

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

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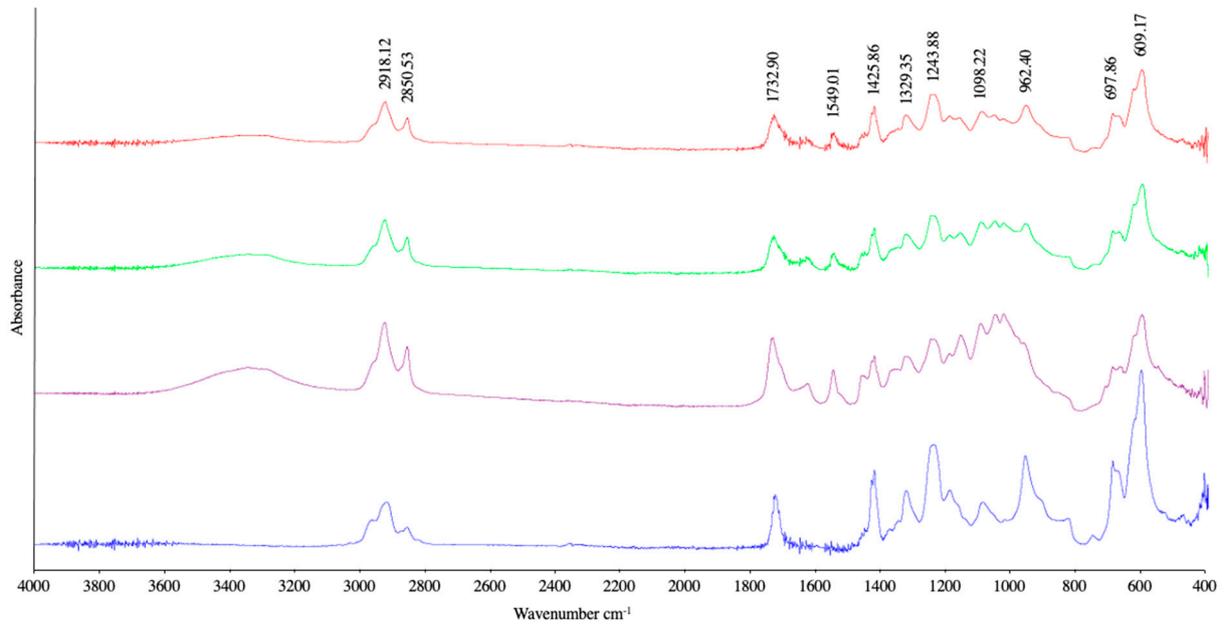
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**Table S1.** Intended and experimental dry matter content of the used rearing substrates.

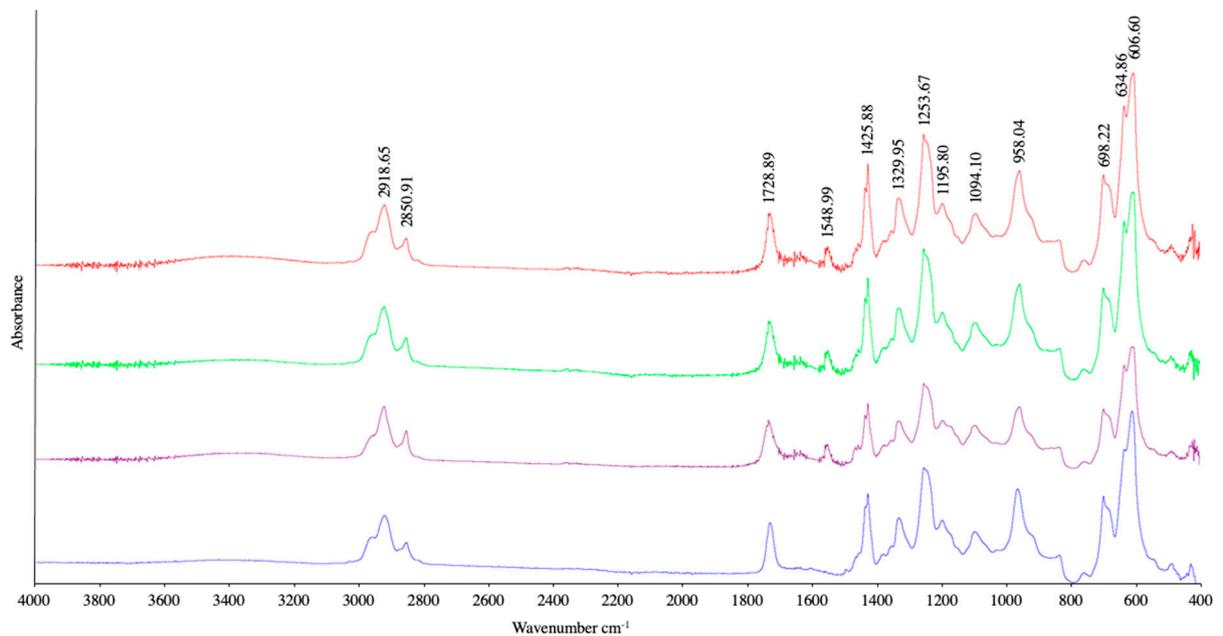
Substrate topology	Intended dry matter (%)	Experimental dry matter (%)
Gainesville diet	25	25.71 ± 1.12
Artificial food waste	25	22.93 ± 0.73

