FORAGE SUMMARIES FOR 2014

Issued for the January Guelph Service Bulletin

WHEN YOU NEED TO BE SURE

SGS

CORN SILAGE SUMMARY
OCTOBER – NOVEMBER 2014

FRESH CORN SILAGE SUMMARY October – November 2014				
Item	N° Samples	Mean	S.D.	CV (%)
Moisture, %	506	65.41	6.29	9.6
Protein, % (N x 6.25)	499	8.1	1.01	12.5
Soluble Protein, %	148	1.31	0.88	67.2
ADF-CP, %	495	0.95	0.18	18.6
Acid Detergent Fibre, %	497	25.55	4.16	16.3
aNeutral Detergent Fibre, %	497	44.87	5.5	12.3
NDF Digestibility (48hr), %	403	60.46	2.53	4.2
Lignin, %	495	2.6	0.56	21.5
Starch, %	497	26.74	8.06	30.1
Fat, %	495	2	0.57	28.5
Ash, %	495	4.26	0.76	17.7
Calcium, %	500	0.17	0.05	27.4
Phosphorus, %	500	0.21	0.02	7.7
Potassium, %	500	1.02	0.23	22.6
Magnesium, %	500	0.14	0.03	18.4
Milk per Ton, kg	348	1348.09	130.54	9.7

CORN SILAGE SUMMARY October – November 2014				
Item	N° Samples	Mean	S.D.	CV (%)
Moisture, %	394	64.03	6.12	9.6
Protein, % (N x 6.25)	393	7.83	1.19	15.1
Soluble protein, %	367	2.62	0.86	32.7
ADF-CP, %	373	0.83	0.09	11.2
Acid Detergent Fibre, %	391	23.24	3.88	16.7
aNeutral Detergent Fibre, %	381	42.14	4.9	11.6
NDF Digestibility (24 h), %	267	40.43	1.58	3.9
NDF Digestibility (30 h), %	267	50.69	2.1	4.1
NDF Digestibility (48 h), %	274	61.01	1.71	2.8
Lignin, %	372	2.35	0.51	21.8
Starch, %	380	29.51	7.05	23.9
Starch Digestibility (7 h), %	263	82.51	1.67	2
Fat, %	374	2.31	0.43	18.5
Ash, %	373	3.57	0.59	16.5
Calcium, %	383	0.21	0.08	38.8
Phosphorus, %	383	0.21	0.03	15.1
Potassium, %	383	0.87	0.22	24.8
Magnesium, %	383	0.15	0.03	23.4

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HAY SUMMARY
JUNE – DECEMBER 2014

LEGUME HAY – 1st CUT				
Item	N° Samples	Mean	S.D.	CV (%)
Moisture, %	58	12.58	4.96	39.5
Protein, % (N x 6.25)	57	15.51	3.09	19.9
Soluble protein, %	38	4.38	1.36	31.1
ADF-CP, %	38	1.78	0.31	17.5
Acid Detergent Fibre, %	42	34.54	5.86	17
aNeutral Detergent Fibre, %	41	50.25	9.35	18.6
Lignin, %	38	8.08	1.52	18.9
NDF Digestibility (24 h), %	9	39.74	8.12	20.4
NDF Digestibility (48 h), %	9	53.97	10.11	18.7
Starch, %	18	1.59	0.58	36.5
Ethanol Soluble CHOs, %	9	4.97	1.17	23.6
Fat, %	40	1.66	0.47	28.3
Ash, %	25	7.84	0.93	11.8
Calcium, %	43	1.1	0.41	37.1
Phosphorous, %	43	0.25	0.05	20.1
Potassium, %	43	1.97	0.59	29.8
Magnesium, %	43	0.25	0.09	35.4
Relative Feed Value	41	120.25	29.99	24.9

