

Table S4. Virus host range for the eight most common RNA viruses of *Apis mellifera* (virus abbreviations: DWV - Deformed wing virus, BQCV - Black queen cell virus, ABPV - Acute bee paralysis virus, SBPV - Slow bee paralysis virus, SBV - Sacbrood virus, KBV - Kashmir bee virus, IAPV - Israeli acute paralysis virus, CBPV - Chronic bee paralysis virus).

Virus	Host	Location	Sample n	~ % n infected	Replication	Symptomatic	Ref.
DWV	<i>Bombus terrestris</i>	Europe commercial	no data	10%	Not tested	Y*	Genersch et al. (2006)
		UK, mainly southwest	57	30%	Not tested	N	Evison et al. (2012)
		Scotland, UK	Unpublished data	Unpublished data	Not tested	N	McMahon pers. comm.
	<i>Bombus pascuorum</i>	UK	170	9	Y	N	Fürst et al. (2014)
		Germany	1 wild nest	No data	Not tested	N	Genersch et al. (2006)
		UK, mainly southwest	36	14%	Not tested	N	Evison et al. (2012)
	<i>Bombus lucorum</i>	UK	60	4	N	N	Fürst et al. (2014)
		Scotland, UK	Unpublished data	Unpublished data	Not tested	N	McMahon pers. comm.
	<i>Bombus lapidarius</i>	UK	175	16	Y	N	Fürst et al. (2014)
	<i>Bombus huntii</i>	Utah, USA	30	no data	Y (gut only)	N	Li et al. (2011)
	<i>Bombus impatiens</i>	Pennsylvania, USA	5	100%	Not tested	N	Singh et al. (2010)
		Pennsylvania, USA	13	62%	Y	N	Levitt et al. (2013)
	<i>Bombus vagans</i>	Pennsylvania, USA	2	50%	Y	N	Levitt et al. (2013)
	<i>Bombus tenarius</i>	Pennsylvania, USA	2	100%	Not tested	N	Singh et al. (2010)
	<i>Bombus hortorum</i>	UK	20	0	n/a	n/a	Fürst et al. (2014)
<i>Bombus monticola</i>	UK	10	11	Y	N	Fürst et al. (2014)	
<i>Osmia bicornis</i>	Belgium	3 pooled samples (10 per sample)	n/a	Not tested	N	Ravoet et al. (2014)	
<i>Vesputa vulgaris</i>	UK, mainly southwest	45	29%	Not tested	N	Evison et al. (2012)	
	Pennsylvania, USA	12	92%	Not tested	N	Singh et al. (2010)	
<i>Vesputa spp.</i>	Pennsylvania, USA	7	57%	Y	N	Levitt et al. (2013)	
<i>Apis cerana</i>	China (19 provinces)	570	33, 51 and 92% in 3 provinces	Not tested	n/a	Li et al. (2011)	
<i>Apis florum</i>	Xishuang province, China	134	15.6%	Not tested	n/a	Zhang et al. (2012)	
<i>Apis dorsata</i>	Xishuang province, China	190	11.6%	Not tested	n/a	Zhang et al. (2012)	
<i>Blatella germanica</i>	Pennsylvania, USA	8	100%	Y	N	Levitt et al. (2013)	
<i>Aethina tumida</i>	Pennsylvania, USA	21	72%	Not tested	N	Levitt et al. (2013)	
<i>Forficula auricularia</i>	Pennsylvania, USA	10	100%	Y	N	Levitt et al. (2013)	
<i>Galleria mellonella</i>	Pennsylvania, USA	21	71%	N	N	Levitt et al. (2013)	
Araneae (order)	Pennsylvania, USA	10	80%	Not tested	N	Levitt et al. (2013)	

