

Mutual Influence between Polyvinyl Chloride (Micro)Plastics and Black Soldier Fly Larvae (*Hermetia illucens* L.)

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Table S1. Intended and experimental dry matter content of the used rearing substrates.

Substrate topology	Intended dry matter (%)	Experimental dry matter (%)
Gainesville diet	25	25.71 ± 1.12
Artificial food waste	25	22.93 ± 0.73

Table S2. Dry matter content of both the initial larvae, the larvae at the end of the rearing cycle, and the rearing residue.

	Substrate topology	Dry matter larvae (%)	Dry matter residue (%)
1000 mg/larvae	CS1	$27.31 \pm 3.03^{A, B}$	$22.13 \pm 2.42^{A, C}$
	CS2	$32.05 \pm 1.41^{B, C}$	$15.38 \pm 2.20^{A, B}$
	RS1	$34.05 \pm 0.59^{B, C}$	$14.63 \pm 1.71^{A, B, C}$
	RS2	$32.64 \pm 0.82^{B, C}$	$17.55 \pm 2.58^{A, B, C}$
	RS3	32.16 ± 1.34^C	19.55 ± 1.64^C
667 mg/larvae	CS1	$25.28 \pm 0.86^{A, B}$	$29.48 \pm 6.31^{C, D}$
	CS2	$31.50 \pm 1.55^{B, C}$	$15.15 \pm 0.82^{A, B}$
	RS1	$32.94 \pm 0.71^{B, C}$	$14.68 \pm 1.64^{A, B, C}$
	RS2	30.38 ± 1.67^C	$13.40 \pm 0.32^{C, D}$
	RS3	$32.42 \pm 0.30^{B, C}$	33.87 ± 15.66^D
	Initial larvae	$28.92 \pm 0.60^{B, C}$	

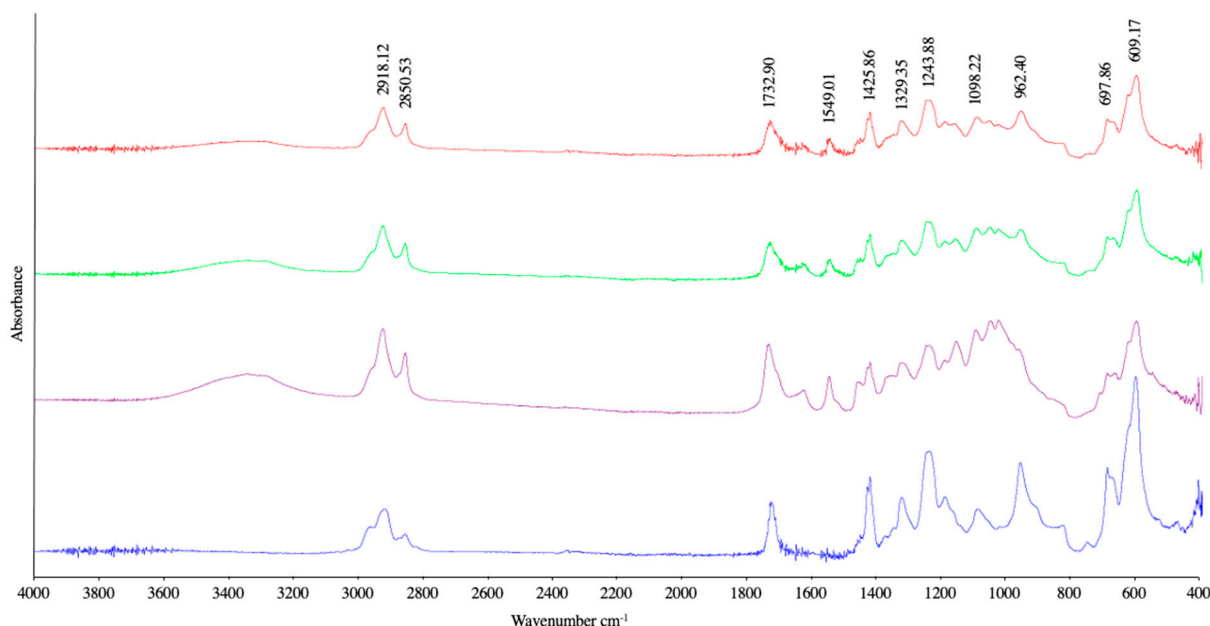


Figure S1. FTIR spectra of the remaining microplastics. The red and green curve represents the microplastics, which were in contact with the BSFL provided with a feed amount of 667 and 1000 mg substrate/larva, respectively. The purple curve depicts the microplastics, which had no contact with BSFL, while the blue displays the control microplastics.

