

Table S1. The global presence and estimated prevalence of the eight most common viruses of *Apis mellifera*, plus conditions that trigger pathogenicity and where they've been implicated in recent serious colony losses. Virus abbreviations: DWV - Deformed wing virus, SBV - Sacbrood virus, BQCV - Black queen cell virus, KBV - Kashmir bee virus, ABPV - acute bee paralysis virus, IAPV - Israeli acute paralysis virus, SBPV - Slow bee paralysis virus, CBPV - Chronic bee paralysis virus. Prevalence was estimated using data collected from the following surveys: (Tentcheva *et al.* 2004; Berényi *et al.* 2006; Chen *et al.* 2006; Gauthier *et al.* 2007; Ward *et al.* 2007; Nielson, Nicolaisen & Kryger 2008; Welch *et al.* 2009; Carreck, Ball & Martin 2010; Genersch *et al.* 2010; Singh *et al.* 2010; Runckel *et al.* 2011) (High prevalence +++, medium prevalence ++ and low prevalence +).

*An expanded survey could not confirm this result (vanEngelsdorp *et al.* 2009)

Virus	Global presence	% prevalence estimate	Pathogenicity association	Colony losses
DWV	Every continent except Oceania	>80% (+++)	<i>Varroa</i> (Bowen-Walker, Martin & Gunn 1999)	Germany (Genersch <i>et al.</i> 2010); UK (Carreck, Ball & Martin 2010)
SBV	Every continent	10-90% (++)	Seasonal, brood density	
BQCV	Every continent	>80% (+++)	<i>Nosema</i> (Bailey 1982)	
KBV	N. America, Oceania and Europe	<20% (++)	<i>Varroa</i> (Chen <i>et al.</i> 2004)	
ABPV	Every continent except Oceania	High, variable (++)	<i>Varroa</i> (Genersch <i>et al.</i> 2010)	Germany (Genersch <i>et al.</i> 2010)
IAPV	N. America, Oceania and Europe	<25% in Europe, high elsewhere (++)	<i>Varroa</i> (Di Prisco <i>et al.</i> 2011)	USA (Cox-Foster 2007)*
SBPV	Europe and Oceania	<2% (+)	<i>Varroa</i> (Carreck, Ball & Martin 2010)	UK (Carreck, Ball & Martin 2010)
CBPV	Every continent except S. America	<10% (+)	Colony Density (Ribière, Olivier & Blanchard 2010)	

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