GRASS HAY – 1ST CUT				
Item	N° Samples	Mean	S.D.	CV (%)
Moisture, %	97	13.5	5.18	38.4
Protein, % (N x 6.25)	53	10.2	2.44	23.9
Soluble protein, %	29	2.41	0.87	36.1
ADF-CP, %	29	1.51	0.32	21.3
Acid Detergent Fibre, %	50	36.5	4.6	12.6
aNeutral Detergent Fibre, %	50	59.59	6.8	11.4
Lignin, %	29	7.5	1.4	18.7
Starch, %	23	2.4	0.53	22.3
Ethanol Soluble CHOs, %	3	5.02	2.44	48.6
Fat, %	29	2.05	0.35	16.8
Ash, %	29	6.4	0.91	14.2
Calcium, %	97	0.5	0.19	37.3
Phosphorous, %	97	0.22	0.06	27.3
Potassium, %	97	1.73	0.54	31.4
Magnesium, %	97	0.16	0.05	29.9
Relative Feed Value	50	96.38	18.76	19.5

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HAY SUMMARY (CONT'D.)
JUNE – DECEMBER 2014

MIXED HAY – 1st CUT				
Item	N° Samples	Mean	S.D.	CV (%)
Moisture, %	356	13.32	4.36	32.7
Protein, % (N x 6.25)	336	12.01	3.41	28.4
Soluble protein, %	249	3.14	1.34	42.5
ADF-CP, %	248	1.59	0.29	18.4
Acid Detergent Fibre, %	293	36.5	4.8	13.1
aNeutral Detergent Fibre, %	270	56.8	7.27	12.8
Lignin, %	247	7.26	1.45	20
NDF Digestibility (24 h), %	90	40.76	7.88	19.3
NDF Digestibility (48 h), %	100	54.72	8.24	15.1
Starch, %	232	1.86	0.68	36.6
Ethanol Soluble CHOs, %	77	4.85	1.92	39.6
Fat, %	268	2.06	0.44	21.2
Ash, %	237	7.19	1.3	18.1
Calcium, %	321	0.75	0.35	47
Phosphorous, %	321	0.22	0.06	28.2
Potassium, %	321	1.82	0.56	30.9
Magnesium, %	321	0.18	0.05	28.7
Relative Feed Value	270	101.36	18.73	18.5

HAY – 2nd+ CUT				
Item	N° Samples	Mean	S.D.	CV (%)
Moisture, %	356	13.32	4.36	32.7
Protein, % (N x 6.25)	336	12.01	3.41	28.4
Soluble protein, %	249	3.14	1.34	42.5
ADF-CP, %	248	1.59	0.29	18.4
Acid Detergent Fibre, %	293	36.5	4.8	13.1
aNeutral Detergent Fibre, %	270	56.8	7.27	12.8
Lignin, %	247	7.26	1.45	20
NDF Digestibility (24 h), %	90	40.76	7.88	19.3
NDF Digestibility (48 h), %	100	54.72	8.24	15.1
Starch, %	232	1.86	0.68	36.6
Ethanol Soluble CHOs, %	77	4.85	1.92	39.6
Fat, %	268	2.06	0.44	21.2
Ash, %	237	7.19	1.3	18.1
Calcium, %	321	0.75	0.35	47
Phosphorous, %	321	0.22	0.06	28.2
Potassium, %	321	1.82	0.56	30.9
Magnesium, %	321	0.18	0.05	28.7
Relative Feed Value	270	101.36	18.73	18.5

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

HAY SUMMARY (CONT'D.)
JUNE – DECEMBER 2014

HAY FOR HORSES				
Item	N° Samples	Mean	S.D.	CV (%)
Moisture, %	155	13.67	6.68	48.9
Protein, % (N x 6.25)	155	11.65	4.04	34.7
Soluble protein, %	153	3.26	1.8	55.3
ADF-CP, %	153	1.65	0.32	19.6
Acid Detergent Fibre, %	153	36.84	4.45	12.1
aNeutral Detergent Fibre, %	153	56.59	7.69	13.6
Lignin, %	153	7.78	1.63	20.9
Fat, %	150	2.01	0.34	17.1
Starch, %	153	1.87	0.74	39.5
Ethanol Soluble CHO, %	148	5.05	1.62	32
Water Soluble CHO, %	148	8.17	2.66	32.6
Ash, %	150	7.02	1.48	21.1
Calcium, %	153	0.81	0.42	51.4
Phosphorous, %	153	0.21	0.07	34.4
Potassium, %	153	1.7	0.52	30.7
Magnesium, %	153	0.18	0.06	35.6
Relative Feed Value	153	101.65	20.36	20
Digestible Energy (Mcal/kg)	153	2.1	0.24	11.2
TDN, %	153	47.52	5.33	11.2

