

**Table S1.** Primers used in this study

Gene name	Purpose	Primer Sequence (5'–3')
TYLCV-F	Detection of TYLCV	ATGTCGAAGCGACCAGGC
TYLCV-R		GATGCGTATTTTCATAGTTGCATATACTGG
<i>Actin-F</i>	<i>B. tabaci</i> reference genes	CGGTGATTTCCTTCTGCATT
<i>Actin-R</i>		ACCGCAAGATTCCATACCC
<i>EF-1<math>\alpha</math>-F</i>	<i>B. tabaci</i> reference genes	TAGCCTTGTGCCAATTTCGG
<i>EF-1<math>\alpha</math>-R</i>		CCTTCAGCATTACCGTCC
<i>BtabOBP1-F</i>	<i>BtabOBP1</i> RT-qPCR	AAGTGCTTGACGGATTATTAC
<i>BtabOBP1-R</i>		GCATCATATTATCGCAGTGT
<i>BtabOBP2-F</i>	<i>BtabOBP2</i> RT-qPCR	CAACAACCCCTCAACCGACA
<i>BtabOBP2-R</i>		TCATGTCAGGTGTCAGAAGGC
<i>BtabOBP3-F</i>	<i>BtabOBP3</i> RT-qPCR	CTATCTCGGTTTCAGTTCCA
<i>BtabOBP3-R</i>		TGTCTTTCCACTCGCTAT
<i>BtabOBP4-F</i>	<i>BtabOBP4</i> RT-qPCR	GTTTCTTGGAGTGCGTTTA
<i>BtabOBP4-R</i>		TCATCATCATCAGCCTCTT
<i>BtabOBP5-F</i>	<i>BtabOBP5</i> RT-qPCR	AAGTAAAGGCTGTGGATGA
<i>BtabOBP5-R</i>		CGAGTAATAGTTGTTGTCTTGA
<i>BtabOBP6-F</i>	<i>BtabOBP6</i> RT-qPCR	GTAGCAATACAGGTGGAGA
<i>BtabOBP6-R</i>		ATGACACTCTTGACATTAGC
<i>BtabOBP7-F</i>	<i>BtabOBP7</i> RT-qPCR	TCGAATCAGATGCAGAGGGTG
<i>BtabOBP7-R</i>		TATCCGGGGGACTCATTCCA

*BtabOBP8-F*

TGATGGCGTGTCTTATGA

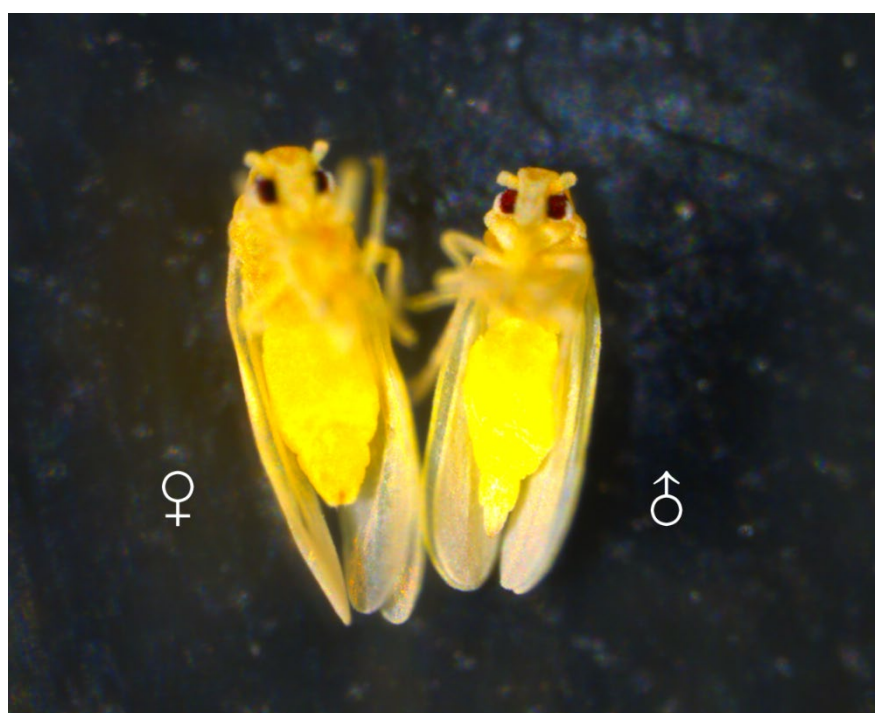
*BtabOBP8* RT-qPCR

*BtabOBP8-R*

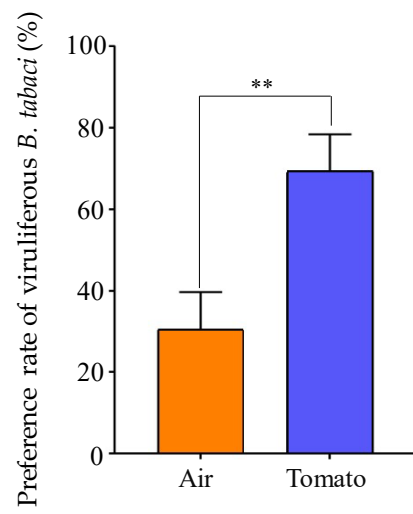
CTGAGGTTGAGTGCTGTA



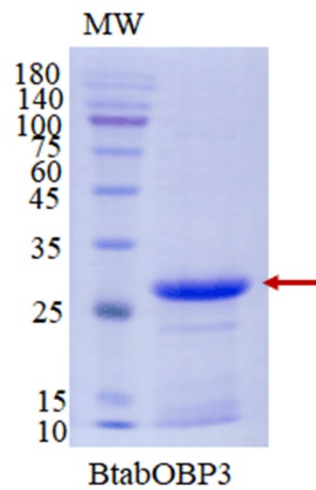
**Figure S1** Tomato plants. (A) Healthy tomato leaves. (B) TYLCV-infected tomato leaves.