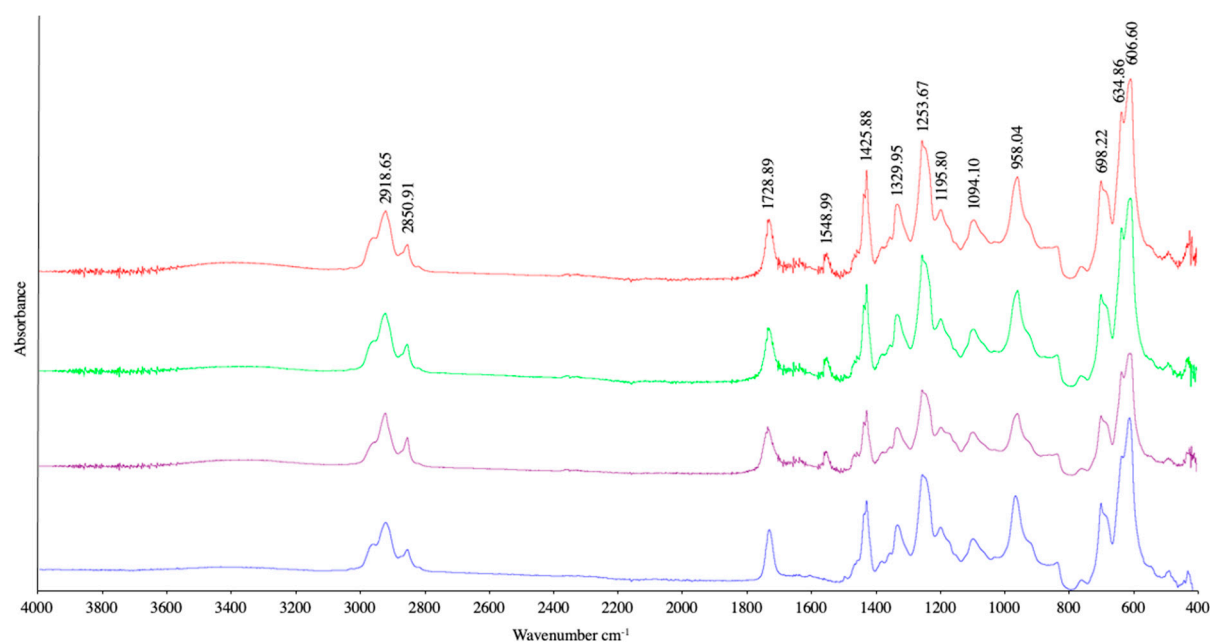


Figure S2. FTIR spectra of the remaining mesoplastics. The red and green curve represents the mesoplastics, which were in contact with the BSFL provided with a feed amount of 667 and 1000 mg substrate/larva, respectively. The purple curve depicts the mesoplastics, which had no contact with BSFL, while the blue displays the control mesoplastics.

