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Tuta absoluta: A New Invasive Pest Alert

Invasive species, alien species, exotic pests, or invasive alien species, are common names that categorize non-native animals, insects, microbes, diseases, or plants that are pests. These pests are not native in areas in which they cause problems and they are considered "invasive" because they invade and establish populations in new areas and the resulting uncontrolled population growth and spread causes economic or environmental problems. South American tomato pinworm, *Tuta absoluta* (Meyrick, 1917) (Lepidoptera: Gelechiidae) also known as the tomato leaf miner is one of the destructive invasive pest observed for the first time infesting tomato crop in Maharashtra, India. This pest has been classified as the most serious threat for tomato production worldwide. The pest has spread from South America to several parts of Europe, entire Africa and has now spread to India. Plants are damaged by direct feeding on leaves, stems, buds, calyces, young fruit, or ripe fruit and by the invasion of secondary pathogens which enter through the wounds made by the pest. It can cause up to 90% loss of yield and fruit quality under greenhouses and field conditions.

The pest was initially observed in Pune on tomato plants grown in polyhouse and fields during October 2014. The specimens were collected, identified and deposited at [National Pusa Collection \(NPC\), Division of Entomology, ICAR-IARI, New Delhi by P.R. Shashank](#) and K. Chandrashekar, ICAR-IARI scientists. Subsequently the pest was observed in the farmer's fields in major tomato growing districts of Maharashtra viz., Pune, Ahmadnagar, Dhule, Jalgaon, Nashik, and Satara. Severe infestation (>50% plants affected) was observed in several tomato fields.

Following the reports of Maharashtra, recent surveys conducted by researchers of Network Project

News

Declaration of Holiday on 14th April, 2020
 Birthday of Dr BR Ambedkar

Solar-powered vegetable vending vans
 come in handy during lockdown

Preventive measures to contain the spread
 of COVID19.

Knowledge Initiatives

- KVK Portal
- MobileApp
- Agricultural Education Portal
- ICAR-e courses
- ICAR-e courses



OCCURRENCE OF TUTA ABSOLUTA (LEPIDOPTERA: GELECHIIDAE) AN INVASIVE PEST FROM INDIA

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ABSTRACT

The South American tomato pinworm, *Tuta absoluta* (Meyrick) (Lepidoptera: Gelechiidae) is an invasive pest of tomato that is rapidly expanding around the world. This paper presents the first report of the occurrence from India. Several individuals were collected from polyhouses and fields during the survey conducted in 2014 and 2015. A preliminary taxonomic note on this pest with diagnosis and known distribution is provided.

Key words: Tomato leaf miner, *Tuta*, invasive pest, field surveys, damage symptoms, diagnosis