

## DISEASE NOTE

**ONION YELLOW DWARF VIRUS ON LEEK,  
ONION, SHALLOT AND WELSH ONION  
IN IRAN****Z. Naderi Saffar<sup>1</sup>, S. Torabi<sup>2</sup>, M. Naghavi<sup>3</sup>,  
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During summer of 2011-2012, bulb samples from allia-  
ceous vegetables, i.e. garlic (*Allium sativum*), leek (*Allium  
porrum*), onion (*Allium cepa*), shallot (*Allium birtifolium*) and  
Welsh onion (*Allium fistulosum*) were collected from Az-  
arbaijan-e-sharghi, Hamedan, Kerman, Khuzestan, Lorestan,  
Mazandaran, Markazi and Zanjan provinces of Iran to de-  
termine the presence of *Onion yellow dwarf virus* (OYDV),  
genus *Potyvirus*. Collected bulbs were planted in plastic  
pots and the resulting plantlets were tested individually at  
the two-leaf stage by indirect ELISA using the “Poty group  
test” kit from Bioreba (Switzerland). ELISA-positive samples  
were subsequently tested by RT-PCR using previously de-  
scribed specific primers to amplify a region in the 3' end  
of the OYDV genome (Van der Vlugt *et al.*, 1999). RT-PCR  
resulted in the amplification of an expected fragment of *ca.*  
0.5 kb in size for 30 out of 35 ELISA-positive seedlings from  
garlic, leek, onion, shallot and Welsh onion bulbs, confirm-  
ing the presence of OYDV. Symptoms of mosaic and yellow  
streak striping, curling and distortion of flower stems were  
associated with potyvirus infections. OYDV was previously  
reported on garlic in Iran (Baghalian *et al.*, 2010) but this is  
the first report of its natural occurrence on leek, onion, shal-  
lot and Welsh onion in the mid-Eurasia of Iran.

Baghalian K., Kim O.K., Natzuaki K.T., 2010. Molecular variability  
and genetic structure of the population of *Onion yellow dwarf  
virus* infecting garlic in Iran. *Virus Genes* **41**: 282-291.

Van der Vlugt R.A.A., Steffens P., Cuperus C., Barg E., Lesemann  
D.-E., Bos L., Vetten H.J., 1999. Further evidence that shal-  
lot yellow stripe virus (SYSV) is a distinct potyvirus and re-  
identification of Welsh onion yellow stripe virus as a SYSV  
strain. *Phytopathology* **89**: 148-155.

## DISEASE NOTE

**FIRST REPORT OF *PERONOSPORA  
SPARSA* ON *ROSA* spp. IN MEXICO****D. López-Guisa, M.J. Yáñez-Morales  
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In Mexico, the state of Mexico is the main producer  
of greenhouse-grown roses (*Rosa* spp.) with *ca.* 650 ha in  
production. During the seasons of high relative humidity  
and mild temperatures, yellow to red or purplish rectan-  
gular spots delimited by veins were observed on the leaves,  
whereas on stems and sepals the spots were rounded and  
reddish to purple. Incidence ranged from 27 to 74% and, in  
severe cases, plants were defoliated. The pathogen associ-  
ated with the disease was identified as *Peronospora sparsa*  
Berk. based on: the symptomatology shown by leaves and  
stems of six rose cultivars (Conga, Grande Classe, Opera,  
Polo, Titanic and Vendela), that were collected during July  
2012 in Villa Guerrero (18.97 N, 99.65 W), state of Mexico;  
sequencing products of the ITS region of rDNA amplified  
by nested PCR (Lindqvist *et al.*, 1998) using primers PS3  
and PS1 (Aegerter *et al.*, 2002) and morphological characters  
(Horst and Cloyd, 2007). Hyaline sporangiophores emerging  
from stomata were observed on the underside of the leaves,  
which were 300-625 µm in size, branched 3-4 times, with  
bifurcated tips 5-22 µm in size. Sporangia were hyaline, sub-  
globose to ellipsoid possessed occasionally a tiny stalk and  
measured 14-22 × 13-20 µm. No structures were found on  
stems. The sequence of ITS-rDNA region (GenBank acces-  
sion No. KF541660) showed 99.1% of similarity index with  
*P. sparsa* on *Rosa multiflora* (AY608610). In the region of  
study, disease management consists mainly of fungicide ap-  
plications every 5-7 days, failing which the pathogen will af-  
fect flower bud aperture and size, thus reducing commercial  
value of the crop. To our knowledge, this is the first report  
in Mexico of downy mildew of roses induced by *P. sparsa*.

Aegerter B.J., Nuñez J.J., Davis R.M., 2002. Detection and man-  
agement of downy mildew in rose rootstock. *Plant Disease* **86**:  
1363-1368.

Horst R.K., Cloyd A.R., 2007. Compendium of Rose Diseases and  
Pests. 2nd Ed. APS Press, St. Paul, USA.

Lindqvist H., Koponen H., Valkonen J.P.T., 1998. *Peronospora  
sparsa* on cultivated *Rubus arcticus* and its detection by PCR  
based on ITS sequences. *Plant Disease* **82**: 1304-1311.

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