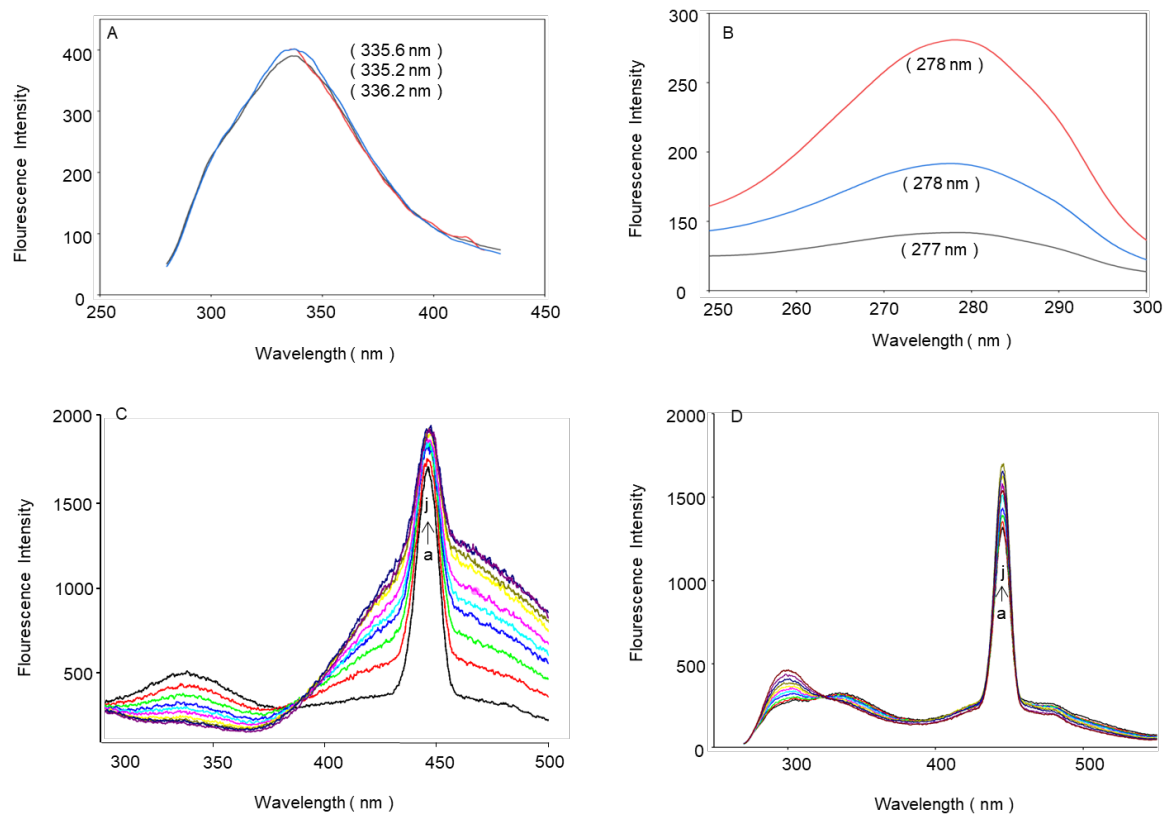
**Figure S2** Female (♀) and male (♂) *B. tabaci* under a stereo microscope.



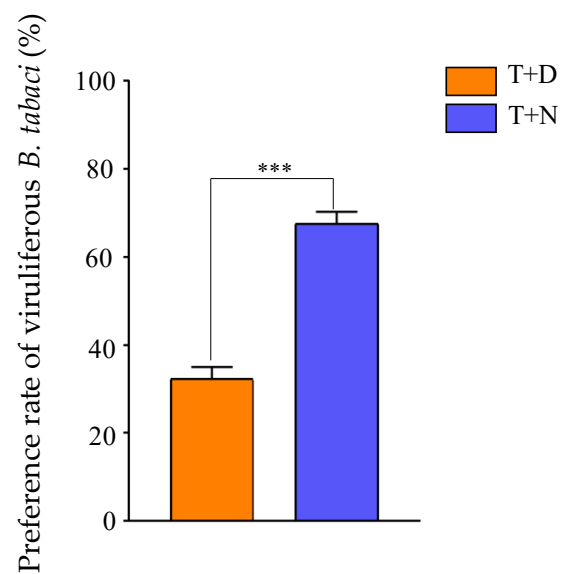
**Figure S3** Preference of viruliferous *B. tabaci* MED for air vs. tomato. Values are means  $\pm$  SEM. Different number of asterisk (\*) and letters above each bar indicate significant differences ( $P < 0.05$ ) among the treatments.



**Figure S4** Expression tests of the target protein.



**Figure S5** Spectra of BtabOBP3 binding test with d-limonene. (A) Determination of the optimum emission wavelength of BtabOBP3. (B) Determination of the optimum excitation wavelength of BtabOBP3. (C) Emission spectrum of 1-NPN and BtabOBP3. (D) D-limonene competes for 1-NPN emission spectra.



**Figure S6** Preference of viruliferous *B. tabaci* MED for tomatoes mixed with  $10^{-2}$  g/mL d-limonene (T+D) vs. tomatoes mixed with n-hexane (T+N). Values are means  $\pm$  SEM. Different number of asterisk (\*) and letters above each bar indicate significant differences ( $P < 0.05$ ) among the treatments.