



**AGRIFOOD
LABORATORIES**

CORN SILAGE SUMMARY
OCTOBER TO DECEMBER 2016

Item	N° Samples	Mean	S.D.	CV (%)
Moisture, %	401	61.44	5.26	8.6
Protein, % (N x 6.25)	400	8.11	0.79	9.8
Soluble protein, %	395	3.28	0.67	20.3
ADF-CP, %	399	0.68	0.08	11.2
NDF-CP, %	399	1.43	0.3	20.7
Acid Detergent Fibre, %	400	18.33	2.45	13.3
aNeutral Detergent Fibre, %	400	37.43	3.3	8.8
NDF Digestibility (24 h), %	299	41.15	2.37	5.8
NDF Digestibility (30 h), %	299	51.08	2.66	5.2
NDF Digestibility (48 h), %	303	61.07	2.51	4.1
Lignin, %	399	1.42	0.33	23.3
Starch, %	400	34.76	5.07	14.6
Starch Digestibility (7 h), %	299	85.68	2.63	3.1
Fat, %	399	2.88	0.32	11.1
Ash, %	399	2.8	0.56	19.9
Calcium, %	400	0.24	0.06	24.9
Phosphorus, %	400	0.22	0.03	14.2
Potassium, %	400	0.82	0.17	21.2
Magnesium, %	400	0.18	0.04	21.6
TDN, %	400	71.56	1.41	2
NEL, Mcal/kg	400	1.63	0.03	2.1

HAY SUMMARY
MAY - DECEMBER 2016

Item	N° Samples	Mean	S.D.	CV (%)
Legume Hay – 1st cut				
Moisture, %	8	11.57	2.06	17.8
Protein, % (N x 6.25)	8	15.18	5.01	33
Soluble protein, %	8	4.64	1.29	27.8
ADF-CP, %	8	1.99	0.27	13.8
NDF-CP, %	8	5.69	2.22	39.1
Acid Detergent Fibre, %	8	34.63	4.72	13.6
aNeutral Detergent Fibre, %	8	49.9	6.98	14
NDF Digestibility (24 h), %	4	41.45	5.88	14.2
NDF Digestibility (30 h), %	4	47.5	4.86	10.2
NDF Digestibility (48 h), %	4	54.97	4.75	8.6
Lignin, %	8	9.57	1.59	16.6
Starch, %	8	1.64	0.53	32.1
Ethanol Soluble CHO, %	4	5.32	1.46	27.5
Water Soluble CHO, %	4	7.88	1.39	17.7
Fat, %	8	1.49	0.35	23.7
Ash, %	8	7.66	2.02	26.4
Calcium, %	8	1.3	0.42	32.6
Phosphorous, %	8	0.2	0.11	54
Potassium, %	8	1.75	0.5	28.7
Magnesium, %	8	0.26	0.14	53.6
Relative Feed Value	8	118.35	23.99	20.3
Grass Hay – 1st cut				
Moisture, %	27	12.92	11.56	89.5
Protein, % (N x 6.25)	27	11.61	5.04	43.4
Soluble protein, %	26	3.25	1.3	40
ADF-CP, %	26	1.5	0.34	22.5
NDF-CP, %	26	6.06	2.34	38.6
Acid Detergent Fibre, %	27	35.11	7.55	21.5
aNeutral Detergent Fibre, %	27	59.38	11.05	18.6
NDF Digestibility (24 h), %	9	43.31	15.8	36.5
NDF Digestibility (30 h), %	9	48.25	17.59	36.5
NDF Digestibility (48 h), %	9	55.9	16.22	29
Lignin, %	26	6.83	2.64	38.7
Starch, %	26	2.36	0.73	30.8
Ethanol Soluble CHOs, %	9	6.82	2.67	39.2
Water Soluble CHO, %	9	10.27	4	38.9
Fat, %	26	1.99	0.6	30
Ash, %	26	6.66	2.18	32.7
Calcium, %	27	0.64	0.28	44
Phosphorous, %	27	0.22	0.1	43.2
Potassium, %	27	1.87	0.95	50.7
Magnesium, %	27	0.2	0.07	34.4
Relative Feed Value	27	101.19	27.75	27.4
Mixed Hay – 1st cut				
Moisture, %	217	12.82	5.74	44.8
Protein, % (N x 6.25)	217	12.96	3.27	25.2
Soluble protein, %	210	3.81	1.24	32.6
ADF-CP, %	212	1.66	0.44	26.5
NDF-CP, %	210	5.56	1.15	20.6

