

Appendix 2b. Trace mineral analyses for selected hay samples from Harrison and adjacent counties in southern Indiana and Kentucky¹. Several specialty hays available from local farm stores are included for comparison.

	Fe (ppm)	Cu	Zn	Mn	Mo	Se	Co
Alfalfa-H2	98	9	23	37	0.8		
Alfalfa-S2	200	9	19	65	0.7		
Orchard grass-H2	68	9	24	27	5.4		
Orchard grass-S2 ²	223	9	21	99	2.4		
Orchard grass-S1R	129	5	9	74	1.0		
Orchard grass-JA1	381	13	53	116	3.3		
Orchard grass-M1	130	5	6	165	0.2		
Mixed grass-D1 ³	76	8	20	62	1.2	0.09	0.26
Mixed grass-G1R	259	7	17	123	0.6		
Mixed grass-G2R	221	7	35	145	0.3		
Mixed grass-JU1	56	7	19	124	0.5		
Mixed grass-JU2	122	8	33	204	0.4		
Mixed grass-JA1R	286	8	26	97	2.2		
Mixed grass-B2	89	7	29	61	3.5		
Mixed grass-M2	74	5	17	78	1.1		
Mixed grass-L2	172	7	28	186	0.65	0.09	0.52
Mixed grass-C2	201	18	62	61	0.65	0.13	0.52
Timothy-N1	131	6	12	51	1.6		
Gammagrass-G1R ⁴	239	8	23	53	1.5		
Broomsedge-S2 ⁴	92	7	17	129	1.6		
Oat	159	7	17	48	4.0		
Specialty hays⁵							
Purina hydration hay ⁶	462	7	25	51	1.8		
Standlee timothy hay	315	11	40	81	0.7		
Triple Crown timothy/orchard grass	98	5	16	29	1.7		

¹Hay analyses are “as sampled”, or “as fed”. Chemical symbols and abbreviations: Fe (Iron), Cu (Copper), Zn (Zinc), Mn (Manganese), Mo (Molybdenum), Se (Selenium), Co (Cobalt), blank cells (not analyzed). Hay symbols expressed in terms of number of cut (1 or 2) and type of bale (R for round bale). Trace mineral concentrations in ppm = part per million = 1 mg/kg.

²Orchard grass-S2 contains about 20% alfalfa.

³Most abundant grass in mixed grass hay is usually fescue.

⁴Gammagrass and broomsedge are C4 native warm-season grasses.

⁵Analyses based on samples from one bag hay, or one package (12 hay blocks, Purina). Results may vary between batches.

⁶Contains no more than 40% alfalfa (Purina, pers. comm.).