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

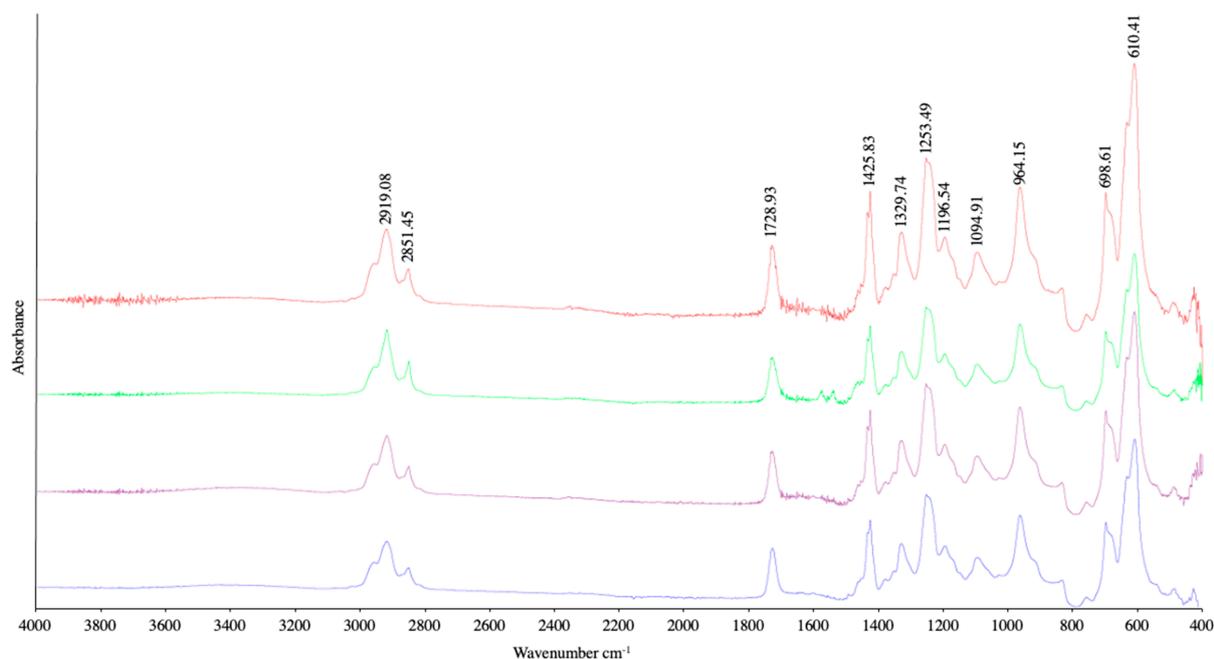
	Substrate topology	Dry matter larvae (%)	Dry matter residue (%)
<b>1000 mg/larvae</b>	CS1	27.31 ± 3.03 <sup>A, B</sup>	22.13 ± 2.42 <sup>A, C</sup>
	CS2	32.05 ± 1.41 <sup>B, C</sup>	15.38 ± 2.20 <sup>A, B</sup>
	RS1	34.05 ± 0.59 <sup>B, C</sup>	14.63 ± 1.71 <sup>A, B, C</sup>
	RS2	32.64 ± 0.82 <sup>B,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



