

**Table S1.** Qualitative predictor variables for logistic regression regarding management factors associated with *O. ostertagi*, *F. hepatica* and *D. viviparus* BTM ELISA results. Abbreviations: N, Number of farms

	Northwest		Northeast		Bavaria		Total	
	N	%	N	%	N	%	N	%
<b>Access to pasture/fresh grass</b>								
Yes	96	47.76	51	24.88	77	31.95	224	34.62
No	101	50.25	142	69.27	146	60.58	389	60.12
Unknown	4	1.99	12	5.85	18	7.47	34	5.26
<b>Floor dried hay</b>								
Floor dried hay <sup>a</sup>	2	1.00	14	6.83	47	19.50	63	9.74
Other dried hay	0	0	0	0	8	3.32	8	1.24
No or low hay percentage in ration	196	97.51	189	92.20	182	75.52	567	87.64
Unknown	3	1.49	2	0.98	4	1.66	9	1.39
<b>Silage and hay quality</b>								
Normal/slightly lower quality	80	39.80	121	59.02	112	46.47	313	48.38
At least 1 silage with significantly lower quality	14	6.97	14	6.83	25	10.37	53	8.19
At least 1 spoiled silage	102	50.75	61	29.76	93	38.59	256	39.57
Unknown	5	2.49	9	4.39	11	4.56	25	3.86
<b>Presence of fully slatted floor</b>								
Yes <sup>b</sup>	1	0.50	1	0.49	6	2.49	8	1.24
No	200	99.50	203	99.02	235	97.51	638	98.61
Unknown	0	0	1	0.49	0	0	1	0.15
<b>Anthelmintic treatment in calves<sup>c</sup> and young cattle<sup>d</sup></b>								
Calves and young cattle	34	16.92	7	3.41	18	7.47	59	9.12
Only calves <sup>e</sup>	3	1.49	4	1.95	3	1.24	10	1.55
Only young cattle	111	55.22	68	33.17	67	27.80	246	38.02
No anthelmintic treatment	50	24.88	125	60.98	152	63.07	327	50.54
Unknown	3	1.49	1	0.49	1	0.41	5	0.77
<b>Anthelmintic treatment in lactating and dry cows</b>								
Lactating and dry cows	81	40.30	27	13.17	36	14.94	144	22.26
Only dry cows	7	3.48	12	5.85	7	2.90	26	4.02
Only lactating cows <sup>e</sup>	14	6.97	9	4.39	4	1.66	27	4.17
No anthelmintic treatment	99	49.25	157	76.59	194	80.50	450	69.55
<b>All</b>	<b>201</b>	<b>100.00</b>	<b>205</b>	<b>100.00</b>	<b>241</b>	<b>100.00</b>	<b>647</b>	<b>100.00</b>

<sup>a</sup> If < 5 farms in the category, these were counted as “no or low hay percentage in ration”

<sup>b</sup> If < 5 farms in the category, these were counted as “no presence of fully slatted floors”

<sup>c</sup> Pre-weaning or < 6 months of age

<sup>d</sup> Weaning/6 months of age to first calving

<sup>e</sup> If < 5 farms in the category, these were counted as “no anthelmintic usage”