

Table 1. Macronutrients (% dry matter) in hays and weeds from Harrington *et al.* (2006) and samples collected near Central, Indiana. Values highlighted in bold are significantly higher than perennial ryegrass or white clover (statistical analyses by Harrington *et al.*)

Hay and Weed Samples from Harrington <i>et al.</i> (2006)							
%	Ca	P	Mg	K	Na	S	
Perennial ryegrass	0.42	0.37	0.173	3.80	0.182	0.347	
White Clover	1.19	0.347	0.237	2.83	0.205	0.213	
Chicory	1.18	0.663	0.393	3.80	0.591	0.627	
Narrow-leaved plantain	1.77	0.480	0.253	1.97	0.618	0.530	
Broad-leaved dock	0.80	0.430	0.520	4.10	0.026	0.287	
Californian thistle	1.87	0.357	0.307	2.93	0.047	0.570	
Dandelion	0.96	0.570	0.353	3.43	0.420	0.393	
Hay and Weed Samples Collected near Central, Indiana							
%	Ca	P	Mg	K	Na	S	
Mixed grass	0.49	0.30	0.16	1.66	0.02	0.18	
Alfalfa (70%)/orchard grass	1.38	0.21	0.31	1.58	0.009	n/a	
Ragweed (Giant)	2.14	0.40	0.40	3.59	0.004	0.52	
Chicory (flower stalks)	1.28	0.38	0.26	2.08	0.020	0.31	
Chicory (basal leaf rosette)	1.49	0.55	0.32	4.65	<0.001	0.66	
Narrow-leaved plantain	1.86	0.29	0.25	3.26	0.003	0.45	
Jerusalem artichoke (leaves)	2.20	0.38	0.43	3.37	<0.001	0.32	
Redroot pigweed	1.28	0.49	0.63	3.22	0.002	0.24	

Note: To convert % to weight multiply by 10, e.g., mixed grass hay contains 0.41 % Ca = 4.1 g/kg Ca = 4.1 g/2.2 lbs hay, e.g., 22 lb hay contains 4.1 g/2.2 x 22 = 41 g Ca. Interpretation of chemical symbols: Ca (calcium), P (Phosphorous), Mg (Magnesium), K (Potassium), Na (Sodium), S (sulfur); n/a not analyzed

Table 2. Micronutrients (% dry matter) in hays and weeds from Harrington *et al.* (2006) and samples collected near Central, Indiana. Values highlighted in bold are significantly higher than perennial ryegrass or white clover (statistical analyses by Harrington *et al.*)

Hay and Weed Samples from Harrington <i>et al.</i> (2006)					
<i>ppm = mg/kg</i>	Fe	Cu	Zn	Mn	Mo
Perennial ryegrass	151	7.9	22.0	99	0.64
White clover	109	8.6	22.0	55	0.22
Chicory	167	18.6	57.7	161	0.42
Narrow-leaved plantain	182	15.1	37.7	109	0.27
Broad-leaved dock	95	7.6	30.7	283	0.42
Californian thistle	139	17.0	41.7	120	0.21
Dandelion	115	14.2	37.0	93	0.373
Hay and Weed Samples Collected near Central, Indiana					
<i>ppm = mg/kg</i>	Fe	Cu	Zn	Mn	Mo
Mixed grass	76	8	20	62	1.2
Alfalfa (70%)/orchard grass	218	10	20	70	0.7
Ragweed (Giant)	144	16	72	79	0.5
Chicory (flower stalks)	90	12	41	24	0.8
Chicory (basal leaf rosette)	117	18	72	36	0.8
Narrow-leaved plantain	106	13	46	38	0.6
Jerusalem artichoke (leaves)	252	27	104	79	0.6
Redroot pigweed	132	6	28	46	2.1

Note: *ppm* = parts per million where 1 *ppm* = 1 mg/kg, or 1 mg/2.2 lbs hay, e.g., 22 lb mixed grass hay contains 8 mg Cu/2.2 x 22 = 80 ppm Cu. Interpretation of chemical symbols: Fe (Iron), Cu (Copper), Zn (Zinc), Mn (Manganese), Mo (Molybdenum).

Note: Major portions of this article were extracted from “Pasture weeds as mineral sources for goats” posted on the farm blog authored by George A Lager (mitchellplainfarm.com/blog).