Acid Detergent Fibre, %	215	34.28	3.64	10.6
aNeutral Detergent Fibre, %	215	54.95	7.01	12.7
NDF Digestibility (24 h), %	75	41.04	6.75	16.4
NDF Digestibility (30 h), %	75	46.91	6.74	14.4
NDF Digestibility (48 h), %	75	54.38	6.47	11.9
Lignin, %	210	7.57	1.39	18.3
Starch, %	210	2.26	1.01	44.6
Ethanol Soluble CHOs, %	76	6.91	1.24	17.9
Water Soluble CHO, %	76	10.41	2.01	19.3
Fat, %	210	1.79	0.27	14.9
Ash, %	210	6.79	1.41	20.8
Calcium, %	210	0.89	0.37	42
Phosphorous, %	210	0.22	0.05	24.6
Potassium, %	210	1.86	0.53	28.8
Magnesium, %	210	0.21	0.05	25.9
Relative Feed Value	215	104.96	24.78	23.6
Hay – 2^{nd+} cut				
Moisture, %	123	12.61	7.15	56.7
Protein, % (N x 6.25)	123	18.72	2.84	15.2
Soluble protein, %	122	5.27	1.5	28.4
ADF-CP, %	123	1.86	0.28	15.2
NDF-CP, %	122	7.18	1.51	21
Acid Detergent Fibre, %	122	30.26	4.02	13.3
aNeutral Detergent Fibre, %	122	45.27	6.24	13.8
NDF Digestibility (24 h), %	57	41.72	8.29	19.9
NDF Digestibility (30 h), %	57	47.97	8.32	17.4
NDF Digestibility (48 h), %	57	55.41	8.42	15.2
Lignin, %	122	7.79	1.66	21.3
Starch, %	122	1.54	0.62	40.3
Ethanol Soluble CHOs, %	57	6.03	1.55	25.7
Water Soluble CHO, %	57	9.28	2.52	27.2
Fat, %	122	1.89	0.31	16.6
Ash, %	122	8.82	1.08	12.3
Calcium, %	122	1.36	0.34	24.9
Phosphorous, %	122	0.28	0.05	19.2
Potassium, %	122	2.04	0.52	25.3
Magnesium, %	122	0.3	0.05	17.8
Relative Feed Value	122	137.21	22.42	16.3
Hay for Horses				
Moisture, %	131	11.79	7.07	59.9
Protein, % (N x 6.25)	131	12.5	3.8	30.4
Soluble protein, %	131	3.84	1.69	44.1
ADF-CP, %	131	1.71	0.34	19.9
NDF-CP, %	131	5.41	1.51	27.8
Acid Detergent Fibre, %	131	35.66	3.85	10.8
aNeutral Detergent Fibre, %	131	55.85	7.07	12.7
Lignin, %	131	7.85	1.61	20.5
Starch, %	131	2.18	1.32	60.8
Ethanol Soluble CHO, %	131	6.26	1.83	29.2
Water Soluble CHO, %	131	10.4	3.19	30.7
Fat, %	131	1.77	0.38	21.3
Ash, %	131	6.77	1.69	25
Calcium, %	131	0.89	0.45	50.9
Phosphorous, %	131	0.2	0.06	31.5
Potassium, %	131	1.74	0.47	27.1
Magnesium, %	131	0.2	0.06	30.4

Digestible Energy, Mcal/kg	131	2.15	0.21	9.8
TDN, %	131	48.83	4.8	9.8
Relative Feed Value	131	104.11	18.96	18.2

