

DISEASE NOTE

**FIRST REPORT OF *CURVULARIA*
SPICIFERA CAUSING LEAF SPOT ON
TOMATO (*SOLANUM LYCOPERSICUM* L.)
IN EGYPT**

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In summer of 2014, brown to black necrotic lesions surrounded by yellow haloes were observed on leaves of tomato plants cultivated in Behira governorate. Isolation was made from 3-5 mm² pieces of lesions margins onto potato dextrose agar (PDA) after surface disinfected using 0.5% NaOCl. The examined morphological features (colony and conidia) were reminiscent of *Curvularia spicifera* as described by Jeon *et al.* (2015). The identity was further confirmed by DNA amplification and sequencing of the glyceraldehyde-3-phosphate dehydrogenase (*gpd*) and second largest subunit of RNA polymerase II (*rpb2*) gene regions using the same primer sets used in the study of Madrid *et al.* (2014). Sequences of *gpd* and *rpb2* were deposited in GenBank under accession Nos. KU133371 and KU133372, respectively, and revealed similarity 100% to (KC928089) and 99% to (HF934818) of *C. spicifera*.

Koch's postulates were further confirmed using surface disinfected leaves cv. Super strain-B wounded by sterile needle. Approximately 3-mm² of colonized PDA plugs of 7-days-old cultures were placed on the wounded sites. Control leaves and fruit were wounded and inoculated with sterile PDA plugs. Tomato leaves were placed at room temperature (28-30°C) and 80% of RH. Five days later, brown circular necrotic lesions (2-3 mm²) were developed on the inoculated leaves. The control leaves showed no symptoms. Re-isolation from infected tissues revealed *C. spicifera* and its identity was morphologically confirmed. To our knowledge this the first report of *C. spicifera* (Bainier) Boedijn causing leaf spot on tomato in Egypt.

Jeon S.J., Nguyen T.T.T., Lee H.B., 2015. Phylogenetic Status of an Unrecorded Species of *Curvularia*, *C. spicifera*, Based on Current Classification System of *Curvularia* and *Bipolaris* Group Using Multi Loci. *Mycobiology* **43**: 210-217.

Madrid H., da Cunha K.C., Gené J., Dijksterhuis J., Cano J., Sutton D.A., Guarro J., Crous P.W., 2014. Novel *Curvularia* species from clinical specimens. *Persoonia* **33**: 48-60.

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Received March 3, 2016
Accepted July 11, 2016

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**FIRST REPORT
OF *PRUNUS NECROTIC RINGSPOT*
VIRUS ON NECTARINE FROM IRAN**

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Prunus necrotic ringspot virus (PNRSV, Genus *Illarvirus*, Family *Bromoviridae*) is pollen and seed transmitted and this contributes to its spread in stone-fruit trees. In 2015, 18 leaf samples from nectarine (*Prunus persica* var. *nucipersica*) symptomatic trees were collected from East-Azerbaijan and Zanjan provinces in west and north-west of Iran. Trees showed stunting, and exhibited chlorotic rings, mosaic and necrotic ringspots on leaves. When total RNAs were subjected to reverse transcription polymerase chain reaction (RT-PCR) with a pair of primers (Ilar1 and Ilar2) (Moury *et al.*, 2000), an expected DNA fragment of 206 bp was amplified from 6 of the 10 tested samples. The indicator plant *Cucumis sativus* developed systemic mosaic, chlorosis, stunting, and leaf deformation after the cotyledons were inoculated with PNRSV isolates, as previously described (Rakhshandehroo *et al.*, 2006). Furthermore, total RNAs extracted from six *Illarvirus*-infected samples were used to amplify the complete coat protein gene by RT-PCR, using VP81 (5-AGTGGATC-CATGGTTTGCCGAATTTGC-3) and VP103 (5-ACATA-AGCTTCTAGATC TCAAGCAGGT C-3) primer pair (Aparicio *et al.*, 2003). Comparing the new sequences in the GenBank showed a high similarity (98%) between new PNRSV isolates and isolates from Iran (rose; KJ599817), Poland (rose; DQ003584) and India (almond; AM408909). Phylogenetic tree generated by MEGA6 program in Neighbor joining (NJ) method confirmed that these new PNRSV isolates (accession Nos. KX353930-KX353935) were grouped within a cluster formed by PNRSV-subgroup II isolates from Iran, Poland, Chile and USA. To the best of our knowledge this is the first report of PNRSV on nectarine from Iran.

Aparicio F., Vilar M., Perez-Paya E., Pallas V., 2003. The coat protein of *Prunus necrotic ringspot virus* specifically binds to and regulates the conformation of its genomic RNA. *Virology* **313**: 213-223.

Moury B., Cardin L., Onesto J.P., Candresse T., Poupet A., 2000. Enzyme-linked immunosorbent assay testing of shoots grown *in vitro* and the use of immunocapture-reverse transcription-polymerase chain reaction improve the detection of *Prunus necrotic ringspot virus* in rose. *Phytopathology* **90**: 522-528.

Rakhshandehroo F., Zamani Zadeh H.R., Modarres A., Hajmansoor S., 2006. Occurrence of *Prunus necrotic ringspot virus* and *Arabis mosaic virus* on Rose in Iran. *Plant Disease* **90**: 975

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Received February 24, 2016
Accepted July 20, 2016