HAYLAGE SUMMARY
JUNE – DECEMBER 2014

LEGUME HAYLAGE – 1st CUT				
Item	N° Samples	Mean	S.D.	CV (%)
Moisture %	133	54.77	11.83	21.6
Protein % (N x 6.25)	133	17.56	2.88	16.4
Soluble protein, %	130	8.55	2.29	26.8
ADF-CP, %	130	1.69	0.38	22.6
NDF-CP, %	48	4.72	1.25	26.4
Acid Detergent Fibre %	132	32.42	3.57	11
aNeutral Detergent Fibre %	132	46.1	6.09	13.2
Lignin, %	130	6.61	1.09	16.4
NDF digestibility (24 h), %	22	46.22	8.34	18.1
NDF digestibility (48 h), %	22	58.61	8.78	15
Fat, %	48	2.38	0.6	25.3
Ethanol Soluble CHO, %	19	1.81	1.17	65
Starch, %	46	1.13	1.09	96.5
Ash, %	48	8.73	1.25	14.3
Calcium, %	132	1.12	0.31	27.4
Phosphorous, %	132	0.29	0.04	15.1
Potassium, %	132	2.45	0.54	22
Magnesium, %	132	0.24	0.05	21.1
Relative Feed Value	132	131.29	22.56	17.2

GRASS HAYLAGE – 1ST CUT				
Item	N° Samples	Mean	S.D.	CV (%)
Moisture %	105	53.98	13.7	25.4
Protein % (N x 6.25)	92	15.33	3.25	21.2
Soluble protein, %	85	7.93	2.7	34.1
ADF-CP, %	85	1.5	0.44	29.6
NDF-CP, %	85	5.14	0.99	19.3
Acid Detergent Fibre %	91	32.12	5.54	17.3
aNeutral Detergent Fibre %	91	51.06	7.87	15.4
Lignin, %	85	4.96	1.6	32.2
NDF digestibility (24 h), %	68	57.88	7.92	13.7
NDF digestibility (48 h), %	68	69.49	7.9	11.4
Fat, %	85	3.02	0.72	23.9
Ethanol Soluble CHO, %	56	2.24	1.37	61.4
Starch, %	85	1.08	0.54	49.5
Ash, %	85	8.94	1.65	18.4
Calcium, %	104	0.66	0.22	33.7
Phosphorous, %	104	0.3	0.07	23.6
Potassium, %	104	2.69	0.96	35.6
Magnesium, %	104	0.23	0.08	32.4
Relative Feed Value	91	119.99	24.11	20.1

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HAYLAGE SUMMARY (CONT'D.)
JUNE – DECEMBER 2014

MIXED HAYLAGE – 1st CUT				
Item	N° Samples	Mean	S.D.	CV (%)
Moisture %	583	56.08	11.87	21.2
Protein % (N x 6.25)	565	16.99	2.78	16.4
Soluble protein, %	552	8.84	2.28	25.8
ADF-CP, %	552	1.75	0.35	19.9
NDF-CP, %	520	4.9	0.95	19.4
Acid Detergent Fibre %	562	32.9	3.64	11.1
aNeutral Detergent Fibre %	562	47.51	6.16	13
Lignin, %	552	6.38	1.16	18.2
NDF digestibility (24 h), %	334	48.76	7.1	14.6
NDF digestibility (48 h), %	335	60.37	7.1	11.8
Fat, %	520	2.74	0.61	22.2
Ethanol Soluble CHO, %	245	1.79	1.1	61.5
Starch, %	520	1.19	3.72	312.1
Ash, %	520	8.8	1.25	14.3
Calcium, %	581	1.05	0.35	33.4
Phosphorous, %	581	0.3	0.05	17.9
Potassium, %	581	2.5	0.59	23.7
Magnesium, %	581	0.23	0.06	24.3
Relative Feed Value	562	126.5	20.66	16.3

