Table S1. Evaluation of the hygienic status of hay by sensory analysis in accordance with Kamphues et al. [1].

Parameters	nutritional value		hygienic status	
	findings	points deducted	findings	points deducted
Texture	soft and leafy ((a lot) inflorescence)	10	dry	0
	low-leaved	7	slightly clammy	-2
	very low leaved	5	clammy, moist	-5
	stem-rich (inflorescences)	2		
	strawy (deflowered)	0		
Odor	aromatic (typically)	3	unremarkable	0
	lightly aromatic / mouldy	1	musty nuances	-5
	flat / rotten	0	mouldy / putrid	-10
Colour	nicely green	5	product - typical	0
	slightly discoloured	3	focally grey, whitish	-2
	strongly discoloured	1	diffusely discoloured	-5
Impurities	macroscopic free	2	none	0
	low sand/ soil content	1	medium grade	-5
	high sand/ soil content (turf, root mass, etc.)	0	high grade	-10
Note:	possibly evaluate the proportion of plants with low forage value (thistles/honeysuckle)	-5 to -10	Containing waste material. poisonous plants, plant parts altered by disease	-5 to -10

Table S2. Evaluation of forage value and hygienic status according to Kamphues et al. [1].

nutritional value	points	hygienic status	points
very good	20 – 16	flawless	0
satisfying	15 – 10	small deficits	-1 to -5
moderate	9 – 5	clear deficits	-6 to -10
very low (strawy)	4 – 0	massive deficits	-11 to -40