Hay – 2^{nd+} cut - Any second or third cut from 50% or more legume or grass

HAYLAGE SUMMARY

JUNE - DECEMBER 2016

Item	N° Samples	Mean	S.D.	CV (%)
<i>Legume Haylage – 1st cut</i>				
Moisture %	40	58.28	8.42	14.5
Protein % (N x 6.25)	40	17.8	2.93	16.5
Soluble protein, %	38	10.25	2.21	21.5
ADF-CP, %	40	1.85	0.44	23.9
NDF-CP, %	40	4.74	1.21	25.5
Acid Detergent Fibre %	40	31.39	2.9	9.3
aNeutral Detergent Fibre %	40	44.7	5.08	11.4
NDF Digestibility (24 h), %	30	47.22	5.66	12
NDF Digestibility (30 h), %	30	51.66	5.96	11.5
NDF Digestibility (48 h), %	32	57.78	6.11	10.6
Lignin, %	40	6.7	1.55	23.1
Starch, %	40	1.28	1.33	104.5
Ethanol Soluble CHOs, %	30	2.27	1.89	83.3
Water Soluble CHO, %	30	3.65	2.61	71.6
Fat, %	40	2.64	0.59	22.5
Ash, %	40	9.45	1.43	15.2
Calcium, %	40	1.13	0.41	36.5
Phosphorous, %	40	0.31	0.06	20.4
Potassium, %	40	2.54	0.63	24.7
Magnesium, %	40	0.26	0.07	26.2
Relative Feed Value	40	136.16	18.85	13.8
<i>Grass Haylage – 1st cut</i>				
Moisture %	102	56.81	11.99	21.1
Protein % (N x 6.25)	102	15.45	3.89	25.2
Soluble protein, %	102	8.98	3.2	35.6
ADF-CP, %	102	1.33	0.4	29.9
NDF-CP, %	102	4.85	1.01	20.9
Acid Detergent Fibre %	102	28.77	5.83	20.3
aNeutral Detergent Fibre %	102	46.86	9.38	20
NDF Digestibility (24 h), %	83	58.92	8.37	14.2
NDF Digestibility (30 h), %	83	63.78	8.5	13.3
NDF Digestibility (48 h), %	83	69.91	8.38	12
Lignin, %	102	4.14	1.73	41.9
Starch, %	102	1.14	0.35	30.7
Ethanol Soluble CHOs, %	83	4.09	2.32	56.8
Water Soluble CHO, %	83	6.43	3.4	52.9
Fat, %	102	3.27	0.64	19.7
Ash, %	102	8.61	1.74	20.2
Calcium, %	102	0.6	0.26	42.6
Phosphorous, %	102	0.31	0.06	20.8
Potassium, %	102	2.75	0.67	24.5
Magnesium, %	102	0.22	0.07	30.6
Relative Feed Value	102	138.4	33.67	24.3
<i>Mixed Haylage – 1st cut</i>				
Moisture %	470	56.64	11.11	19.6
Protein % (N x 6.25)	470	17.44	3.13	17.9
Soluble protein, %	469	9.89	2.69	27.2
ADF-CP, %	469	1.81	0.32	17.8
NDF-CP, %	469	4.88	0.96	19.7

Acid Detergent Fibre %	470	30.8	3.53	11.5
aNeutral Detergent Fibre %	470	44.27	6.28	14.2
NDF Digestibility (24 h), %	347	48.32	6.73	13.9
NDF Digestibility (30 h), %	347	53.02	6.76	12.8
NDF Digestibility (48 h), %	347	59.41	6.76	11.4
Lignin, %	468	6.42	1.3	20.3
Starch, %	469	1.09	0.48	43.5
Ethanol Soluble CHOs, %	347	2.42	1.71	70.7
Water Soluble CHO, %	347	3.84	2.38	62.1
Fat, %	469	2.73	0.62	22.5
Ash, %	469	8.98	1.3	14.5
Calcium, %	470	1.2	0.36	30.1
Phosphorous, %	470	0.29	0.05	18.3
Potassium, %	470	2.49	0.55	22.3
Magnesium, %	470	0.27	0.06	24
Relative Feed Value	470	139.67	23.84	17.1
Mixed Legume Haylage – 2^{nd+} cut				
Moisture %	307	52.11	11.42	21.9
Protein % (N x 6.25)	307	19.94	2.75	13.8
Soluble protein, %	307	11.05	2.3	20.8
ADF-CP, %	307	1.95	0.31	16.2
NDF-CP, %	307	5.34	1.28	24
Acid Detergent Fibre %	307	29.64	3.31	11.2
aNeutral Detergent Fibre %	307	41.02	5.13	12.5
NDF Digestibility (24 h), %	241	45.14	6.55	14.5
NDF Digestibility (30 h), %	241	49.87	6.7	13.4
NDF Digestibility (48 h), %	241	56.1	6.65	11.9
Lignin, %	307	6.97	1.15	16.5
Starch, %	307	1.07	0.28	25.9
Ethanol Soluble CHOs, %	241	2.26	1.56	69.1
Water Soluble CHO, %	241	3.64	2.13	58.5
Fat, %	307	2.74	0.56	20.4
Ash, %	307	9.57	1	10.4
Calcium, %	307	1.43	0.33	22.9
Phosphorous, %	307	0.32	0.05	16.6
Potassium, %	307	2.5	0.56	22.5
Magnesium, %	307	0.31	0.07	23.4
Relative Feed Value	307	152.19	24.13	15.9
Grass Haylage – 2^{nd+} cut				
Moisture %	62	55.5	11.17	20.1
Protein % (N x 6.25)	62	17.47	2.97	17
Soluble protein, %	62	9.61	2.76	28.7
ADF-CP, %	62	1.43	0.4	28.2
NDF-CP, %	62	5.52	1.19	21.6
Acid Detergent Fibre %	62	27.53	3.7	13.4
aNeutral Detergent Fibre %	62	45.32	5.05	11.1
NDF Digestibility (24 h), %	57	57.91	6.47	11.2
NDF Digestibility (30 h), %	57	63.12	6.68	10.6
NDF Digestibility (48 h), %	57	68.65	6.75	9.8
Lignin, %	61	4.19	1.44	34.4
Starch, %	62	1.04	0.26	24.9
Ethanol Soluble CHOs, %	57	3.76	2.11	56.1
Water Soluble CHO, %	57	5.75	3.07	53.4
Fat, %	62	3.75	0.61	16.4
Ash, %	62	9.47	1.1	11.6

