

SUPPLEMENTARY MATERIAL to the article: Understanding the metabolism and dissipation kinetics of flutriafol in vegetables under laboratory and greenhouse scenarios

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Table S1. Parameters of greenhouse experiment[†]

Study location	Retamar, Almeria, Spain
Orientation	East-West
Area	727.2 m ²
Working field	156 plants
Agricultural model	Passive climate control systems with 4% ventilation and side windows (12.9% ventilation)
Cultivation system	Hydroponic crop
Irrigation water	0.6-3.0 dS/m
Application dose	0.090 L/h
Air temperature (greenhouse indoor)	16.5°C
Binomial plant name	<i>Solanum lycopersicum</i> L.(tomato)
Plant stage at pesticide application	Bloom
BBCN scale	60

[†] Abbreviations: BBCN-scale: Biologische Bundesanstalt, Bundessortenamt und CHemische Industrie, used to identify the phenological development stages of plants.

Table S2. Concentration ($\mu\text{g}/\text{kg}$) of unknown flutriafol metabolites under laboratory conditions at single dose [†]

Metabolite	Sampling period (days)										
	2 h	6 h	1	2	5	10	15	22	29	36	43
MF1	--	--	--	--	--	--	--	--	2.7	--	2.9
MF3	--	--	--	--	<LOQ _f	--	--	<LOQ _f	--	--	--
MF4	--	--	--	--	<LOQ _f	--	<LOQ _f	--	<LOQ _f	<LOQ _f	--

[†] Abbreviations: MF1: metabolite 2; MF3: metabolite 3; MF4: metabolite 4; <LOQ_f: compound detected below limit of quantification of flutriafol (2 $\mu\text{g}/\text{kg}$), but not quantified; --: compound not detected.

Table S3. Concentration ($\mu\text{g}/\text{kg}$) of unknown flutriafol metabolites under laboratory conditions at double dose [†]

Metabolite	Sampling period (days)										
	2 h	6 h	1	2	5	10	15	22	29	36	43
MF1	--	--	--	--	--	--	--	2.8	3.1	--	5.6
MF3	--	--	--	--	<LOQ _f	--	--	<LOQ _f	--	--	--
MF4	--	--	--	--	<LOQ _f						

[†] Abbreviations: MF1: metabolite 2; MF3: metabolite 3; MF4: metabolite 4; <LOQ_f: compound detected below limit of quantification of flutriafol (2 $\mu\text{g}/\text{kg}$), but not quantified; --: compound not detected.

Triazol alanine

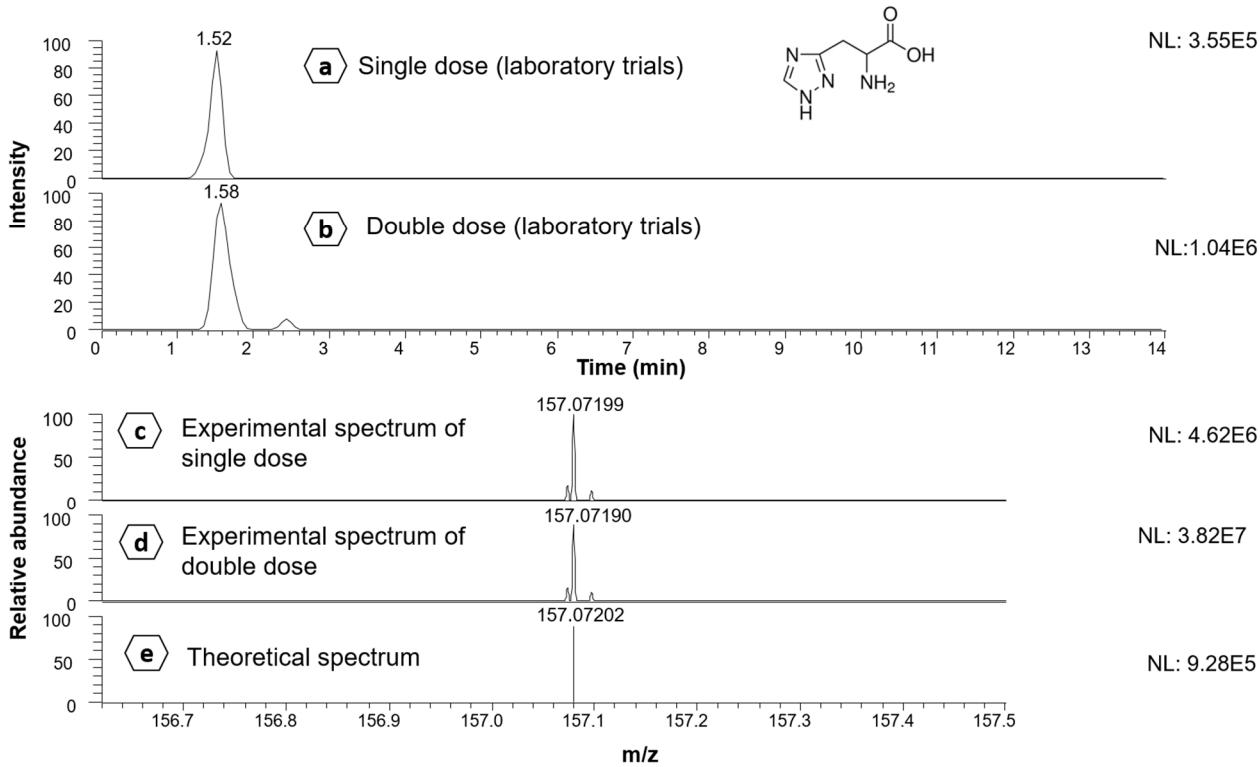


Figure S1. Extracted Ion Chromatograms of triazol alanine at 48 h under laboratory conditions: a) single dose; b) double dose; c) full Scan MS experimental spectrum of single dose; d) full Scan MS experimental spectrum of double dose; and e) full Scan MS theoretical spectrum