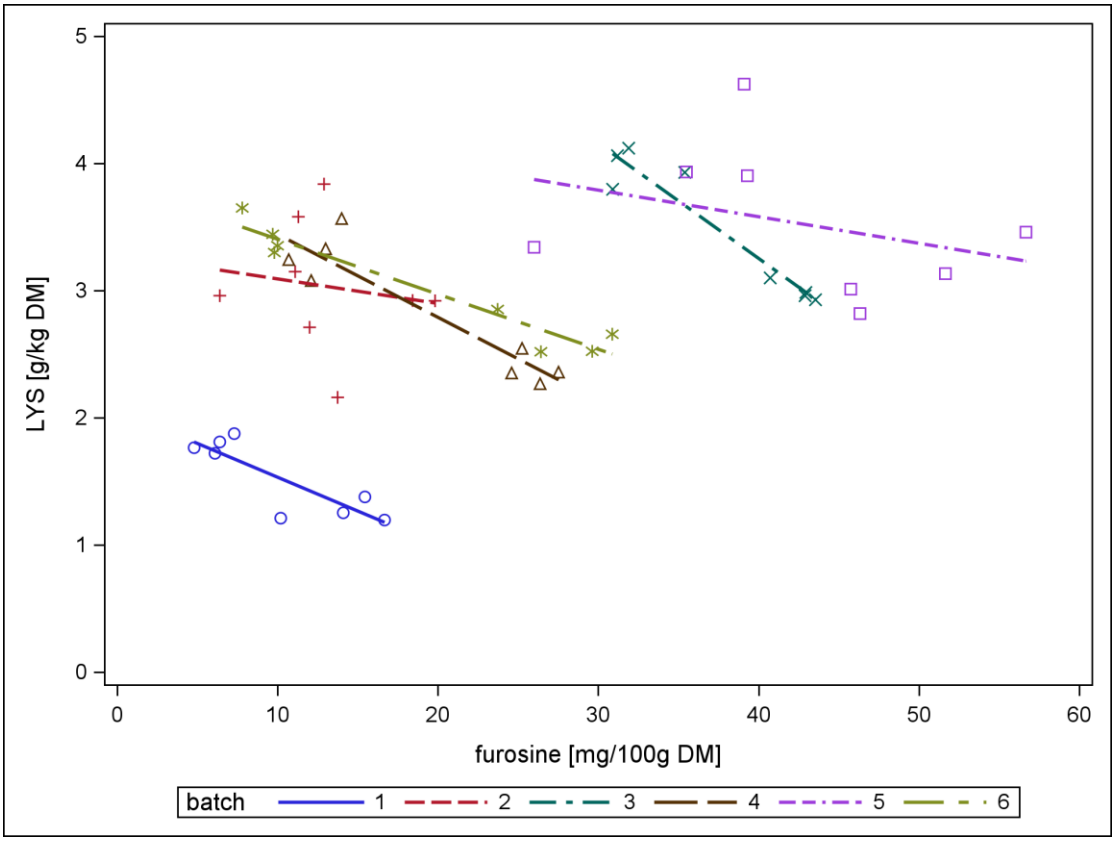


Figure S1. Lysine [g/kg DM] compared to furosine [mg/100g DM]

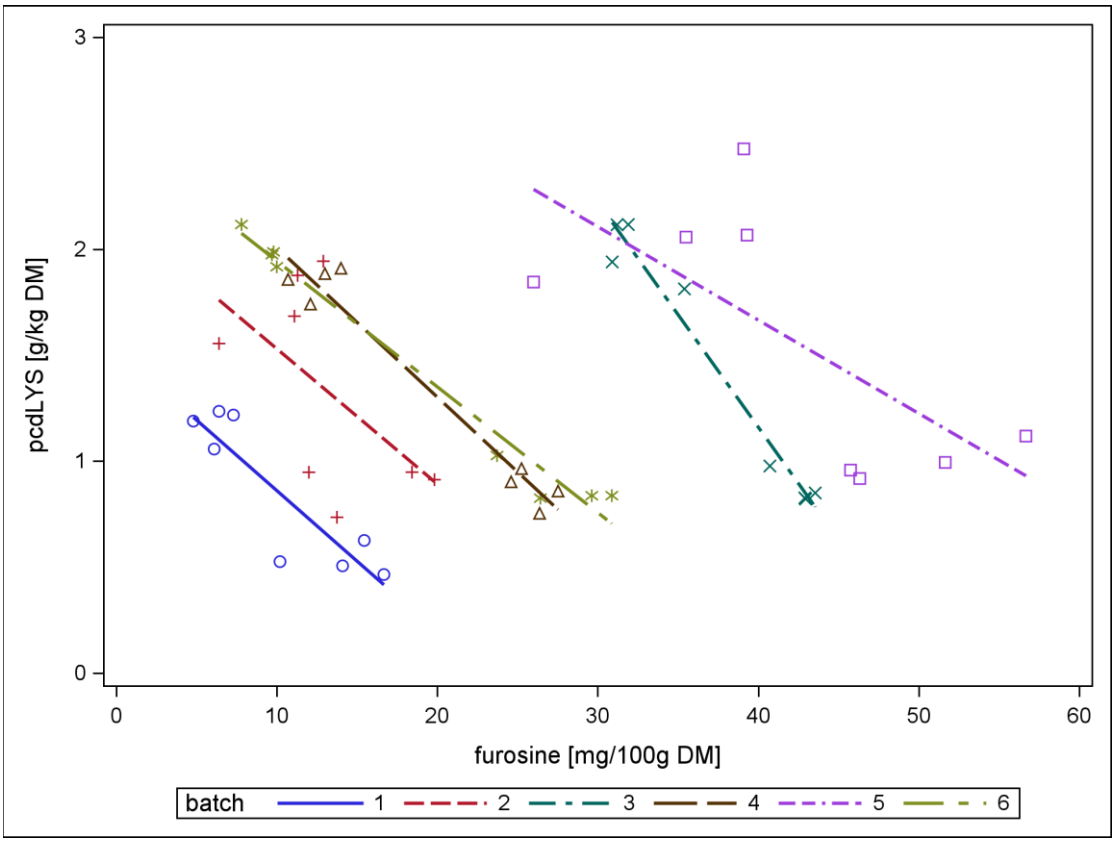


Figure S2. pcdLys [g/kg DM] compared to furosine [mg/100g DM]

