

*

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*

2006 2005

(TBIA)

:

(BYSMV)

(BYDV)

(WSMV)

(TBIA)

(BSMV)

2005

2006

Polypogon monspeliensis

Avena fatua

Sorghum halpense

Lolium temulentum

Phalaris minor

(BYDV, BYSMV, BSMV, (WDV)

WSMV, WDV)

Poaceae

)

(1987)

(1996)

%70

%48

(1982)

(2002 Plumb Henry 2001 Van Regenmortel 1972 Smith)

. 2010 / 12 / 12

. 2011 / 2 / 16

(BYDV) *Barley yellow dwarf virus*
 (BYSMV) *Barley stripe mosaic virus*
Wheat Barley stripe mosaic virus (BSMV)
 (WDV) *Wheat dwarf virus* (WSMV) *streak mosaic virus*
 1996 Lindsten 1969 Rochow)
 .(2002 Conti Milne

2006 2005 .1

.2

(BYSMV) (WSMV) (BYDV) .3

-1

2006 2005 . 10-4

()
 Tissue Blot Immuno Assay (TBIA)
 . 18-

(BYDV) (BSMV)
 (WSMV) (BYSMV)

31 .(55 86) 7 125
 14 25 39
 : -2

/

TBIA

-3

:(TBIA)

Comeau Makkouk (1990) Hsu Lin (1994)

: (1994)

Schleicher Schuell

Phosphate Buffered Saline Tween-20 (PBST)

1 PBST Polyvinylalcohol

PBST /

Phosphate 1000:1 ()

PBST Buffered Saline (PBS)

Goat Anti-rabbit ()

PBST (Bioreba) conjugate

20 -15

10 5-bromo-4-chloro-3-indolylphosphate 3,5

0,05 0,1 9,5 pH 0,1 Tris-HCl

(MgCl₂)

(1964) Slogteren :

TBIA

(1)

(1984)

(1)

7,2 ,pH 0,01 K₂HPO₄

400

%40

N. P. K.

(/ 15) 18:18:18

(1)

.1

Poacea	<i>Triticum aestivium</i>	Wheat	
Poacea	<i>Hordium vulgare</i>	Barley	
Chenopodiaceae	<i>Chenopodium amaranticolor</i>	Goosefoot	
Chenopodiaceae	<i>Chenopodium album</i>	Lambsquarters	

-4

1000 :
2x2

(WSMV) (WDV) (BYSMV) (BSMV) (BYDV)

TBIA

(BYDV)
: (WSMV) (BYSMV)
100 (BYDV) 100
1x1 .(BYSMV) 100 (WSMV)
.(TBIA)

.1

2005 (BYDV) (TBIA)
(WSMV) (BYSMV)
(BSMV) 2006
(1)
2006 2005
(BSMV) (BYSMV) (WSMV)

(BYDV) (2002 Plump Henry) 50
 (1995 Ronieri Lister) El-Muadhidi
 (2001) Skaf 1982 Comeau) (1992) El-Zoubi 1988
 (1988) Skaf 16.3
 %3.9
 (1992) El-Zoubi *Rhopalosiphum padi*
 MAV RMV RPV PAV
 % 62 59 35 22
 Walter 2003 Laszio 1990 Hill El-Yamani) %62-3.6
 (WSMV) (2003
 (1997 Kumari Makkouk 1971 Brakke)
 (1982) (2000) Bowden %2
 %50
 %100 (2000) Watkins
 (2001) Masumi
 %32
 (BYSMV) (1986 Conti Milne)
 Makkouk 1991 Izadpanan) (2003 2000 Makkouk 1996
 (1991) Izadpanan
 (BSMV) *Loadelphex sriatellus*
 (1989 1971 Novikov Atabekov)
 Sherif 1972 Bremer) (1991
 (1975) Slack
 %45 – 38
 (1991) Sherif) %7
 %25 (2001) Evans
 -
 (BSMV) :
 7-6 : *
 (2)

* : 9-7
 * : (2)

