

**Appendix A:**  
**Supplementary Materials**

**Table 1.** Microbial counts of fresh *T. molitor* larvae in log CFU/g.

Sample	Batch	Total aerobic count (TAC)	Bacterial endospores	Lactic acid bacteria(LAB )	<i>Enterobacteriaceae</i>	Yeasts and molds	Yeast	Molds
A	1	8.5±0.0	5.3±0.0	8.1±0.0	/	4.2	3.9*	3.9*
	2	8.3±0.0	3.5±0.1	7.9±0.1	>4.2	3.8*	2.3	3.8*
	Mean	8.4±0.0	5.0±0.0	8.0±0.1	>4.2	4.0	3.1	3.8
AR	1	8.4±0.0	4.1±0.1	8.0±0.1	/	/	/	4.0*
	2	8.5±0.0	3.6±0.1	7.9±0.1	/	/	/	4.0*
	Mean	8.4±0.0	3.9±0.1	7.9±0.1	/	/	/	4.0

\* Calculation performed on one dilution; / Not tested

**Table 2.** Microbial hazards detection of fresh *T. molitor* larvae in log CFU/g.

Sample	Batch	<i>E.coli</i>	Sulfite-reducing anaerobes	Coagulase-positive <i>staphylococci</i>	<i>Bacillus cereus</i>	<i>Clostridium perfringens</i>	<i>Listeria monocytogenes</i>	<i>Salmonella</i> spp.	<i>Cronobacter sakazakii</i>
A	1	<1.0	1.0**	<2.0	<1.0	<1.0	ND	ND	ND
	2	<1.0	<1.0	<2.0	<1.0	<1.0	ND	ND	ND
	Mean	<1.0	<1.0	<2.0	<1.0	<1.0	ND	ND	ND

\*\* Estimated number; ND not detected

**Table 3.** Microbial counts of *T. molitor* powder in log CFU/g.

Sample	Batch	Total aerobic count (TAC)	Bacterial endospores	Lactic acid bacteria (LAB)	<i>Enterobacteriaceae</i>	Yeasts and molds	Yeast	Molds
PA-P	1	5.6±0.1	2.5±0.1	3.9±0.1	3.6*	3.4*	3.4*	1.5**
	2	4.6±0.1	2.2±0.1	3.2±0.0	2.0**	<1.0	<1.0	<1.0
	Mean	5.3±0.1	2.4±0.1	3.7±0.1	2.8	<2.2	<2.2	<2.2
PB-P	1	4.4±0.0	2.3±0.1	2.0±0.2*	<1.0	<1.0	<1.0	<1.0
	2	4.9±0.1	2.2±0.1	3.2±0.0	2.8	<1.0	<1.0	<1.0
	Mean	4.7±0.1	2.2±0.1	3.0±0.0	<1.9	<1.0	<1.0	<1.0
PC-P	1	5.5±0.1*	2.6±0.1	5.1±0.1	3.4*	<1.6	<1.0	1.5**
	2	5.5±0.1*	2.4±0.1	3.8±0.1	3.2	2.1	2.1	1.0**
	Mean	5.5±0.1	2.5±0.1	4.8±0.1	3.3	<1.9	<1.6	1.3
PD-P	1	8.5±0.0	5.2±0.0	7.8±0.1	>4.2	2.6	2.0**	2.5
	2	8.8±0.1	4.4±0.0	8.3±0.0	>4.2	2.9	2.5	2.7
	Mean	8.6±0.1	4.9±0.0	8.1±0.0	>4.2	2.8	2.3	2.6

\* Calculation performed on one dilution; \*\* Estimated number

**Table 4.** Microbial hazards detection of *T. molitor* powder in log CFU/g.

Sample	Batch	<i>E.coli</i>	Sulfite-reducing anaerobes	Coagulase-positive staphylococci	<i>Bacillus cereus</i>	<i>Clostridium perfringens</i>	<i>Listeria monocytogenes</i>	<i>Salmonella</i> spp.	<i>Cronobacter sakazakii</i>
PA-P	1	<1.0	<1.0	<2.0	<1.0	<1.0	/	/	/
	2	<1.0	<1.0	<2.0	<1.0	<1.0	/	/	/
	Mean	<1.0	<1.0	<2.0	<1.0	<1.0	/	/	/
PB-P	1	<1.0	<1.0	<2.0	<1.0	<1.0	/	/	/
	2	<1.0	<1.0	<2.0	<1.0	<1.0	/	/	/
	Mean	<1.0	<1.0	<2.0	<1.0	<1.0	/	/	/
PC-P	1	<1.0	<1.0	<2.0	<1.0	<1.0	/	/	/
	2	<1.0	<1.0	<2.0	<1.0	<1.0	/	/	/
	Mean	<1.0	<1.0	<2.0	<1.0	<1.0	/	/	/
PD-P	1	<1.0	<1.0	<2.0	<1.0	<1.0	/	/	/
	2	<1.0	<1.0	<2.0	<1.0	<1.0	/	/	/
	Mean	<1.0	<1.0	<2.0	<1.0	<1.0	/	/	/

/ Not tested

**Table 5.** Log reduction of significant hazards estimated with D<sub>ref</sub>-values for two heat treatments.

Log reduction	<i>B. Cereus</i> (spore)	<i>C. botulinum</i> group I (spore)	<i>C. perfringens</i> (spore)	<i>Cronobacter</i> spp.	<i>E. coli</i> STEC	<i>L. monocytogenes</i>	<i>S. aureus</i>	<i>Salmonella</i> spp.	<i>S. aureus</i> enterotoxin
100°C for 5 min	6.28	0.18	0.12	15789721.53*	863245.78*	3799.78*	258973.73*	1187585.56*	0.03
80°C for 30 min	0.95	0.01	0.02	25415.41*	1199.48*	346.52*	2159.06*	5968.88*	0.05

\* Replaced by >12 in Figure