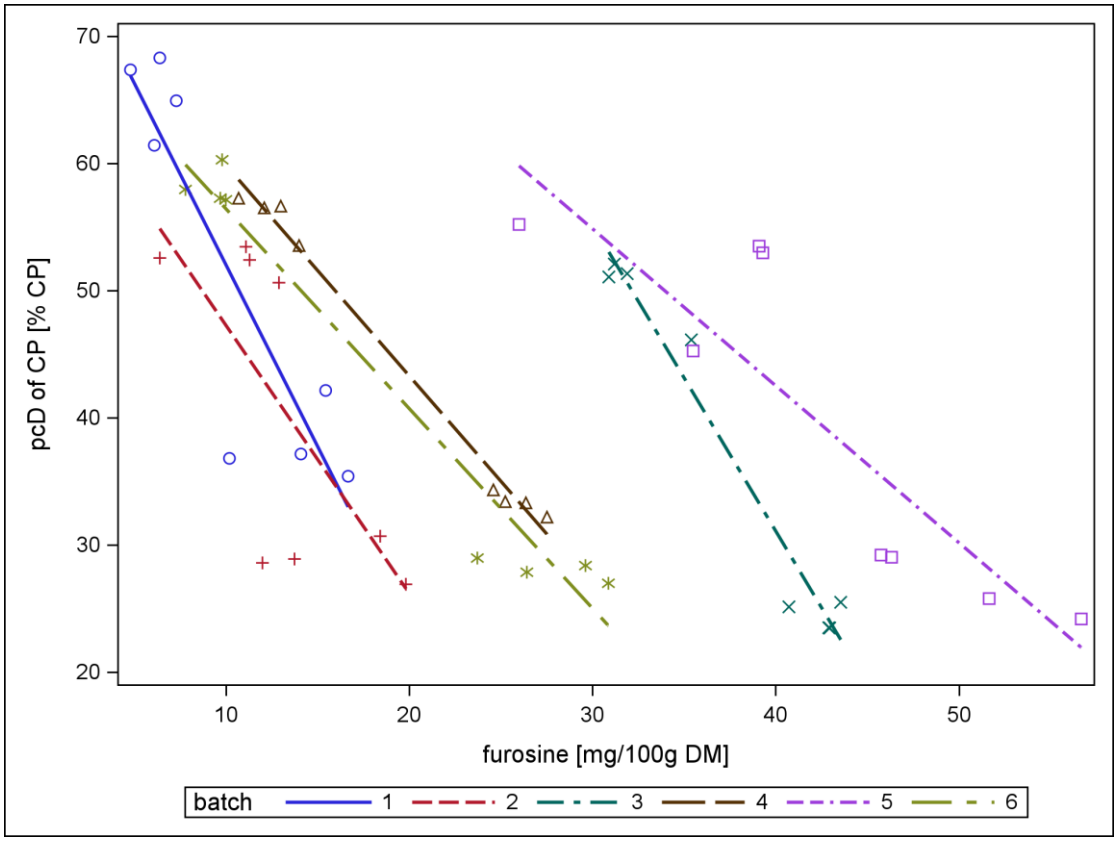


Figure S3. pcD of CP in [% CP] compared to furosine [mg/100g DM]