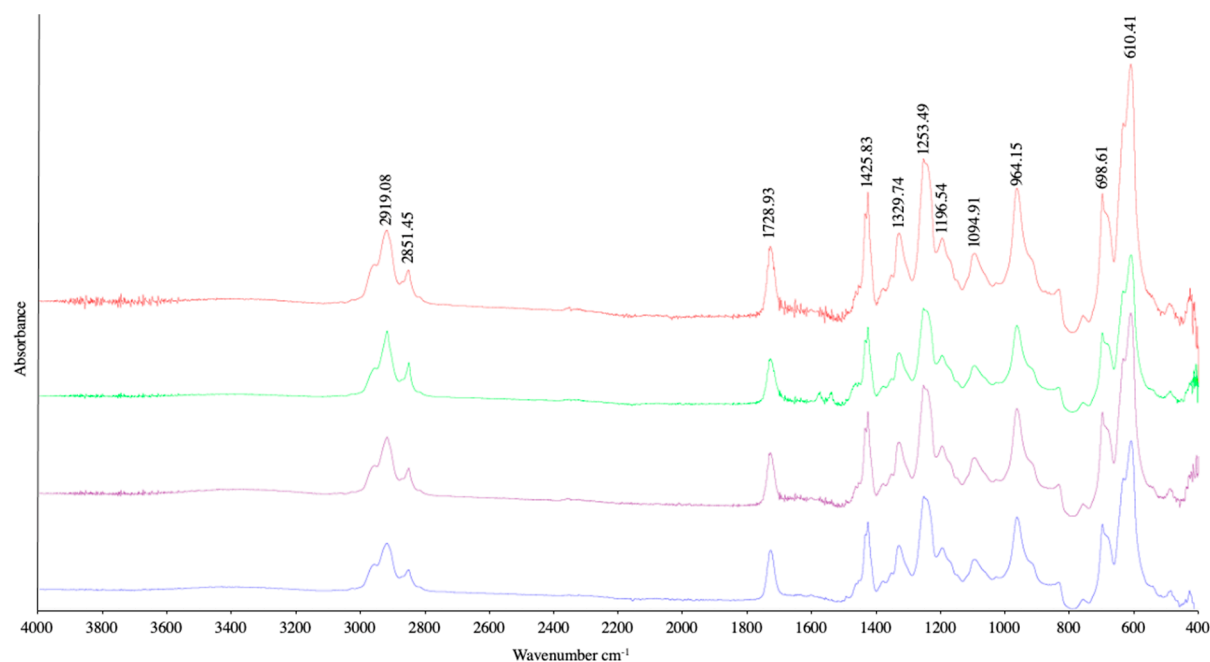


Figure S3. FTIR spectra of the remaining macroplastics. The red and green curve represents the macroplastics, which were in contact with the BSFL provided with a feed amount of 667 and 1000 mg substrate/larva, respectively. The purple curve depicts the macroplastics, which had no contact with BSFL, while the blue displays the control macroplastics.

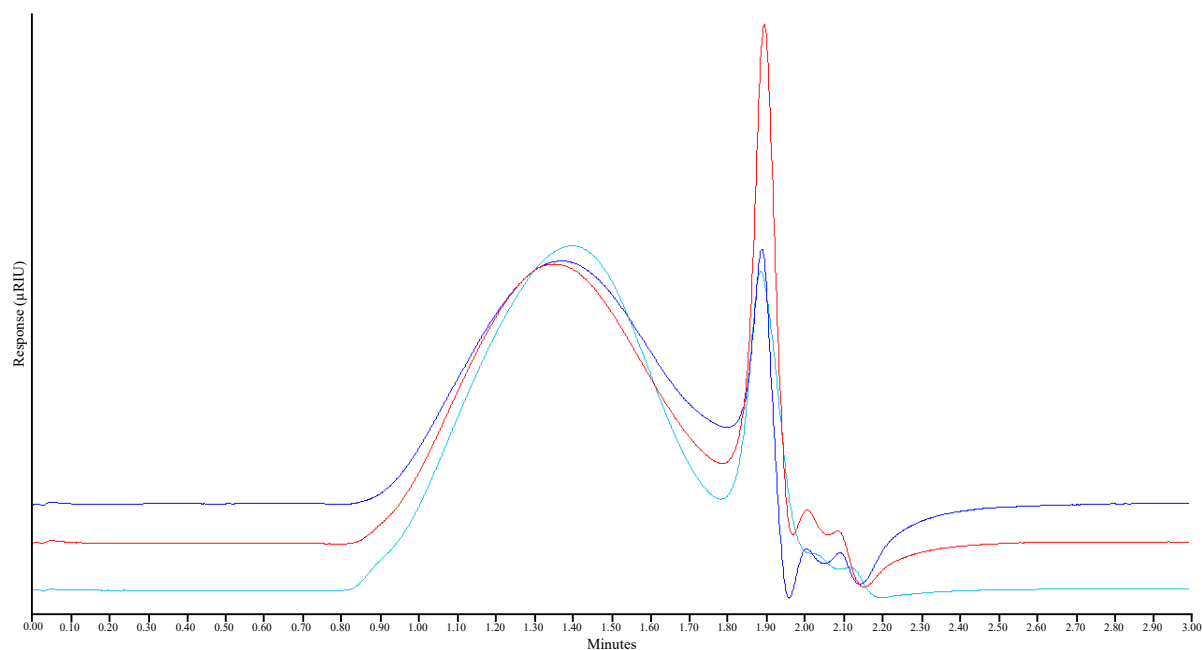


Figure S4. Overlay of the normalised IR signals of microplastics which were not in contact with BSF larvae (red), and which were in contact with BSF larvae provided with a feed amount of 667 (light blue) and 1000 (dark blue) mg substrate/larva.

