

RESEARCH ARTICLE

Roving survey on panama disease (*Fusarium oxysporum* f. sp. *ubense*) in banana growing areas of Karnataka

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ABSTRACT

Roving survey was conducted in major banana growing regions of Karnataka during 2011-12 and it revealed that the disease incidence ranged from zero to hundred per cent. Maximum incidence was recorded on Kadali variety in Bangalore followed by Mysore (Devarasanahalli) (51.0%), Nanjanagudu (48.0%) and Mandya (Bukanakere) (44.0%) on Rasthali and Ney Poovan cultivars. The disease was not observed in Belgaum area. Pseudostem vascular infection was maximum (6.0) in cultivars of Rasthali and Ney Poovan in Nanjanagudu, Devarasanahalli and Bukanakere.

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INTRODUCTION

Banana (*Musa* spp.) is one of the most important fruit crops in international trade and is commonly cultivated in all the tropical and sub-tropical regions of the world. Banana often plays a vital role in human nutrition and is a staple food in many African countries (Nayar, 1962). It is also the fourth important food crop in terms of gross value after paddy, wheat and milk products and forms an important crop for subsistence farmers. Banana is also called 'poor man's apple' as it is the cheapest among fruits grown in the country with rich energy and nutritive values. It is also popular on account of its year round availability as compared to seasonal availability of other fruits.

In the year 2010-11 banana ranked first in area and production among the fruit crops grown in India with production of 35.9 million metric tons from an area of 8.30

million hectares and productivity 35.9 metric tons per hectare. Of this, Karnataka state alone had 111.8 thousand hectares of area and production of 22.81 million metric tons with productivity of 20.4 metric tons per hectare (Anonymous, 2011). The demand for the banana is increasing due to increase in population and a demand of 25 million tonnes by 2020 is estimated. The main hurdle in increasing the productivity is the threat posed by pest and diseases. Panama wilt of banana caused by *Fusarium oxysporum* f. sp. *ubense* (E. F. Smith) Snyder and Hans. is considered as the major constraint to banana production especially in Southern parts of Karnataka.

The *Fusarium* wilt pathogen lives in soil and penetrates into the roots, from where it slowly spreads until the corm is reached. From then on the disease develops very rapidly. Purplish stains appear in the xylem vessels which are blocked, outer leaves turn yellow and collapse. Soon, only a few of the