

Table 1. Influence of hemp fractions under nitrogen fertilization regimens on VFA and N-NH3 in vitro production

Item ¹	Treatments ²						SEM	TRT	P-value	
	TOFL	TOST	T100FL	T100ST	T200FL	T200ST			Time	TRT x Time
N-NH3, mg/dl	32.3	36.4	30.1	32.0	30.2	37.6	5.020	0.8508	0.1218	0.7295
Total VFA, mmol/ g of DM	17.9 ^a	26.2 ^b	22.1 ^c	24.4 ^d	18.6 ^a	23.6 ^d	0.283	<0.0001	<0.0001	<0.0001
Total VFA,mmol										
Acetate	14.5 ^a	21.7^b	17.9 ^c	19.4 ^d	15.5 ^e	19.1 ^d	0.158	<0.0001	<0.0001	<0.0001
Propionate	1.71 ^a	2.07 ^b	2.18 ^b	2.03 ^b	1.78 ^a	2.29^c	0.024	<0.0001	<0.0001	<0.0001
Butyrate	1.265 ^{ac}	1.727 ^a	1.610 ^a	2.456^b	0.947 ^c	1.782 ^a	0.163	<0.0001	0.0015	<0.0001
Valerate	0.083	0.077	0.045	0.085	0.041	0.050	0.020	0.3903	0.0035	0.1644
Isobutyrate	0.078 ^a	0.098^b	0.082 ^{ac}	0.084 ^c	0.077 ^a	0.086 ^c	0.001	<0.0001	<0.0001	<0.0001
Isovalerate	0.298 ^{ac}	0.438^b	0.312 ^{ac}	0.311 ^{ac}	0.282 ^c	0.319 ^a	0.007	<0.0001	<0.0001	<0.0001
A:P	8.39 ^a	10.55 ^b	7.93 ^c	9.50 ^d	8.61 ^a	8.06 ^c	0.053	<0.0001	<0.0001	<0.0001
Proportion, %										
Acetate	80.7 ^{ab}	83.0 ^a	80.6 ^{ab}	79.4 ^b	82.9 ^a	80.5 ^{ab}	0.640	0.0001	0.0009	0.4311
Propionate	9.71 ^a	7.88 ^b	10.29 ^c	8.36	9.69 ^{ad}	10.08 ^{acd}	0.083	<0.0001	<0.0001	<0.0001
Butyrate	6.90 ^a	6.80 ^a	6.91 ^a	10.26 ^b	5.23 ^a	7.28 ^{ab}	0.691	<0.0001	0.1948	0.0049

¹N-NH3: ammonia nitrogen, VFA: Volatile fatty acids, DM: dry matter, A:P: acetate to propionate ratio; ²TOFL: floral fraction with no nitrogen fertilization, TOST: stem and leaves fraction with no nitrogen fertilization, T100FL: floral fraction with 100 kg ha⁻¹ nitrogen fertilization, T100ST: stem and leaves fraction with 100 kg ha⁻¹ nitrogen fertilization, T200FL: floral fraction with 200 kg ha⁻¹ nitrogen fertilization, T200ST: stem and leaves fraction with 200 kg ha⁻¹ nitrogen fertilization,