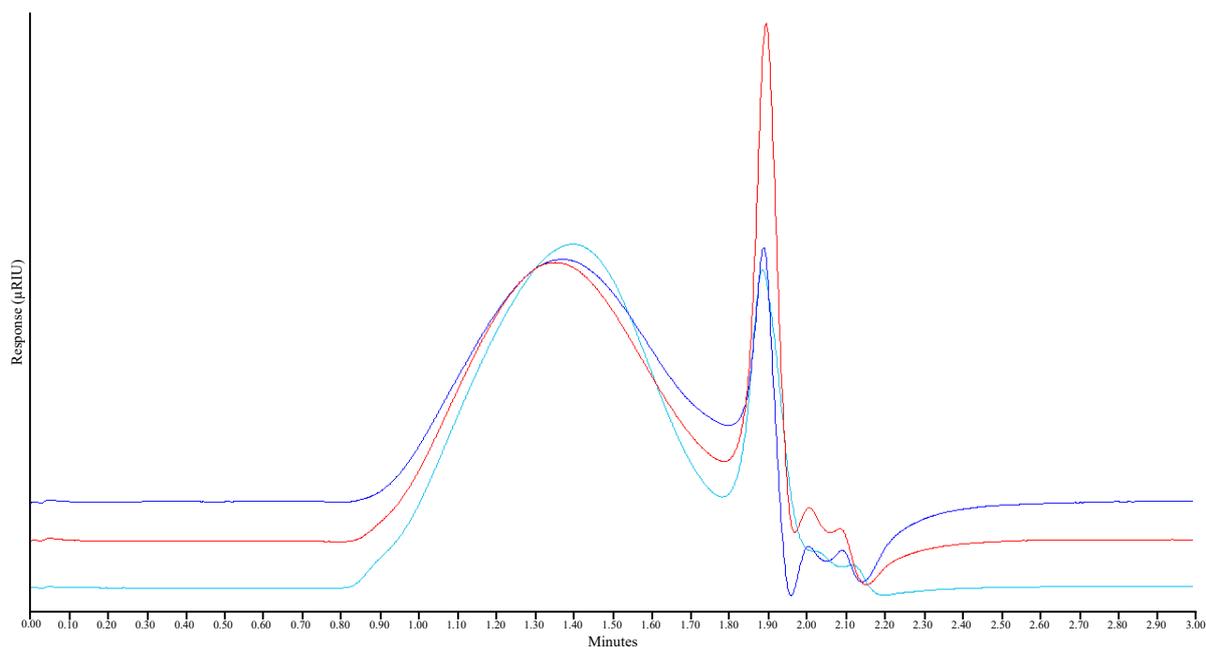
**Figure S1.** FTIR spectra of the remaining microplastics. The red and green curve represents the microplastics, which were in contact with the BSFL provided with a feed amount of 667 and 1000 mg substrate/larva, respectively. The purple curve depicts the microplastics, which had no contact with BSFL,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



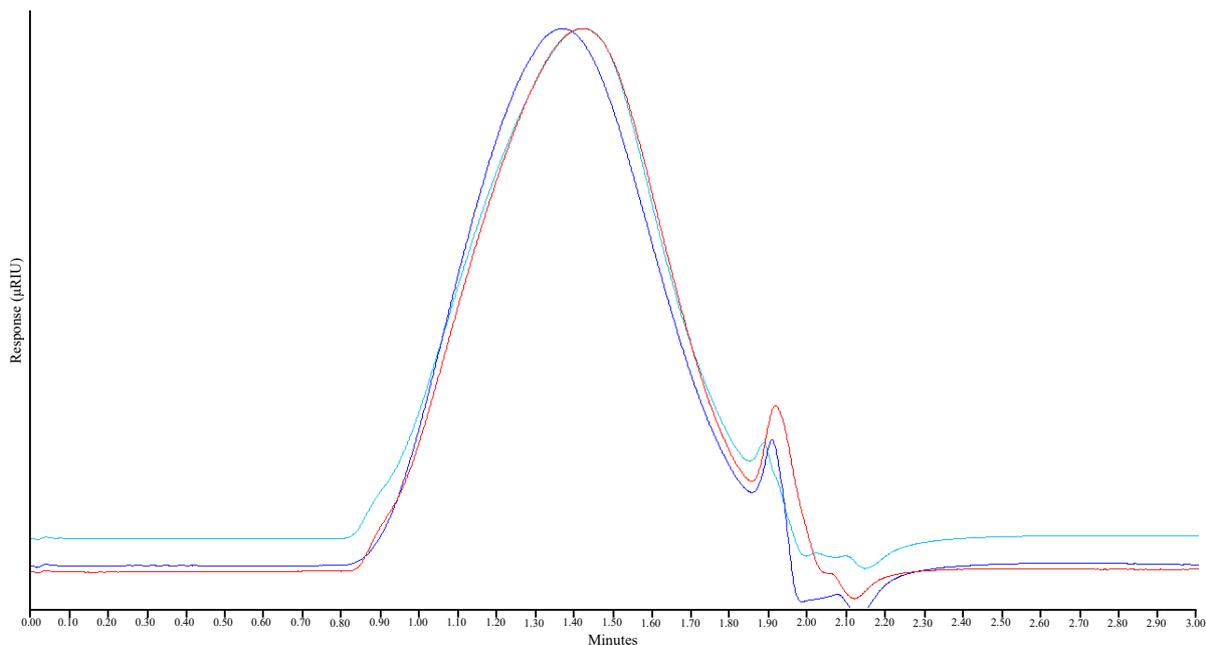
**Figure S2.** FTIR spectra of the remaining mesoplastics. The red and green curve represents the mesoplastics, which were in contact with the BSFL provided with a feed amount of 667 and 1000 mg substrate/larva, respectively. The purple curve depicts the mesoplastics, which had no contact with BSFL,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