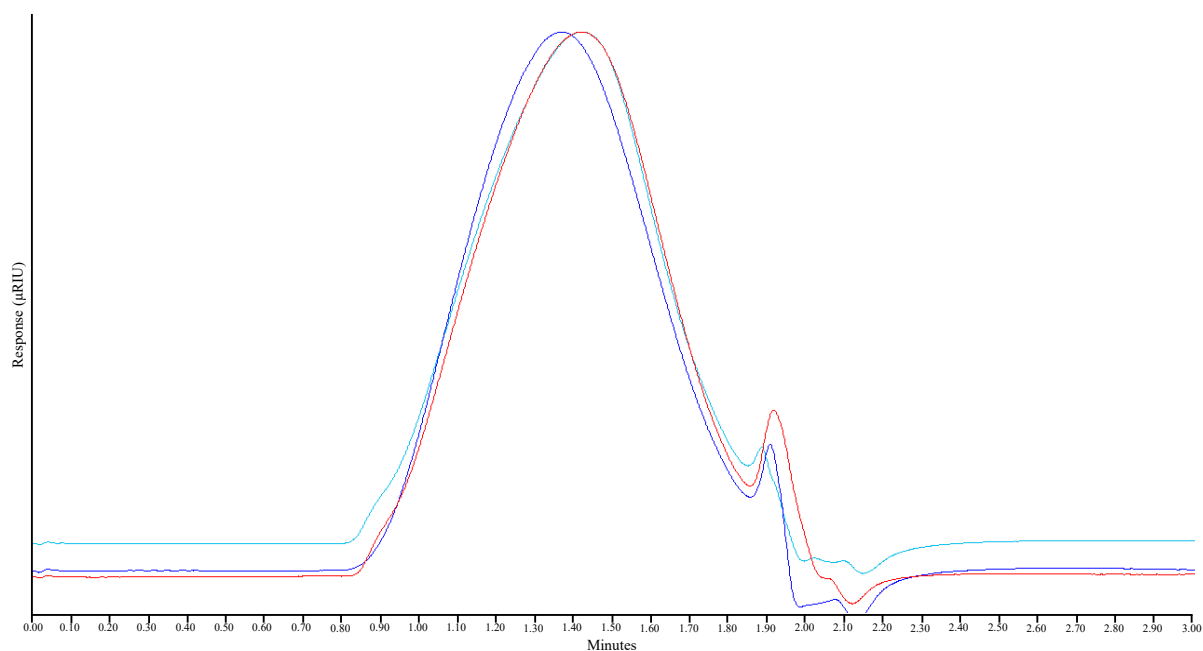


Figure S5. Overlay of the normalised IR signals of mesoplastics which were not in contact with BSF larvae (red), and which were in contact with BSF larvae provided with a feed amount of 667 (light blue) and 1000 (dark blue) mg substrate/larva.

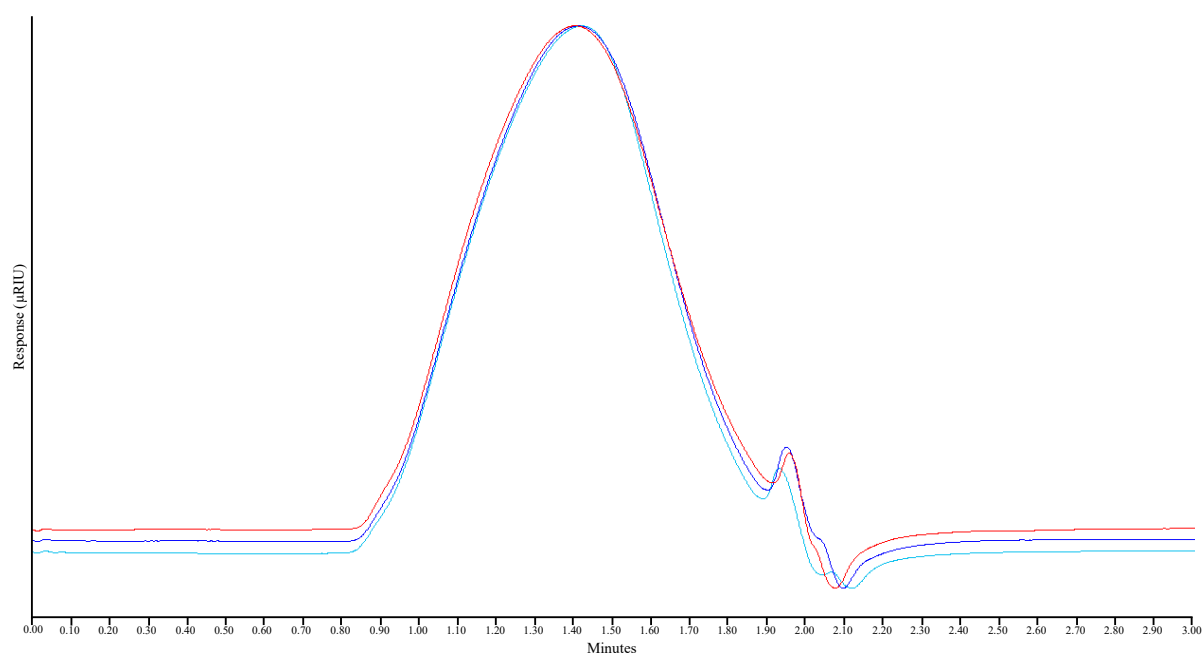


Figure S6. Overlay of the normalised IR signals of macroplastics which were not in contact with BSF larvae (red), and which were in contact with BSF larvae provided with a feed amount of 667 (light blue) and 1000 (dark blue) mg substrate/larva.