

FERMENTATION PROFILES of differing sample-sets with longer and shorter fermentation periods, plus Nutritional Results on same or similar samples (data from 2024 & 2019 Dairy One analyses)

Samp ID	Harvest Date	Date Frozen	Description	Moisture	Dry Matter	Crude Protein	pH in Fresh	pH	% Ammonia (CPE)	LACTIC ACID	ACETIC ACID	ACETIC RATIO	PROPI ONIC ACID	% Butyric Acid	% Iso Butyric Acid	% Total Acids	Amm-N % of Total N	A % CP	B % CP	C % CP	Kd CP	Amm-CPE % of CP
SAMPLES KEPT INTO 2ND SUMMER				Lab received 8/21/24., printed 8/29 & 9/17/24.																		
FER#1	09/28/23	08/21/24	YKF BUCKET BT ASPEN hand-stripd	59.4	40.6	11.1	5.5	4.4	0.14	1.75	0.78	2.26	0	0	0.1	2.63	1	57	33	10	9	1.2
FER#2	07/20/23	08/07/24	MOFGA BUCKET AM BEECH	55.2	44.8	12.7	5.4	5.4	0.02	0.06	0.17	0.35	0.01	0	0.16	0.41	0	57	33	10	9	0.2
FER#3	06/29/23	08/07/24	MOFGA BUCKET PIN CHERRY	63	37	13.4		4.6	0.5	0.76	0.86	0.89	0.01	0.01	0.25	1.88	4	57	33	10	9	3.7
FER#4	09/15/23	08/21/24	YKF BUCKET: WINTERBERRY	61.6	38.4	12.8	5.7	4.2	0.19	2.92	1.63	1.79	0.01	0.03	0.23	4.83	2	57	33	10	9	1.5

SAMPLES KEPT 1ST WINTER ONLY Lab printed 8/8, 8/9 & 8/12/19

2018A	05/26/18		3SF AMERICAN BEECH, hand-stripd	66.6	33.4	19.2		3.7	0.06	0.07	0.13	0.53	0	0	0	0.21	0	57	33	10	9	~
2018B	07/15/18	In Root Cellar	3SF WHITE ASH, hand-stripped	34.7	65.3	11.2		5.6	0.06	0.03	0.05	0.52	0	0	0	0.08	1	57	33	10	9	~
2018C	07/15/18	all winter, at 23-38° F.	3SF W ASH, chipped leafy branches <1	41.6	58.4	5.6		5.5	0.02	0.03	0.02	1.25	0	0	0	0.05	0	57	33	10	9	~
2018D	08/10/18		3SF YELLOW BIRCH, hand-stripped	59.5	40.5	12.1		5.1	0.05	0	0.25	0	0.13	0.1	0.05	0.53	0	57	33	10	9	~
2018E	08/20/18	Frozen in spring.	3SF RED OAK, hand-stripped	53.4	46.6	15.6		5.4	0.12	0.04	0.09	0.4	0	0	0	0.13	1	57	33	10	9	~

NUTRITIONAL RESULTS ON SAME OR SIMILAR SAMPLES

Samp ID	Harvest Date	Date Frozen	Description	Moisture	Dry Matter	Crude Protein	Avail Prot	Adj ADICP	Adj Crud Prot	Sol P %CP	Degr P %CP	ADF	NDF	NFC	%WS C	% Crud Fat EE	Ash	TDN	NEL	NEM	NEG
FER#1	09/28/23	08/21/24	YKF BUCKET BT ASPEN, hand-stripd	59.4	40.6	11.1	5.4	5.7	6.4	~	~	30.3	41.1	33.7	4.1	8.6	5.53	66	0.72	0.71	0.44
FER#2	07/20/23	08/07/24	MOFGA BUCKET AM BEECH	55.2	44.8	12.7	8.4	4.3	9.4	~	~	35.5	54.2	24.6	3	3.7	4.78	59	0.57	0.55	0.29
PE21	07/01/23	12/25/23	MOFGA PIN CHERRY ENSILED	66.2	33.8	17	11.5	5.5	12.5	14	18	27.8	33.5	37.8	5.9	5.9	5.76	66	0.73	0.71	0.43
PE15	09/15/23	12/25/23	YKF WINTERBERRY ENSILED	58.2	41.8	12.6	7.1	5.5	8.1	12	24	31.4	49.2	27	4	6.1	5.08	62	0.64	0.63	0.37
Aves for these 2024 long-fermented machine-sep leaf-silages:				59.75	40.25	13.35	8.10	5.25	9.10	13.00	21.00	31.25	44.50	30.78	4.25	6.08	5.29	63.25	0.67	0.65	0.38
2018A	05/26/18		3SF AMERICAN BEECH, hand-stripd	66.6	33.4	19.2	~	~	~	8	~	27.8	38.8	31.2*	~	~	~	62	0.65	0.61	0.35
2018B	07/15/18	In Root Cellar	3SF WHITE ASH, hand-stripped	34.7	65.3	11.2	~	~	~	6	~	27.2	39.7	38.3*	~	~	~	59	0.62	0.56	0.31
2018C	07/15/18	all winter, at 23-38° F.	3SF W ASH, chipped branches <1"D	41.6	58.4	5.6	~	~	~	7	~	46.2	67.5	16	~	~	~	52	0.43	0.43	0.18
2018D	08/10/18		3SF YELLOW BIRCH, hand-stripped	59.5	40.5	12.1	~	~	~	4	~	29	41.1	36.1*	~	~	~	59	0.62	0.57	0.31
2018E	08/20/18	Frozen in spring.	3SF RED OAK, hand-stripped	53.4	46.6	15.6	~	~	~	9	~	30.9	49.5	24*	~	~	~	58	0.58	0.54	0.29
Aves for these 2018 short-fermented hand-stripped leaf-silages:				53.55	46.45	14.53				6.75		28.73	42.28	32.4*				59.50	0.62	0.57	0.32

