



**AGRIFOOD  
LABORATORIES**

**CORN SILAGE SUMMARY**  
SEPTEMBER TO DECEMBER 2015

Item	N° Samples	Mean	S.D.	CV (%)
Moisture, %	610	58.87	11.06	18.8
Protein, % (N x 6.25)	605	7.11	1.01	14.2
Soluble protein, %	597	2.52	0.61	24.1
ADF-CP, %	597	0.68	0.06	9.2
NDF-CP, %	597	1.58	0.22	13.9
Acid Detergent Fibre, %	605	20.71	2.34	11.3
aNeutral Detergent Fibre, %	604	39.5	3.05	7.7
NDF Digestibility (24 h), %	420	39.6	2.3	5.8
NDF Digestibility (30 h), %	420	48.95	2.72	5.6
NDF Digestibility (48 h), %	420	59.17	2.32	3.9
Lignin, %	597	1.53	0.33	21.6
Starch, %	604	31.6	4.53	14.3
Starch Digestibility (7 h), %	402	86.71	1.18	1.4
Fat, %	601	2.59	0.34	13.3
Ash, %	597	3.27	0.39	11.9
Calcium, %	588	0.21	0.09	41
Phosphorus, %	587	0.22	0.03	13.8
Potassium, %	587	0.84	0.15	17.3
Magnesium, %	587	0.15	0.05	29.9
TDN, %	583	70.19	1.3	1.9
NEL, Mcal/kg	583	1.6	0.03	2

**HAY SUMMARY**  
JUNE - DECEMBER 2015

Item	N° Samples	Mean	S.D.	CV (%)
<b>Legume Hay – 1<sup>st</sup> cut</b>				
Moisture, %	27	11.22	4.32	38.5
Protein, % (N x 6.25)	27	16.39	4.04	24.6
Soluble protein, %	22	4.82	1.44	29.8
ADF-CP, %	22	1.99	0.27	13.8
NDF-CP, %	8	8.26	3.45	41.8
Acid Detergent Fibre, %	23	33.24	5.78	17.4
aNeutral Detergent Fibre, %	23	49.01	8.27	16.9
NDF Digestibility (24 h), %	2	37.38	6.33	16.9
NDF Digestibility (30 h), %	2	42.5	8.37	19.7
NDF Digestibility (48 h), %	2	46.01	7.63	16.6
Lignin, %	22	8.05	1.75	21.7
Starch, %	8	1.54	1.04	67.4
Ethanol Soluble CHO, %	4	5.35	0.76	14.3
Water Soluble CHO, %	4	8.23	1.31	15.9
Fat, %	8	1.85	0.69	37.1
Ash, %	8	9.76	2.99	30.6
Calcium, %	25	1.22	0.26	21.2
Phosphorous, %	25	0.25	0.04	15.8
Potassium, %	25	1.92	0.52	27.2
Magnesium, %	25	0.25	0.06	25
Relative Feed Value	22	123.89	34.71	28
<b>Grass Hay – 1<sup>st</sup> cut</b>				
Moisture, %	36	12.74	5.73	45
Protein, % (N x 6.25)	36	11.02	3.26	29.6
Soluble protein, %	33	2.94	1.1	37.4
ADF-CP, %	33	1.67	0.41	24.5
NDF-CP, %	33	5.65	1.19	21
Acid Detergent Fibre, %	35	36	8.05	22.4
aNeutral Detergent Fibre, %	34	60.81	10.48	17.2
NDF Digestibility (24 h), %	16	45.22	8.75	19.3
NDF Digestibility (30 h), %	16	52.17	9.28	17.8
NDF Digestibility (48 h), %	16	57.52	8.45	14.7
Lignin, %	33	6.8	2.57	37.8
Starch, %	33	2.05	0.76	36.8
Ethanol Soluble CHOs, %	14	6.08	3.25	53.4
Water Soluble CHO, %	12	10.12	4.15	41
Fat, %	33	1.71	0.48	28.2
Ash, %	33	6.38	1.63	25.6
Calcium, %	34	0.63	0.23	36.4
Phosphorous, %	34	0.22	0.1	44.4
Potassium, %	34	1.72	0.77	44.9
Magnesium, %	34	0.23	0.11	44.9
Relative Feed Value	32	96.71	25.33	26.2
<b>Mixed Hay – 1<sup>st</sup> cut</b>				
Moisture, %	281	13.11	5.17	39.4
Protein, % (N x 6.25)	258	12.52	3.3	26.4
Soluble protein, %	223	3.45	1.29	37.3
ADF-CP, %	222	1.79	0.32	17.8
NDF-CP, %	216	5.44	1.29	23.6

