

**Pathogen :**

OYDV Onion Yellow Dwarf Virus

Test format :**DAS-ELISA (alkaline phosphatase)****Catalogue number :****PSS10009****REAGENT**

	Coating-Ab	AP-Conjugate-Ab
Batch	90819	90820
Type	Rabbit Polyclonal	Rabbit Polyclonal
Dilution	1/100	1/100
Format	PBS / Glycerol 50%	PBS / Glycerol 50%
Storage temperature	-20°C	-20°C
Use by		

Number of tests	500
Volume per bottle of Coating-Ab*	500 µL
Volume per bottle of Conjugate-Ab*	500 µL

* Volume based on a test performed with 100 µl per well. 1 test = 1 well

QUALITY CONTROL

Value of ELISA responses (OD 405 nm)*	Positive Control	Negative Control
	1.038	0.071

* ELISA responses were measured 1 hour after incubation of substrate (pNPP) at +37°C.



CHARACTERISTICS OF THE DISEASE

Onion yellow dwarf virus (**OYDV**), a member of the genus *Potyvirus* in the family *Potyviridae*, is a flexuous, filamentous virus containing a single, positive sense genomic RNA. OYDV is one of several viruses causing mosaic diseases in commercially important *Allium* species such as garlic (*A. sativum*), onion (*A. cepa*), shallot (*A. cepa* var. *perutile*), and leek (*A. porrum*). OYDV is transmitted by aphids in a non-persistent manner.

Leaves of OYDV-infected onion show irregular yellow striping to almost complete yellowing and also downward curling, flattening and crinkling followed by stunting. Deterioration during storage and premature sprouting of bulbs may occur. In garlic, OYDV produces symptoms of mild chlorotic stripes to bright yellow stripes depending on virus isolate and cultivars. Reduction in growth and bulb size also occurs. Infection by other viruses such as Leek yellow stripe virus, Garlic common latent virus and Shallot latent virus also occurs and may aggravate the symptoms further. However, OYDV is recognized as a major element of the virus disease complex in garlic.

MORE INFORMATION

Lot, H; Chovelon, V; Souche, S, et al. 2001. Resistance to onion yellow dwarf virus and leek yellow stripe virus found in a fertile garlic clone. *PROCEEDINGS OF THE SECOND INTERNATIONAL SYMPOSIUM ON EDIBLE ALLIACEAE*. Issue: 555. Pages: 243-246.

Hervé Lot, Véronique Chovelon, Sylvie Souche, and Brigitte Delecalle. 1998. Effects of Onion Yellow Dwarf and Leek Yellow Stripe Viruses on Symptomatology and Yield Loss of Three French Garlic Cultivars. *Plant disease*. Volume 82, Number 12. Pages 1381-1385