\* These NFC figures were based upon average Fat EE & Ash of grass.

NUTRITIONAL RESULTS ON SAME OR SIMILAR SAMPLES, continued

Samp ID	Harvest Date	Date Frozen	Description	RFV	Calciu m	Phosph orus	Magne sium	Potass ium	Sodium	Iron	Zinc	Coppe	PPM			pH	Amm	Am	Am
													Manga nese	Molyb denum	Sulfur		-CPE % of CP	mon % of SP	CPE %C P
FER#1	09/28/23	08/21/24	YKF BUCKET BT ASPEN (hand-stripp	148	~	~	~	~	~	~	~	~	~	~	~	4.4	1.2	~	~
FER#2	07/20/23	08/07/24	MOFGA BUCKET AM BEECH	105	~	~	~	~	~	~	~	~	~	~	~	5.4	0.2	~	~
PE21	07/01/23	12/25/23	MOFGA PIN CHERRY ENSILED	187	0.96	0.33	0.28	1.4	0.008	86	29	6	54	0.5	0.15	4	0.48	21	2.8
PE15	09/15/23	12/25/23	YKF WINTERBERRY ENSILED	122	0.92	0.15	0.31		0.014	115	232	15	479	0.6	0.19	5.4	0.12	8	0.9
Ave RFV of these 2024 long-fermented machine-sep leaf-silages:				140.39															
2018A	05/26/18		3SF AMERICAN BEECH, hand-stripper	161	0.51	0.28	0.2	1.34	0.013	218	31	13	145	0.1	0.24	3.7	~	~	~
2018B	07/15/18	In Root Cellar	3SF WHITE ASH, hand-stripped	159	1.54	0.12	0.32	1.04	0.008	56	13	9	76	0.1	0.28	5.6	~	~	~
2018C	07/15/18	all winter, at 23-38° F.	3SF W ASH, chipped leafy branches <1	73	0.95	0.13	0.13	0.85	0.01	537	27	24	24	0.1	0.11	5.5	~	~	~
2018D	08/10/18		3SF YELLOW BIRCH, hand-stripped	150	1.05	0.13	0.27	0.9	0.01	62	260	7	843	0.1	0.13	5.1	~	~	~
2018E	08/20/18	Frozen in spring.	3SF RED OAK, hand-stripped	122	0.78	0.15	0.19	1.11	0.01	66	34	6	337	0.2	0.17	5.4	~	~	~
Ave RFV of 2018 these short-fermented hand-stripped leaf-silages:				160.00															

Samp ID	Harvest Date	Date Frozen	Description	ME 1X lb	ME 1X kg	TDN1X	DE Mcal/kg	A % CP	B % CP	C % CP	Kd CP
FER#2	07/20/23	08/07/24	MOFGA BUCKET AM BEECH	0.98	2.15	59	3	57	33	10	9
PE21	07/01/23	12/25/23	MOFGA PIN CHERRY ENSILED	1.15	2.53	66	3	31	62	7	12
PE15	09/15/23	12/25/23	YKF WINTERBERRY ENSILED	1.05	2.31	62	3	31	62	7	12
2018A	05/26/18		3SF AMERICAN BEECH, hand-stripper	1.09	2.4	62	3	57	33	10	9
2018B	07/15/18	In Root Cellar	3SF WHITE ASH, hand-stripped	0.97	2.13	59	3	57	33	10	9
2018C	07/15/18	all winter, at 23-38° F.	3SF W ASH, chipped leafy branches <1	0.81	1.79	52	2	57	33	10	9
2018D	08/10/18		3SF YELLOW BIRCH, hand-stripped	0.99	2.18	59	3	57	33	10	9
2018E	08/20/18	Frozen in spring.	3SF RED OAK, hand-stripped	0.99	2.19	58	3	57	33	10	9