	<i>Varroa destructor</i>	UK apiaries (Devon)	462 (3 hives)	No data	Not tested	n/a	Bowen-Walker et al. (1999)
		France apiaries (nationwide)	22,000 (22 apiaries)	100%	Not tested	n/a	Tentcheva et al. (2004)
		France (360 apiaries)	36,000 (36 apiaries)	No data	Not tested	n/a	Gauthier et al. (2007)
		Germany	40 per hive (5 hives)	45-100% per hive	Y (only mites from symptomatic bees)	n/a	Yue and Genersch (2005)
BQCV	<i>B. huntii</i>	Utah, USA	30	No data	Y (gut only)	N	Peng et al. (2011)
	<i>B. terrestris</i>	Scotland, UK	Unpublished data	Unpublished data	Not tested	N	McMahon pers. comm.
	<i>B. pascuorum</i>	Scotland, UK	Unpublished data	Unpublished data	Not tested	N	McMahon pers. comm.
	<i>B. lucorum</i>	Scotland, UK	Unpublished data	Unpublished data	Not tested	N	McMahon pers. comm.
	<i>Bombus hortorum</i>	Scotland, UK	Unpublished data	Unpublished data	Not tested	N	McMahon pers. comm.
	<i>B. impatiens</i>	Pennsylvania, USA	5	60%	Not tested	N	Singh et al. (2010)
		Pennsylvania, USA	13	61%	Not tested	N	Levitt et al. (2013)
	<i>B. tenarius</i>	Pennsylvania, USA	2	50%	Not tested	N	Singh et al. (2010)
	<i>B. vagans</i>	Pennsylvania, USA	1	100%	Not tested	N	Singh et al. (2010)
		Pennsylvania, USA	2	100%	Not tested	N	Levitt et al. (2013)
	<i>Osmia cornuta</i>	Belgium	3 pooled samples (10 per sample)	n/a	Not tested	N	Ravoet et al. (2014)
	<i>Andrena vaga</i>	Belgium	1 pooled sample (10 in pool)	n/a	Not tested	N	Ravoet et al. (2014)
	<i>Heriades truncorum</i>	Belgium	3 pooled samples (10 per sample)	n/a	Not tested	N	Ravoet et al. (2014)
	<i>A. cerana</i>	China (19 provinces)	570	12% – 98% across 6 provinces	Not tested	N	Li et al. (2012)
	<i>A. florum</i>	Xishuang province, China	134	52%	Not tested	N	Zhang et al. (2012)
	<i>A. dorsata</i>	Xishuang province, China	190	21.6%	Not tested	N	Zhang et al. (2012)
	<i>V. vulgaris</i>	UK, mainly southwest	45	2.2%	Not tested	N	Evison et al. (2012)
		Pennsylvania, USA	12	66.7%	Not tested	N	Singh et al. (2010)
	<i>Vespula sp.</i>	Pennsylvania, USA	7	29%	Not tested	N	Levitt et al. (2013)
	<i>Blatella germanica</i>	Pennsylvania, USA	8	50%	Not tested	N	Levitt et al. (2013)
	<i>Aethina tumida</i>	Pennsylvania, USA	21	5%	Not tested	N	Levitt et al. (2013)
	<i>Forficula auricularia</i>	Pennsylvania, USA	10	60%	Not tested	N	Levitt et al. (2013)
	<i>Galleria mellonella</i>	Pennsylvania, USA	21	33%	Not tested	N	Levitt et al. (2013)
	Araneae (order)	Pennsylvania, USA	10	10%	Not tested	N	Levitt et al. (2013)

ABPV	<i>B. lucorum</i>	n/a experimental infections	No data	No data	Not tested	Y	Bailey and Gibbs (1964)
		Scotland, UK	Unpublished data	Unpublished data	Unpublished data	N	Wilfert unpublished
	<i>B. ruderarius</i>	n/a experimental infections	No data	No data	Not tested	Y	Bailey and Gibbs (1964)
	<i>B. terrestris</i>	n/a experimental infections	No data	No data	Not tested	Y	Bailey and Gibbs (1964)
		Scotland, UK	Unpublished data	Unpublished data	Unpublished data	N	Wilfert unpublished
	<i>B. hortorum</i>	n/a experimental infections	No data	No data	Not tested	Y	Bailey and Gibbs (1964)
		Scotland, UK	Unpublished data	Unpublished data	Unpublished data	N	Wilfert unpublished
	<i>B. pascuorum</i>	n/a experimental infections	No data	No data	Not tested	N	Bailey and Gibbs (1964)**
		Scotland, UK	Unpublished data	Unpublished data	Unpublished data	N	Wilfert unpublished
	<i>V. destructor</i>	France (nationwide)	22,000 (22 apiaries)	36%	Not tested	n/a	Tentcheva et al. (2004)
France (360 colonies)		36,000	low	Not tested	n/a	Gauthier et al. (2007)	
SBPV	<i>B. terrestris</i>	Scotland, UK	Unpublished data	Unpublished data	Unpublished data	N	Wilfert unpublished
		Scotland, UK	Unpublished data	Unpublished data	Unpublished data	N	Wilfert unpublished
	<i>B. pascuorum</i>	Scotland, UK	Unpublished data	Unpublished data	Unpublished data	N	Wilfert unpublished
	<i>B. lucorum</i>	Scotland, UK	Unpublished data	Unpublished data	Unpublished data	N	Wilfert unpublished
	<i>B. hortorum</i>	Scotland, UK	Unpublished data	Unpublished data	Unpublished data	N	Wilfert unpublished
	<i>Eristalis pertinax</i>	Scotland, UK	Unpublished data	Unpublished data	Unpublished data	N	Wilfert unpublished
<i>Episyrrhus balteatus</i>	Scotland, UK	Unpublished data	Unpublished data	Unpublished data	N	Wilfert unpublished	
SBV	<i>B. ternarius</i>	Pennsylvania, USA	2	50%	Not tested	N	Singh et al. (2010)
		Pennsylvania, USA	1	100%/	Not tested	N	Singh et al. (2010)
	<i>B. vagans</i>	Pennsylvania, USA	2	50%	Not tested	N	Levitt et al. (2013)
		Pennsylvania, USA	13	23%	Not tested	N	Levitt et al. (2013)
	<i>V. vulgaris</i>	Pennsylvania, USA	7	57%	Not tested	N	Singh et al. (2010)
		UK, mainly southwest	45	0.45%	Not tested	N	Evison et al. (2012)
	<i>Vespula spp.</i>	Pennsylvania, USA	7	0.07%	Not tested	N	Levitt et al. (2013)
	<i>Blatella germanica</i>	Pennsylvania, USA	8	75%	Not tested		Levitt et al. (2013)
<i>Aethina tumida</i>	Pennsylvania, USA	21	11%	Not tested	N	Levitt et al. (2013)	

