

Table 1. Infectious agents identified as hazards in the risk analysis for the reintroduction of the short-haired bumblebee, *B. subterraneus*

(adapted from Vaughan-Higgins et al., 2012a)

Name of Hazard	Non-native to UK	Found in Sweden	Strain differences considered?	Type of hazard	Risk category
Acute Bee Paralysis Virus (ABPV)	No	Yes	Potentially	Source Destination	Low Medium
<i>Apicystis bombi</i> (Neogregarine)	No	Yes	Potentially	Source Destination	Low Medium
<i>Beauveria bassiana</i> (Fungus)	No	Yes	Potentially	Source Destination	Low Low
<i>Crithidia bombi</i> (Trypanosome)	No	Yes	Potentially	Source Destination	Medium High
Deformed Wing	No	Yes	Potentially	Source	Medium

<i>Locustacarus buchneri</i> (Tracheal mite)	No	Yes	Potentially	Source Destination	Low Low
<i>Nosema bombi</i> (Microsporidian)	No	Yes	Potentially	Source Destination	Low Low
<i>Metarhizium anisopliae</i> (Fungus)	No	Yes	Potentially	Source Destination	Low Low
<i>Paecilomyces farinosus</i> (Fungus)	No	Yes	Potentially	Source Destination	Low Low
<i>Verticillium lecanii</i> (Fungus)	No	Yes	Potentially	Source Destination	Low Low
<i>Sphaerularia bombi</i> (Nematode)	No	Yes	Potentially	Source Destination	Medium Medium
Kashmir Bee Virus (KBV)	Yes (in <i>Apis mellifera</i> )	No	Potentially	Destination	Low
<i>Melittobia acasta</i>	No	Yes	Potentially	Destination	Medium

(Chalcidoid wasp)					
<i>Aspergillus candidus</i> (Fungus)	No	Yes	-	Transport	Low
<i>Paenibacillus larvae</i> (Bacterium)	No	Yes	Potentially	Source Destination	Low Low

Table 2. Parasite prevalence (with 95% confidence intervals) for *B. subterraneus* queens collected in Sweden for reintroduction to the UK and tested in quarantine.

	2012 (N = 89)	2013 (N = 100)	2014 (N = 100)	2015 (N = 67)
<i>Apicystis bombi</i>	0 (0-0.041)	0.04 (0.011-0.100)	0 (0-0.036)	0.04 (0.001-0.125)
<i>Crithidia bombi</i>	0.11 (0.005-0.197)	0.21 (0.135-0.303)	0.10 (0.049-0.176)	0.36 (0.245-0.485)
<i>Nosema bombi</i>	0.01 (0.003-0.061)	0.02 (0.002-0.070)	0.02 (0.002-0.070)	0 (0-0.054)
<i>Sphaerularia bombi</i>	0 (0-0.041)	0.02 (0.002-0.070)	0 (0-0.036)	0 (0-0.054)
<i>Syntretus</i> sp.	0.16 (0.089-0.250)	0.15 (0.087-0.235)	0.27 (0.186-0.368)	0.09 (0.034-0.185)

Table 3. Viral prevalence (with 95% confidence intervals) for *B. subterraneus* queens that died or were sacrificed during quarantine in the UK.

	2012 (N = 39)	2013 (N = 50)	2014 (N = 53)	2015 (N = 42)
Acute Bee Paralysis Virus (ABPV)	0 (0-0.090)	0 (0-0.071)	0 (0-0.067)	0 (0-0.084)
Black Queen Cell Virus (BQCV)	0 (0-0.090)	0.02 (0.001-0.107)	0 (0-0.067)	0 (0-0.084)
Deformed Wing Virus (DWV)	0 (0-0.090)	0 (0-0.071)	0 (0-0.067)	0 (0-0.084)
Israeli Acute Bee Paralysis Virus (IAPV)	0 (0-0.090)	0 (0-0.071)	0 (0-0.067)	0 (0-0.084)
Kashmir Bee Virus (KBV)	0 (0-0.090)	0 (0-0.071)	0 (0-0.067)	0 (0-0.084)
Sacbrood Virus (SBV)	0 (0-0.090)	0 (0-0.071)	0 (0-0.067)	0 (0-0.084)