MIXED LEGUME HAYLAGE – 2ND+ CUT				
Item	N° Samples	Mean	S.D.	CV (%)
Moisture %	325	54.82	10.08	18.4
Protein % (N x 6.25)	325	19.14	1.92	10.1
Soluble protein, %	321	9.95	1.86	18.7
ADF-CP, %	323	1.89	0.32	16.8
NDF-CP, %	323	5.13	1.12	21.8
Acid Detergent Fibre %	324	32.12	3.27	10.2
aNeutral Detergent Fibre %	324	43.56	4.65	10.7
Lignin, %	319	6.99	0.98	14
NDF digestibility (24 h), %	235	45.31	5.99	13.2
NDF digestibility (48 h), %	237	56.71	6	10.6
Fat, %	323	2.6	0.51	19.4
Ethanol Soluble CHO, %	220	1.89	1.1	57.9
Starch, %	323	0.99	0.53	53.2
Ash, %	323	9.52	0.88	9.2
Calcium, %	325	1.37	0.28	20.6
Phosphorous, %	325	0.32	0.05	16.4
Potassium, %	325	2.48	0.52	21.1
Magnesium, %	325	0.27	0.05	18.7
Relative Feed Value	324	138.4	19.38	14

Mixed Legume Haylage – 2nd+ Cut - Anything greater than 50% legume. Includes all second or third cuts.

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HAYLAGE SUMMARY (CONT'D.)
JUNE – DECEMBER 2014

GRASS HAYLAGE – 2ND+ CUT				
Item	N° Samples	Mean	S.D.	CV (%)
Moisture %	64	54.28	15.29	28.2
Protein % (N x 6.25)	64	17.14	2.41	14.1
Soluble protein, %	64	8.83	1.93	21.8
ADF-CP, %	64	1.43	0.41	28.4
NDF-CP, %	64	5.47	1.06	19.4
Acid Detergent Fibre %	64	28.99	4.25	14.6
aNeutral Detergent Fibre %	64	46.42	5.58	12
Lignin, %	64	4.43	1.47	33.2
NDF digestibility (24 h), %	56	60.22	8.08	13.4
NDF digestibility (48 h), %	56	71.92	7.68	10.7
Fat, %	64	3.27	0.51	15.7
Ethanol Soluble CHO, %	52	2.68	1.6	59.7
Starch, %	64	1.12	0.49	43.2
Ash, %	64	9.65	1.31	13.6
Calcium, %	64	0.73	0.21	29.1
Phosphorous, %	64	0.34	0.06	17.2
Potassium, %	64	2.98	0.72	24.1
Magnesium, %	64	0.27	0.06	22.7
Relative Feed Value	64	135.69	24.26	17.9

BALEAGE				
Item	N° Samples	Mean	S.D.	CV (%)
Moisture %	387	44.49	13.79	31
Protein % (N x 6.25)	386	17.51	2.97	17
Soluble protein, %	383	8.09	2.14	26.5
ADF-CP, %	383	1.69	0.33	19.3
NDF-CP, %	381	5.73	1.27	22.2
Acid Detergent Fibre %	384	31.44	3.56	11.3
aNeutral Detergent Fibre %	383	45.93	6.13	13.4
Lignin, %	382	6.39	1.27	19.9
NDF digestibility (24 h), %	215	47.58	7.96	16.7
NDF digestibility (48 h), %	215	59.24	7.89	13.3
Fat, %	381	2.22	0.56	25.1
Ethanol Soluble CHO, %	188	3.2	1.44	45.1
Starch, %	381	1.23	0.49	40
Ash, %	381	8.93	1.11	12.4
Calcium, %	387	1.14	0.39	34.4
Phosphorous, %	387	0.3	0.06	18.4
Potassium, %	387	2.33	0.56	24
Magnesium, %	387	0.24	0.06	24.8
Relative Feed Value	383	133.33	22.1	16.6

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

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GRAIN SUMMARY
SEPTEMBER – NOVEMBER 2014