Acid Detergent Fibre, %	231	35.25	4.26	12.1
aNeutral Detergent Fibre, %	223	56.25	7.38	13.1
NDF Digestibility (24 h), %	105	38.7	7.13	18.4
NDF Digestibility (30 h), %	105	44.65	7.84	17.5
NDF Digestibility (48 h), %	105	51.52	7.58	14.7
Lignin, %	222	7.14	1.54	21.5
Starch, %	217	1.93	0.71	36.5
Ethanol Soluble CHOs, %	102	5.39	1.73	32.1
Water Soluble CHO, %	35	9.11	3.09	33.9
Fat, %	216	1.61	0.33	20.7
Ash, %	216	6.7	1.41	21
Calcium, %	272	0.81	0.38	47.1
Phosphorous, %	272	0.23	0.06	27.1
Potassium, %	272	1.8	0.54	29.8
Magnesium, %	271	0.21	0.08	39.6
Relative Feed Value	220	104.51	19.56	18.7
<b>Hay – 2<sup>nd+</sup> cut</b>				
Moisture, %	218	12.32	3.98	32.3
Protein, % (N x 6.25)	218	16.64	2.85	17.1
Soluble protein, %	190	4.92	1.36	27.6
ADF-CP, %	190	1.9	0.29	15.2
NDF-CP, %	190	6.02	1.11	18.4
Acid Detergent Fibre, %	200	32.11	3.97	12.4
aNeutral Detergent Fibre, %	195	48.53	6.01	12.4
NDF Digestibility (24 h), %	80	42.4	6.8	16
NDF Digestibility (30 h), %	80	48.67	7.21	14.8
NDF Digestibility (48 h), %	80	55.21	6.67	12.1
Lignin, %	190	7.12	1.34	18.8
Starch, %	190	1.62	0.55	33.8
Ethanol Soluble CHOs, %	77	5.35	1.57	29.5
Water Soluble CHO, %	42	8.32	2.83	34
Fat, %	190	1.72	0.3	17.2
Ash, %	190	8.22	0.95	11.5
Calcium, %	214	1.16	0.32	27.8
Phosphorous, %	214	0.3	0.07	21.7
Potassium, %	214	2.18	0.58	26.6
Magnesium, %	214	0.26	0.06	23.5
Relative Feed Value	192	124.59	19.53	15.7
<b>Hay for Horses</b>				
Moisture, %	138	12.21	4.68	38.4
Protein, % (N x 6.25)	138	12.83	3.9	30.4
Soluble protein, %	138	3.79	1.55	41
Acid Detergent Fibre, %	138	35.92	3.97	11.1
aNeutral Detergent Fibre, %	138	55.56	6.68	12
Lignin, %	138	7.69	1.52	19.7
Fat, %	138	1.54	0.28	18.5
Starch, %	138	1.85	0.65	35.3
Ethanol Soluble CHO, %	138	5.33	1.54	28.9
Water Soluble CHO, %	138	8.74	2.96	33.8
Ash, %	138	6.66	1.57	23.6
Calcium, %	138	0.91	0.4	43.9
Phosphorous, %	138	0.22	0.07	32.5
Potassium, %	138	1.65	0.44	26.5
Magnesium, %	138	0.2	0.07	36.7
Copper, ppm	138	5.8	2.64	45.5
Iron, ppm	138	238.36	314.82	132.1

Manganese, ppm	138	39.49	24.64	62.4
Zinc, ppm	138	23.14	8.11	35
Digestible Energy, Mcal/kg	138	2.16	0.22	10.1
TDN, %	138	48.93	4.95	10.1
Relative Feed Value	138	104.06	18.04	17.3

Hay – 2<sup>nd+</sup> cut - Any second or third cut from 50% or more legume or grass