.2

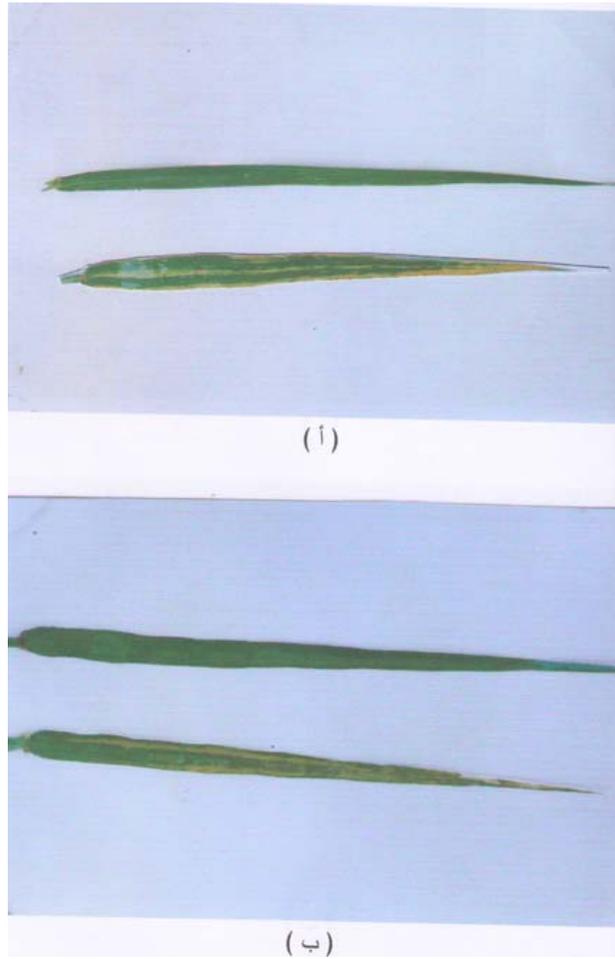
-	(BYDV)
-	(BYSMV)
+	(BSMV)
-	(WSMV)
-	(WDV)

(+)
 (-)



.1

() . ()



2. () - () : .

(BSMV) .(1989 1971) Novikov Atabekov

Rochow (2)
 .(1991) Lindsten (2002) (1986) Conti Milne (1969)

2.

(TBIA) (3)
Polypogon *Avena fatua* (BYDV)
 (BYSMV) *Sorghum halpense* *monspeliensis*
 (WSMV) *Lolium temulentum*
 (WDV) *Phalaris minor*

Makkouk 1991 Lindsen 1969 Rochow)

.(1996

(WDV)

(2005 Huusela Lemmetty 1991 Lindsten)

%35

(2002) Lindblad

%76

(2003) Laszio

%100

(2005) Huusela Lemmetty

1969 Rochow 1971 Brakke)

(1976) Slykhuis

(1991 Lindsten

Izadpanan Moini

L. multiflorum

(WSMV)

P. A. fatua S. halpense

(BYDV)

(2000)

monspeliensis

(1969) Rochow

Bromus

Phalaris

Paspalum dilatatum

Chloris goyana

intermis

(1989) Novikov

Atabekov

.Phleum pretense

arundinacea

Dactylis

(BSMV)

Oryzopsis miliacea

L. parenna

glomerata

L. temulentum A. fatua

(1986) Conti Milne

(BYSMV)

(2002) Conti Milne

(WSMV)

.P. minor

.(1971 Brakke)

Panicum repens

:

.(1991 Lindsten)

(WDV)

. (TBIA)

WDV WSMV BYSMV BSMV BYDV							
-	-	-	-	-	Umbelliferae	<i>Ammi majus</i>	
-	-	-	-	-	Liliaeae	<i>Rineale allium</i>	
-	-	-	-	-	-	<i>Aristolochia maurorumdl</i>	
-	-	-	-	-	Primulaceae	<i>Anagallis arvensis</i>	
-	-	-	-	-	Chenopodiacea	<i>Artiplex sp.</i>	
-	+	+	-	+	Poaceae	<i>Avena fatua</i>	
-	-	-	-	-	Poaceae	<i>Bromus japonicum</i>	
-	-	-	-	-	Compositae	<i>Carthamus oxyacanthus</i>	
-	-	-	-	-	Cruciferae	<i>Capsella bursapasyoria</i>	
-	-	-	-	-	Compositae	<i>Centaurea iberica</i>	
-	-	-	-	-	Dipsalaceae	<i>Cephalaria syriaca</i>	
-	-	-	-	-	Chenopodiacea	<i>Chenopodium album</i>	
-	-	-	-	-	Compositae	<i>Cichorium intybus</i>	
-	-	-	-	-	Convolvulaceae	<i>Convolvulus arvensis</i>	
-	-	-	-	-	Cramineae	<i>Cyndon dactylon</i>	
-	-	-	-	-	Cyperaceae	<i>Cyperus rotundus</i>	
-	-	-	-	-	Compositae	<i>Erigeron canadensiv</i>	
-	-	-	-	-	Poaceae	<i>Hordeum jupatum</i>	
-	-	-	-	-	Compositae	<i>Lactuca scrriola</i>	
-	-	-	-	-	Poaceae	<i>Lolium ridium</i>	
-	+	+	-	-	Poaceae	<i>L. temulentum</i>	
-	-	-	-	-	Compositae	<i>Matricaria chamomilla</i>	
-	-	-	-	-	Malvaceae	<i>Malva rotundifolia</i>	
-	-	-	-	-	Fabaceae	<i>Melilotus indicus</i>	