Calcium, %	62	0.69	0.22	31.4
Phosphorous, %	62	0.34	0.06	16.5
Potassium, %	62	2.93	0.45	15.5
Magnesium, %	62	0.31	0.08	25.6
Relative Feed Value	62	140.68	20.86	14.8
<i>Baleage</i>				
Moisture %	391	43.47	14.37	33.1
Protein % (N x 6.25)	391	17.95	3.95	22
Soluble protein, %	388	8.86	3.06	34.5
ADF-CP, %	390	1.79	0.37	20.9
NDF-CP, %	387	5.98	1.4	23.5
Acid Detergent Fibre %	391	29.46	3.57	12.1
aNeutral Detergent Fibre %	391	43.69	6.89	15.8
NDF Digestibility (24 h), %	249	47.17	7.64	16.2
NDF Digestibility (30 h), %	249	51.8	7.75	15
NDF Digestibility (48 h), %	249	57.99	7.88	13.6
Lignin, %	387	6.47	1.42	21.9
Starch, %	390	1.46	1.02	69.7
Ethanol Soluble CHOs, %	249	4.41	2.06	46.7
Water Soluble CHO, %	249	6.56	2.85	43.5
Fat, %	390	2.43	0.62	25.6
Ash, %	390	9.12	2.01	22
Calcium, %	391	1.23	0.42	34
Phosphorous, %	391	0.29	0.06	21.7
Potassium, %	391	2.26	0.59	26.1
Magnesium, %	391	0.29	0.09	31.8
Relative Feed Value	391	144.74	28.39	19.6

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

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

CORN GRAIN SUMMARY
OCTOBER TO DECEMBER 2016

Item	N° Samples	Mean	S.D.	CV (%)
<i>High Moisture Corn</i>				
Moisture, %	64	25.2	4.51	17.9
Protein, % (N x 6.25)	64	8.95	0.69	7.7
Acid Detergent Fibre, %	62	3.02	0.21	7.1
aNeutral Detergent Fibre, %	62	10.45	0.82	7.8
Starch, %	62	69.78	1.66	2.4
7-hr Starch Digestibility, %	62	70.69	2.03	2.9
Fat, %	62	3.08	0.67	21.6
Ash, %	62	1.24	0.18	14.2
Calcium, %	62	0.02	0.02	92.6
Phosphorus, %	62	0.29	0.03	8.8
Potassium, %	62	0.4	0.03	8
Magnesium, %	62	0.11	0.01	9.8
<i>H. M. Corn & Cob Meal</i>				
Moisture, %	22	32.19	5.47	17
Protein, % (N x 6.25)	22	8.51	0.67	7.8
Acid Detergent Fibre, %	22	9.3	1.21	13
aNeutral Detergent Fibre, %	22	19.91	2.03	10.2
Starch, %	21	58.84	2.25	3.8
Fat, %	22	3.18	0.4	12.7
Ash, %	21	1.45	0.06	4.4
Calcium, %	21	0.04	0.02	53.5
Phosphorus, %	21	0.27	0.03	12.1
Potassium, %	21	0.44	0.05	11.5
Magnesium, %	21	0.11	0.02	14.1