## HAYLAGE SUMMARY

JUNE - DECEMBER 2015

Item	N° Samples	Mean	S.D.	CV (%)
<b><i>Legume Haylage – 1<sup>st</sup> cut</i></b>				
Moisture %	121	52.51	12.13	23.1
Protein % (N x 6.25)	121	17.39	2.49	14.3
Soluble protein, %	119	8.49	2.4	28.2
ADF-CP, %	119	1.87	0.32	17.3
NDF-CP, %	50	4.72	1.09	23
Acid Detergent Fibre %	121	31.85	3.16	9.9
aNeutral Detergent Fibre %	120	44.31	4.81	10.9
NDF Digestibility (24 h), %	37	43.33	7.24	16.7
NDF Digestibility (30 h), %	37	47.23	7.32	15.5
NDF Digestibility (48 h), %	37	54.42	7.17	13.2
Lignin, %	119	6.86	1.05	15.2
Starch, %	51	1.13	0.77	67.9
Ethanol Soluble CHOs, %	37	2.34	1.75	74.9
Water Soluble CHO, %	17	3.22	2.43	75.5
Starch, %	50	2.22	0.69	31.1
Ash, %	50	8.74	1.29	14.7
Calcium, %	121	1.2	0.26	21.9
Phosphorous, %	121	0.28	0.04	15.7
Potassium, %	121	2.26	0.42	18.6
Magnesium, %	121	0.27	0.06	22.5
Relative Feed Value	120	136.51	18.82	13.8
<b><i>Grass Haylage – 1<sup>st</sup> cut</i></b>				
Moisture %	80	59.02	12.16	20.6
Protein % (N x 6.25)	80	15.48	3.32	21.5
Soluble protein, %	80	8.2	2.53	30.9
ADF-CP, %	80	1.52	0.37	24.1
NDF-CP, %	80	4.71	1.06	22.5
Acid Detergent Fibre %	80	31.12	4.88	15.7
aNeutral Detergent Fibre %	80	49.13	7.46	15.2
NDF Digestibility (24 h), %	61	56.06	8.06	14.4
NDF Digestibility (30 h), %	61	60.54	8.63	14.3
NDF Digestibility (48 h), %	61	67.37	7.81	11.6
Lignin, %	80	5.03	1.58	31.4
Starch, %	80	1.2	0.89	74
Ethanol Soluble CHOs, %	61	2.44	1.7	69.6
Water Soluble CHO, %	42	4.79	3.26	68.2
Starch, %	80	3	0.67	22.4
Ash, %	80	8.66	1.49	17.2
Calcium, %	80	0.68	0.31	45.7
Phosphorous, %	80	0.3	0.06	20.8
Potassium, %	80	2.7	0.83	30.8
Magnesium, %	80	0.24	0.08	34.6
<b><i>Mixed Haylage – 1<sup>st</sup> cut</i></b>				
Moisture %	590	54.12	11.97	22.1
Protein % (N x 6.25)	588	16.69	3.01	18
Soluble protein, %	563	8.86	2.54	28.6
ADF-CP, %	562	1.87	0.34	18.4
NDF-CP, %	513	4.59	0.99	21.6
Acid Detergent Fibre %	582	32.76	3.95	12.1

aNeutral Detergent Fibre %	576	46.96	6.78	14.4
NDF Digestibility (24 h), %	364	46.66	7.01	15
NDF Digestibility (30 h), %	364	50.75	7.33	14.4
NDF Digestibility (48 h), %	364	58.02	7.04	12.1
Lignin, %	562	6.7	1.34	20
Starch, %	526	1.08	0.72	66.7
Ethanol Soluble CHOs, %	361	2.04	1.18	57.9
Water Soluble CHO, %	160	3.34	2.02	60.3
Starch, %	513	2.56	0.58	22.6
Ash, %	513	8.52	1.26	14.7
Calcium, %	583	1.14	0.38	33.5
Phosphorous, %	582	0.29	0.06	20.4
Potassium, %	582	2.37	0.54	22.7
Magnesium, %	582	0.25	0.06	22
<b>Mixed Legume Haylage – 2<sup>nd+</sup> cut</b>				
Moisture %	406	54.45	10.34	19
Protein % (N x 6.25)	404	19.03	2.45	12.9
Soluble protein, %	392	10.53	2.15	20.4
ADF-CP, %	390	1.91	0.28	14.7
NDF-CP, %	390	4.86	1.06	21.7
Acid Detergent Fibre %	404	31.5	2.98	9.5
aNeutral Detergent Fibre %	404	43.65	4.88	11.2
NDF Digestibility (24 h), %	333	45.71	6.13	13.4
NDF Digestibility (30 h), %	333	49.89	6.22	12.5
NDF Digestibility (48 h), %	334	57.22	6.04	10.6
Lignin, %	390	6.79	1.06	15.7
Starch, %	401	1.04	0.29	28.2
Ethanol Soluble CHOs, %	332	1.72	1.23	71.5
Water Soluble CHO, %	205	2.91	1.81	62.4
Starch, %	390	2.56	0.5	19.3
Ash, %	390	9.29	0.91	9.7
Calcium, %	405	1.28	0.29	22.7
Phosphorous, %	405	0.33	0.05	16.6
Potassium, %	405	2.53	0.51	20.3
Magnesium, %	405	0.28	0.05	19.6
<b>Grass Haylage – 2<sup>nd+</sup> cut</b>				
Moisture %	83	54.23	10.6	19.5
Protein % (N x 6.25)	83	16.59	2.25	13.6
Soluble protein, %	83	8.89	2.13	23.9
ADF-CP, %	83	1.5	0.38	25.5
NDF-CP, %	83	5.28	1.1	20.8
Acid Detergent Fibre %	83	29.18	3.84	13.2
aNeutral Detergent Fibre %	83	46.45	5.39	11.6
NDF Digestibility (24 h), %	75	58.3	7.52	12.9
NDF Digestibility (30 h), %	75	63.05	7.87	12.5
NDF Digestibility (48 h), %	75	69.38	7.37	10.6
Lignin, %	83	4.4	1.52	34.5
Starch, %	83	1.13	0.26	22.9
Ethanol Soluble CHOs, %	75	3.27	1.97	60.4
Water Soluble CHO, %	65	5.66	3.48	61.5
Starch, %	83	3.24	0.54	16.7
Ash, %	83	9.31	1.04	11.2
Calcium, %	83	0.7	0.26	37
Phosphorous, %	83	0.35	0.07	19.3
Potassium, %	83	3.11	0.81	26