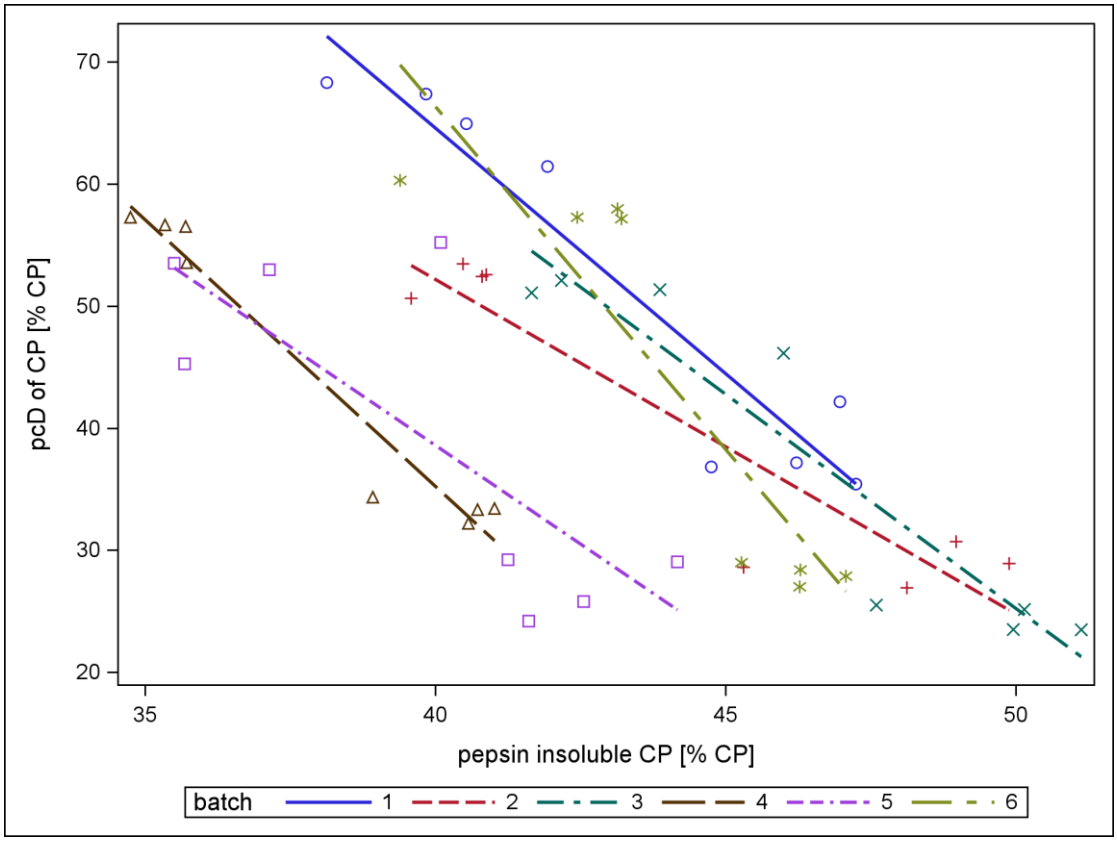


Figure S4. pcD of CP in [% CP] compared to piCP in [% CP]

Table S3. Linear regression for individual batch of hay with R^2 and significance *p*-value

x	furosine		furosine		pcD of CP		pcD of CP	
y	lys		pcdLYS		piCP		furosine	
batch	R^2	*p*	R^2	*p*	R^2	*p*	R^2	*p*
1	0.7199	0.008	0.7884	0.003	0.8997	<0.001	0.7919	0.003
2	0.0255	0.706	0.3104	0.151	0.8722	0.001	0.5072	0.048
3	0.9142	<0.001	0.9663	<0.001	0.885	<0.001	0.9652	<0.001
4	0.854	0.001	0.9538	<0.001	0.9533	<0.001	0.9897	<0.001
5	0.1155	0.410	0.4676	0.062	0.6023	0.024	0.7686	0.004
6	0.9322	0.001	0.9781	<0.001	0.8028	0.003	0.957	<0.001
mean	0.59		0.74		0.84		0.83	

x, x-axis; y, y-axis; Lys, lysine [g/kg DM]; furosine [mg/100g DM]; pcdLYS, pre-caecal digestible lysine [g/kg DM]; pcD of CP, pre-caecal digestibility of CP [% CP]; piCP, pepsin insoluble CP [% CP]