OATS				
Item	N° Samples	Mean	S.D.	CV (%)
Moisture, %	11	13.51	2.77	20.5
Protein, % (N x 6.25)	11	12.42	2.26	18.2
Acid Detergent Fibre, %	7	10.39	5.60	53.9
aNeutral Detergent Fibre, %	7	23.45	11.88	50.7
Calcium, %	9	0.06	0.05	72.5
Phosphorus, %	9	0.38	0.04	10.2
Potassium, %	8	0.41	0.07	15.9
Magnesium, %	8	0.12	0.02	14.3

BARLEY				
Item	N° Samples	Mean	S.D.	CV (%)
Moisture, %	35	12.62	1.68	13.3
Protein, % (N x 6.25)	60	10.71	1.45	13.5
Acid Detergent Fibre, %	6	7.51	1.33	17.6
aNeutral Detergent Fibre, %	5	21.19	2.01	9.5
Fat, %	12	1.22	0.44	35.6
Ash, %	11	1.91	0.38	20.2
Calcium, %	12	0.03	0.02	76.3
Phosphorus, %	12	0.36	0.07	19.7
Potassium, %	9	0.53	0.06	10.5
Magnesium, %	9	0.11	0.02	13.4

CORN				
Item	N° Samples	Mean	S.D.	CV (%)
Moisture, %	360	13.63	2.25	16.5
Protein, % (N x 6.25)	400	7.52	0.79	10.6
Acid Detergent Fibre, %	34	3.29	0.61	18.5
aNeutral Detergent Fibre, %	8	9.84	0.90	9.2
Starch, %	9	66.29	7.60	11.5
Fat, %	53	2.85	0.50	17.7
Ash, %	51	1.20	0.13	11.0
Calcium, %	29	0.01	0.01	145.9
Phosphorus, %	29	0.27	0.04	14.0
Potassium, %	28	0.36	0.05	14.2
Magnesium, %	28	0.09	0.02	17.3

WHEAT				
Item	N° Samples	Mean	S.D.	CV (%)
Moisture, %	257	11.52	1.84	16.0
Protein, % (N x 6.25)	258	12.30	1.83	14.9
Acid Detergent Fibre, %	50	3.83	1.04	27.2
aNeutral Detergent Fibre, %	17	12.88	5.08	39.4
Starch, %	79	59.43	3.29	5.5
Fat, %	81	1.51	0.58	38.4
Ash, %	36	1.82	0.54	29.7
Calcium, %	42	0.02	0.02	115.5
Phosphorus, %	74	0.40	0.09	22.3
Potassium, %	73	0.40	0.10	26.1
Magnesium, %	41	0.12	0.04	35.4

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GRAIN SUMMARY (CONT'D.)
SEPTEMBER – NOVEMBER 2014

HIGH MOISTURE CORN				
Item	N° Samples	Mean	S.D.	CV (%)
Moisture, %	110	27.95	4.41	15.8
Protein, % (N x 6.25)	106	8.26	0.91	11.0
Acid Detergent Fibre, %	63	2.68	0.71	26.5
aNeutral Detergent Fibre, %	60	11.30	1.49	13.2
Starch, %	70	67.99	3.46	5.1
Fat, %	56	2.87	0.72	24.9
Ash, %	56	1.61	0.14	8.4
Calcium, %	75	0.01	0.02	146.5
Phosphorus, %	75	0.30	0.03	8.7
Potassium, %	73	0.40	0.03	7.3
Magnesium, %	73	0.11	0.01	11.9

CORN & COB MEAL				
Item	N° Samples	Mean	S.D.	CV (%)
Moisture, %	39	35.90	6.59	18.3
Protein, % (N x 6.25)	39	8.04	0.82	10.1
Acid Detergent Fibre, %	39	9.97	2.86	28.7
aNeutral Detergent Fibre, %	37	21.10	4.97	23.5
Starch, %	32	55.08	5.40	9.8
Ash, %	33	1.42	0.19	13.2
Calcium, %	39	0.03	0.03	92.9
Phosphorus, %	32	55.08	5.40	9.8
Potassium, %	39	0.45	0.05	10.9
Magnesium, %	39	0.10	0.02	15.3

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