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 +).

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.

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

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

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