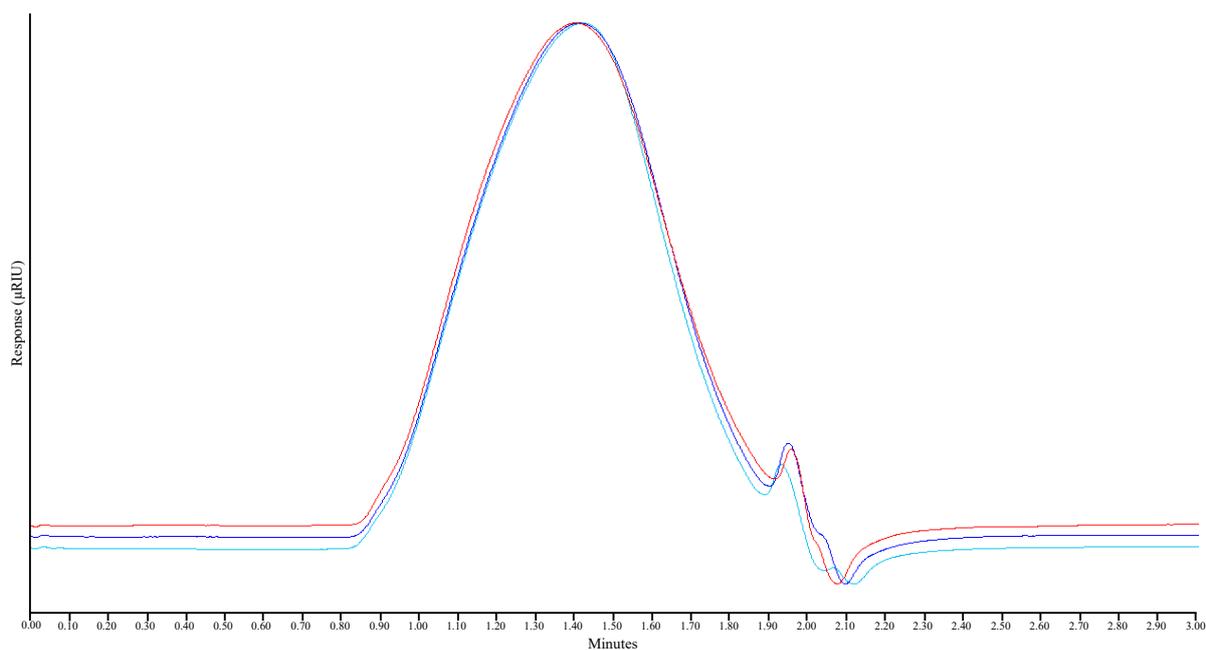
**Figure S3.** FTIR spectra of the remaining macroplastics. The red and green curve represents the macroplastics, which were in contact with the BSFL provided with a feed amount of 667 and 1000 mg substrate/larva, respectively. The purple curve depicts the macroplastics, which had no contact with BSFL,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