorded in Simhadripuram (12.0%).

Mishra *et al*. (1974) conducted a periodical survey on diseases of pulse crops and observed a severe disease incidence on chickpea caused by *Colletotrichumdematium*at Jabalpur and also at Indore (Madhya Pradesh) during October 1974.

Varaprasad (2000) conducted survey on *Colletotrichum* blight disease during *rabi*1998-99 in and around Gulbarga district of Karnataka and observed that the disease incidence ranged from 0 to 91 per cent with maximum disease incidence of 67.84 per cent.

Table 1: Survey on the Incidence of *Colletotrichum Blight* in Major Chickpea Growing Mandals of Kurnool, Anantapur, Prakasam, Kadapa and Nellore Districts of Andhra Pradesh

S. No	District	Mandal	Percent Disease Incidence (%)	Mean Per cent Disease Incidence (%)	Range (%)
1.	Kurnool	Banaganapalli Kovelakuntla Nandyal Orvakal Panyam	5.7 8.1 7.3 7.0 7.9	7.2	0-10
2.	Anantapur	Guntakal Putlur Tadipatri Uravakonda Vajrakarur	5.3 6.7 6.0 6.6 6.8	6.3	0-8
3.	Prakasam	Bestavaripet Giddaluru Kambham Komarolu Markapur	36.7 52.9 38.4 38.7 42.3	41.8	1-85
4.	Kadapa	Jammalamadugu Peddamudium Simhadripuram	12.6 31.7 12.0	18.8	1-35
5.	Nellore	Kondapuram	76.5	76.5	1-90

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