WDV WSMV BYSMV BSMV BYDV							
-	-	-	-	-	Plantaginaceae	<i>Plntago lanceolata</i>	
-	-	-	-	-	Poaceae	<i>Phragmites communis</i>	
-	+	-	-	-	Poaceae	<i>Phalaris minor</i>	
-	-	-	-	+	Poaceae	<i>Polypogon monspeliensis</i>	
-	-	-	-	-	Portulacaceae	<i>Portulaca oleraca</i>	
-	-	-	-	-	Cruciferae	<i>Raphanus raphanistrum</i>	
-	-	-	-	-	Cramineae	<i>Setaria glaucae</i>	
-	-	-	-	-	Compositae	<i>Silybum marianum</i>	
-	-	-	-	-	Cruciferae	<i>Sinapis arvensis</i>	
-	-	-	-	-	Cruciferae	<i>Sisymbrium irio</i>	
-	-	-	-	-	Compositae	<i>Sonchus oleraceus</i>	
+	-	+	-	+	Poaceae	<i>Sorghum halpense</i>	
-	-	-	-	-	Fabaceae	<i>Trifolium canpestre</i>	
-	-	-	-	-	Typhaceae	<i>Typha angustata</i>	
-	-	-	-	-	Utricaceae	<i>Utrica pilulifera</i>	
-	-	-	-	-	Fabaceae	<i>Visia angustifolia</i>	
-	-	-	-	-	Compositae	<i>Xanthium strumarium</i>	

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(TBIA)

(BYDV, BSMV, BYSMV, :

WSMV, WDV)

(BYDV, BYSMV, WDV)

(1991 Lindsten 1986 Conti Milne 1970 Rochow)

1970 Carroll)

(BSMV, WSMV)

.(1995 Brunt

:

BYDV, BYSMV, WSMV

WSMV

Rochow

BYDV, BYSMV,

- (1986) Conti Milne (1971) Brakke (1969)
(1995) Brunt
WSMV
(2001) Masumi
(BYDV, % 31.5
% 73 76 BYSMV)
.1982.
.1996.
.1984.
.1987.
.1982.
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NEW VIRUSES RECORDED ON WHEAT AND BARLEY CROPS IN NINEVEH PROVINCE .

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ABSTRACT

This study was achieved to detect the viruses of wheat and barley in Nineveh province and because there is no any diagnostic study of these viruses. The study include field survey for some wheat and barley fields in province in 2005 and 2006 seasons to obtain infected samples which diagnosed by Tissue Blot Immuno Assay (TBIA) test and to collect samples of weeds associated with these crops to detect any viruses in it. The results proved the existence of Barley yellow dwarf virus (BYDV), Barley yellow striate mosaic virus (BYSMV) and Wheat streak mosaic virus (WSMV) on barley and wheat crops in Al-Hamdaniyah and Tilkeif districts (Nineveh Province) during the growing season in 2005, by using TBIA. Also the existence of Barley stripe mosaic virus (BSMV) and the previous viruses during the growing season in 2006 by using the slide agglutination test. Some of these viruses are recorded firstly in Iraq. The results declared the existence of (BYDV) on weeds: *Avena fatua*, *Polypogon monspeliensis*, *Sorghum halpense*. As well as the existence of (BYSMV) on *A. fatua* , *S. halpense* , *Lolium temulentum*, and the existence of (WSMV) on *A. fatua*, *L. temulentum*, *Phalaris minor*, and the existence of (WDV) on *S. halpense* only. These viruses were recorded firstly on weeds in Iraq. The study indicates that the viruses (BYDV, BYSMV, BSMV, WSMV and WDV) were not transmitted in wheat and barley seeds.