Magnesium, %	83	0.29	0.07	24.4
<b><i>Baleage</i></b>				
Moisture %	423	42.86	14.17	33.1
Protein % (N x 6.25)	423	17.2	3.07	17.9
Soluble protein, %	406	8.04	2.55	31.7
ADF-CP, %	405	1.85	0.38	20.4
NDF-CP, %	405	5.7	1.3	22.8
Acid Detergent Fibre %	420	31.53	3.94	12.5
aNeutral Detergent Fibre %	414	46.37	6.57	14.2
NDF Digestibility (24 h), %	260	46.59	7.97	17.1
NDF Digestibility (30 h), %	260	50.72	8.4	16.6
NDF Digestibility (48 h), %	260	57.9	8	13.8
Lignin, %	407	6.56	1.44	21.9
Starch, %	410	1.34	0.46	34.6
Ethanol Soluble CHOs, %	256	3.45	1.56	45.1
Water Soluble CHO, %	144	5.26	2.46	46.8
Starch, %	405	2.19	0.59	26.8
Ash, %	405	8.67	1.18	13.6
Calcium, %	417	1.16	0.36	31.5
Phosphorous, %	417	0.3	0.06	21.1
Potassium, %	417	2.34	0.59	25.1
Magnesium, %	417	0.27	0.06	23
Relative Feed Value	410	132.45	23.83	18

Mixed Legume Haylage – 2<sup>nd+</sup> cut – Anything greater than 50% legume. Includes all second or three cuts.

Grass Haylage – 2<sup>nd+</sup> cut – If greater than 50% grass. Includes all second or three cuts.

**CORN GRAIN SUMMARY**  
SEPTEMBER TO DECEMBER 2015

Item	N° Samples	Mean	S.D.	CV (%)
<b><i>High Moisture Corn</i></b>				
Moisture, %	131	25.46	4.51	17.7
Protein, % (N x 6.25)	118	8.25	0.68	8.2
Acid Detergent Fibre, %	96	2.9	0.24	8.1
aNeutral Detergent Fibre, %	95	10.33	0.75	7.3
Starch, %	106	69.73	1.49	2.1
7-hr Starch Digestibility, %	94	69.65	5.67	8.1
Fat, %	96	3.01	0.51	16.9
Ash, %	96	1.37	0.17	12.7
Calcium, %	96	0.02	0.02	87.9
Phosphorus, %	96	0.3	0.03	9.7
Potassium, %	96	0.42	0.04	10
Magnesium, %	96	0.11	0.01	10.4
<b><i>H. M. Corn &amp; Cob Meal</i></b>				
Moisture, %	55	35.54	6.42	18.1
Protein, % (N x 6.25)	54	7.96	0.51	6.4
Acid Detergent Fibre, %	53	10.46	2.41	23
aNeutral Detergent Fibre, %	50	22.81	3.19	14
Starch, %	51	54.97	4.13	7.5
Ash, %	50	1.54	0.12	8
Calcium, %	53	0.04	0.04	92.6
Phosphorus, %	53	0.27	0.04	13.7
Potassium, %	53	0.46	0.07	15.3
Magnesium, %	53	0.1	0.01	14.2