	<i>Forficula auricularia</i>	Pennsylvania, USA	10	50%	Not tested	N	Levitt et al. (2013)
	<i>Galleria mellonella</i>	Pennsylvania, USA	21	29%	Not tested	N	Levitt et al. (2013)
	Araneae (order)	Pennsylvania, USA	10	10%	Not tested	N	Levitt et al. (2013)
	<i>V. destructor</i>	Penn State, USA	111 (one hive)	no data	Not tested	n/a	Shen et al. (2005)
		France (nationwide)	22,000 (22 apiaries)	45%	Not tested	n/a	Tentcheva et al. (2004)
KBV	<i>A. cerana</i>	India, Kashmir	No data	No data	Not tested	Y	Bailey and Woods (1977)
	<i>Aethina tumida</i>	Pennsylvania, USA	21	44%	Not tested	N	Levitt et al. (2013)
	<i>Forficula auricularia</i>	Pennsylvania, USA	10	20%	Not tested	N	Levitt et al. (2013)
	<i>Galleria mellonella</i>	Pennsylvania, USA	21	29%	Not tested	N	Levitt et al. (2013)
	<i>V. destructor</i>	France (nationwide)	22,000 (22 apiaries)	5%	Not tested	n/a	Tentcheva et al. (2004)
	<i>V. destructor</i>	Penn State, USA	111 (one hive)	No data	Not tested	n/a	Shen et al. (2005)
IAPV	<i>B. impatiens</i>	Pennsylvania, USA	13	31%	Y	N	Levitt et al. (2013)
	<i>B. ternarius</i>	Pennsylvania, USA	2	100%	Not tested	N	Singh et al. (2010)
	<i>B. vagans</i>	Pennsylvania, USA	1	100%	Not tested	N	Singh et al. (2010)
	<i>V. vulgaris</i>	Pennsylvania, USA	7	~71%	Not tested	N	Singh et al. (2010)
	<i>Vespa velutina</i>	Hangzhou, China	10	100%	Y (head, thorax & abdomen)	N	Yañez et al. (2012)
	<i>A. cerana</i>	Hangzhou, China	180 (6 hives)	1 hive only	N***	N	Yañez et al. (2012)
	<i>Aethina tumida</i>	Pennsylvania, USA	21	78%	Not tested	N	Levitt et al. (2013)
	<i>Forficula auricularia</i>	Pennsylvania, USA	10	40%	Not tested	N	Levitt et al. (2013)
	<i>Galleria mellonella</i>	Pennsylvania, USA	21	14%	Not tested	N	Levitt et al. (2013)
	Araneae (order)	Pennsylvania, USA	10	10%	Not tested	N	Levitt et al. (2013)
	<i>V. destructor</i>	n/a (experimental)	40	n/a	Y	n/a	Di Prisco et al. (2011)
CBPV	<i>Camponotus vagus</i>	France	22 (from 2 apiaries)	No data	Y	N	Celle et al. (2008)
	<i>Formica rufa</i>	France	20 (from 2 apiaries)	No data	N	N	Celle et al. (2008)
	<i>V. destructor</i>	France	19 (from 1 apiary)	No data	Y	n/a	Celle et al. (2008)

* Bumblebees had deformed wings and were found to be positive for DWV by PCR. However, it is not proven that the symptoms are linked to the virus.

** The authors use the now out-of-date name *Bombus agrorum* to refer to *B. pascuorum*

***The authors do not believe this result to be true as replication occurred in *A. mellifera* and the two species are so similar that it seems unlikely replication does not occur in *A. cerana* as well (Yañez et al. 2012)

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