

## SUPPLEMENTARY MATERIALS

to the article: V.Y. Vavilova, I. Konopatskaia, S.L. Luzyanin, M. Woyciechowski, A.G. Blinov  
 “Parasites of the genus *Nosema*, *Crithidia* and *Lotmaria* in the honeybee and bumblebee populations:  
 a case study in India”

**Table S1.** The literature references about microsporidian parasites, *N. apis* and *N. ceranae*, in honeybees

Country	<i>N. apis</i> infection	<i>N. ceranae</i> infection	References
Argentina	NI	+	Branchiccela et al., 2017
Australia	+	+	Rice, 2001; Dosselli et al., 2016; Sagastume et al., 2016
Belgium	+	+	Ravoet et al., 2013
Brazil	+	+	Gatehouse, Malone, 1999; Klee et al., 2007; Teixeira et al., 2013; Branchiccela et al., 2017
Canada	+	+	Gatehouse, Malone, 1999; Rice, 2001; Hamiduzzaman et al., 2010; Shutler et al., 2014; Emsen et al., 2016; Branchiccela et al., 2017
China	+	+	Chen et al., 2009a; Yang et al., 2013
Croatia		+	Branchiccela et al., 2017
Czech Republic	+	+	Hubert et al., 2017
Denmark	+	+	Klee et al., 2007
Finland	+	+	Gatehouse, Malone, 1999; Klee et al., 2007
France	NI	+	Sagastume et al., 2016; Branchiccela et al., 2017
Germany	+	+	Klee et al., 2007; Sagastume et al., 2016; Wells et al., 2016; Gisder et al., 2017
Greece	-	+	Klee et al., 2007; Bacandritsos et al., 2010
Hungary	+	+	Klee et al., 2007; Csáki et al., 2015
Indonesia	+	-	Rice, 2001
Iran	-	+	Nabian et al., 2011
Ireland	+	+	Klee et al., 2007
Israel	+	-	Gatehouse, Malone, 1999
Italy	+	+	Gatehouse, Malone, 1999; Klee et al., 2007; Porrini et al., 2016; Branchiccela et al., 2017
Japan	+	+	Chen et al., 2009a; Morimoto et al., 2013
Kenya	+	-	Muli et al., 2014
Mexico	NI	+	Guerrero-Molina et al., 2016
Mongolia	-	+	Tsevegmid et al., 2016
New Zealand	+	+	Gatehouse, Malone, 1998, 1999; Rice, 2001; Klee et al., 2007
Poland	+	+	Ptaszyńska et al., 2016
Portugal		+	Branchiccela et al., 2017
Russia	+	+	Zinatullina et al., 2013; Ostroverkhova et al., 2016a,b
Saudi Arabia	-	+	Ansari et al., 2017
Serbia	-	+	Klee et al., 2007; Stevanovic et al., 2016
Slovakia	NI	+	Sagastume et al., 2016
Slovenia	NI	+	Sagastume et al., 2016; Branchiccela et al., 2017
Spain	+	+	Klee et al., 2007; Higes et al., 2010; Jara et al., 2012, 2015; Botías et al., 2013; Cepero et al., 2014; Sagastume et al., 2016; Branchiccela et al., 2017
Sweden	+	+	Gatehouse, Malone, 1999; Klee et al., 2007; Forsgren, Fries, 2013
Switzerland	+	+	Gatehouse, Malone, 1999; Dainat et al., 2012; Sagastume et al., 2016; Branchiccela et al., 2017; Tritschler et al., 2017
Taiwan	+	+	Chen et al., 2009a
the Netherlands	NI	+	Branchiccela et al., 2017
Turkey	+	+	Whitaker et al., 2011; Ivgin Tunca et al., 2016; Branchiccela et al., 2017
UK	+	+	Gatehouse, Malone, 1999; Klee et al., 2007; Budge et al., 2015; Roberts et al., 2015
Uruguay		+	Branchiccela et al., 2017
USA	+	+	Gatehouse, Malone, 1998; Klee et al., 2007; Chen et al., 2008, 2009b; Traver, Fell, 2011; Traver et al., 2012; Zheng et al., 2015; Cavigli et al., 2016
Vietnam	-	+	Klee et al., 2007
Zimbabwe	+	-	Fries et al., 2003

**Table S2.** The literature references about trypanosomatid parasites, *C. mellifecae* and *L. passim*, in honeybees

Country	<i>C. mellifecae</i> infection	<i>L. passim</i> infection	References
Australia	+	NI	Langridge, McGhee, 1967
Belgium	+	+	Ravoet et al., 2015; Schwarz et al., 2015
Japan	-	+	Ravoet et al., 2015
Serbia	-	+	Stevanovic et al., 2016
Spain	+	NI	Cepero et al., 2014
Switzerland	-	+	Ravoet et al., 2015; Tritschler et al., 2017
USA	+	NI	Runckel et al., 2011; Cornman et al., 2012

**Table S3.** The literature references about trypanosomatid parasites, *C. bombi*, *C. expoeki* and *C. mexicana*, in bumblebees

Country	<i>C. bombi</i> infection	<i>C. expoeki</i> infection	<i>C. mexicana</i> infection	References
Argentina	+	NI	NI	Schmid-Hempel et al., 2014
Argentina	+	NI	NI	Plischuk et al., 2017
Belgium	+	NI	NI	Meeus et al., 2010
Chile	+	NI	NI	Schmid-Hempel et al., 2014
England	+	NI	NI	Graystock et al., 2014
Germany	+	NI	NI	Popp et al., 2012
Germany	+	NI	NI	Erlor et al., 2012
Italy	+	NI	NI	Lipa, Triggiani, 1988
Mexico	-	+	+	Gallot-Lavallée et al., 2016
Russia	+	NI	NI	Gorbunov, 1987
Switzerland	+	+	NI	Schmid-Hempel, Reber Funk, 2004; Schmid-Hempel, Tognazzo, 2010; Salathé, Schmid-Hempel, 2011

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