

**Supplementary Material**  
**Animal Species Identification of Meat using**  
**MALDI-TOF Mass spectrometry**

Jörg Rau, Ekkehard Hiller, Annegret Männig, Martin Dyk, Olivera Wenninger, Phillip Stoll,  
Gudrun Wibbelt, Pat Schreiter

**Correspondence:** [joerg.rau@cvuas.bwl.de](mailto:joerg.rau@cvuas.bwl.de)

<https://ejournal.cvuas.de/issue202114.asp>

## Supplement 2

Selection of specific MALDI-TOF MS  $m/z$  signals obtained from meat of pig (n=109), cattle (n=92), goats (genus *Capra*; n=30), sheep (n=75), horses (genus *Equus*; n=35), chicken (n=81) and turkey (n=45). The intensity of  $m/z$  signals in relation to the highest peak is given as the mean-value of all spectra received from the type of meat considered. # = no signal >5% intensity for >80% of all spectra in a +/- 800 ppm  $m/z$ -window. <sup>1</sup> Signal-frequency lower than 80%.

$m/z$ +/- 800 ppm	Skeletal muscle / Meat						
	Pig <i>Sus</i> <i>scrofa</i>	Cattle <i>Bos</i> <i>taurus</i>	Sheep <i>Ovis</i> <i>aries</i>	Goats <i>Capra</i> (genus)	Horses <i>Equus</i> (genus)	Chicken <i>Gallus</i> <i>gallus</i>	Turkey <i>Meleagris</i> <i>gallopavo</i>
	Relative intensities (%)						
3292.9	#	#	#	#	#	54.1	43.2
3344.7	62.3	#	#	#	18.8	#	#
3356.5	#	#	31.1	30.2	#	#	#
3455.7	#	#	12.6	8.4	#	23.6	21.5
4281.9	#	#	20.9	23.0	8.8	31.7	36.7
4489.8	#	#	#	#	7.3	21.7	#
4598.2	#	#	26.2	18.9	14.9	#	#
4741.9	14.2	#	#	#	#	#	#
5014.0	#	#	16.6	#	#	#	#
5120.1	#	#	#	#	#	46.9	#
5127.1	#	#	11.4	7.4	#	#	20.8
5643.4	#	#	37	43.5	#	#	#
5653.7	38.8	43.1	#	#	50.1	#	#
6252.1	#	#	#	#	#	18.1	16.1
6893.6	35.8	38.5	47.8	44.3	16.4	#	#
7093.4	#	#	#	8.7	#	#	#
7525.3	40.4	28.0	23.5	23.3	#	#	#
7552.4	#	#	#	#	14.1	#	#
8006.0	#	#	#	#	10.3	#	71.5
8188.5	#	9.3 <sup>1</sup>	13.7	10.0	#	#	#
8417.4	#	#	10.5	9.6	#	#	#
8455.6	40.4	#	76.1	81.0	#	23.7	25.9
8479.8	66.0	#	#	#	92.8	#	#
8727.4	#	#	#	#	#	13.6	19.3
8959.9	#	#	11.4	12.5	#	#	#
8975.9	#	#	#	#	6.9	9.2	#
9195.2	#	#	#	#	8.5	#	#
9582.0	#	#	13.4	14.0	#	#	#
9952.5	#	#	#	6.9	#	#	#
10048	#	#	#	#	7.6	#	#
10640	12.2	#	#	12.3	#	#	#
12357	#	#	#	#	6.6	#	#