

Table A6. Forage quality measures after 120 days of fermentation for Adirondack Farm, Peru, NY, BMR/non-BMR corn silage project, NNY, 2017.

Item	Hybrids			SE ¹
	1	2	3	
Dry matter, %	32.5	33.9	35.7	0.2
Starch, % of DM	36.1	35.1	34.2	1.4
7-h starch digestibility, % of starch	71.0	68.2	66.4	2.2
Crude protein (CP), % of DM	7.4	7.4	8.4	0.1
Soluble protein, % of DM	3.60	3.67	4.13	0.15
Total digestible nutrients (TDN), % of DM	74.6	75.7	74.1	0.8
Acid detergent fiber, % of DM	22.5	21.5	21.3	0.6
Neutral detergent fiber (aNDFom), % of DM	38.6	36.5	35.9	0.9
30-h aNDF digestibility, % of aNDFom	66.1	67.7	59.5	1.2
Undigested NDF 30-h, % of DM	13.1	11.8	14.5	0.4
Undigested NDF 120-h, % of DM	9.9	8.7	11.5	0.4
Undigested NDF 240-h, % of DM	9.4	8.2	11.2	0.3
Potentially digestible NDF (pdNDF), % of DM	29.2	28.3	24.7	0.7
Acid detergent lignin, % of DM	2.08	1.95	2.29	0.2
Nonstructural carbohydrates (NSC), % of DM	36.7	36.4	35.4	1.3
Ash, % of DM	3.51	3.52	4.24	0.7
pH	3.65	3.56	3.63	0.02
Lactic, % of DM	8.03	8.33	9.13	0.7
Acetic, % of DM	2.56	2.17	2.74	0.3
Ammonia, % of CP	12.3	11.3	13.1	0.6
Dry matter recovery, %	94.8	94.2	98.1	1.2

¹ Standard error of the mean; the highest standard error among the hybrids is presented.

Table A7. Comparison of mean undigested fiber (uNDF) measures based on NIR and Tilley-Terry methods for fresh chop and at 120 days of fermentation, BMR/non-BMR corn silage project, NNY, 2017.

Item	Tilley-Terry Method	NIR	R ²
Neutral detergent fiber (aNDFom), % of DM	39.7	39.7	0.95
Undigested NDF 30-h, % of DM	14.3	12.8	0.64
Undigested NDF 120-h, % of DM	10.2	7.9	0.73
Undigested NDF 240-h, % of DM	9.7	6.9	0.68

These results showed that there was a strong relationship ($R^2 = 0.95$) between aNDFomNIR and aNDFom (Table A7 and Fig. A1). There was a good relationship ($R^2 = 0.64$) between uNDF30omNIR and uNDF30om, uNDF120om and uNDF120omNIR ($R^2 = 0.73$), and between uNDF240omNIR and uNDF240om ($R^2 = 0.68$). *The NIR-based estimates of uNDF accurately predicted wet chemistry (Tilley-Terry) uNDF values and they provided relatively consistent estimates and ranked hybrids similarly.*

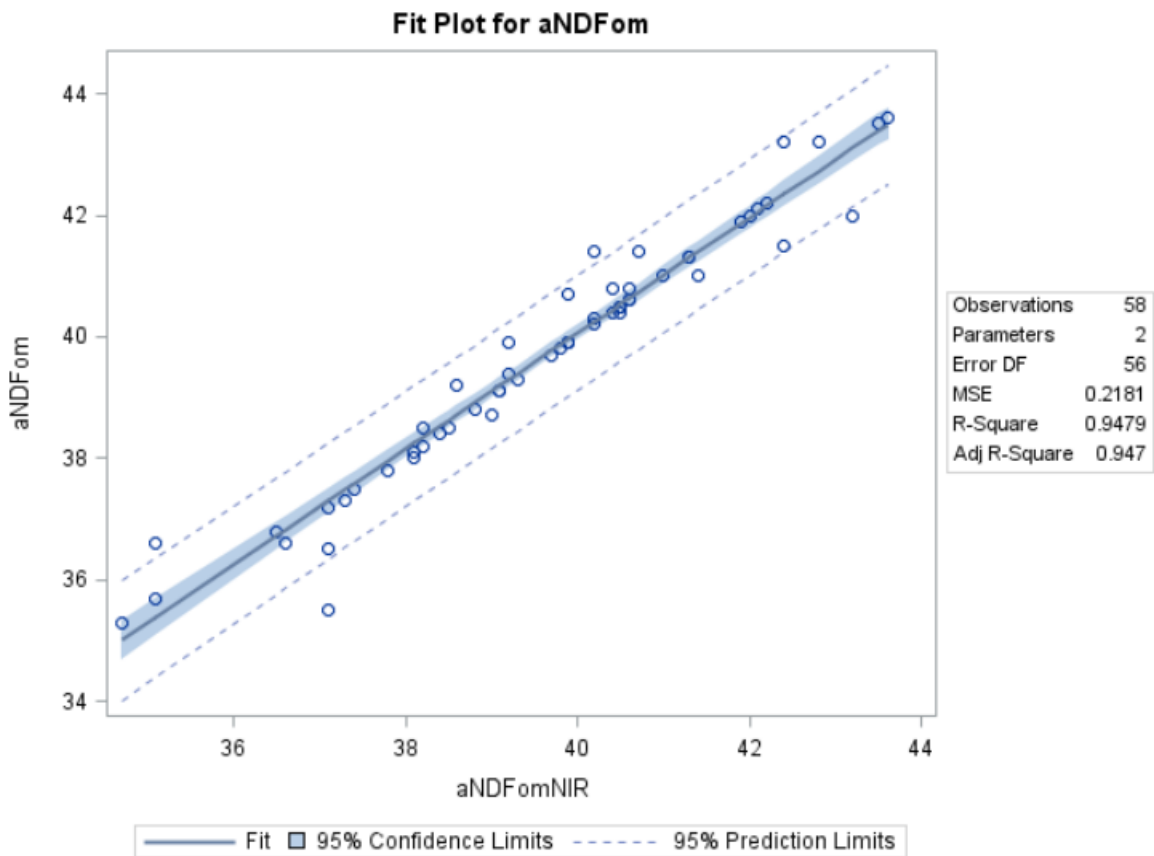


Figure A1. Linear regression between aNDFom and aNDFomNIR for fresh chop and at 120 days of fermentation for Miner Institute, Chazy, NY, and Adirondack Farms, Peru, NY, corn silage samples, BMR/non-BMR corn silage project, NNY, 2017.

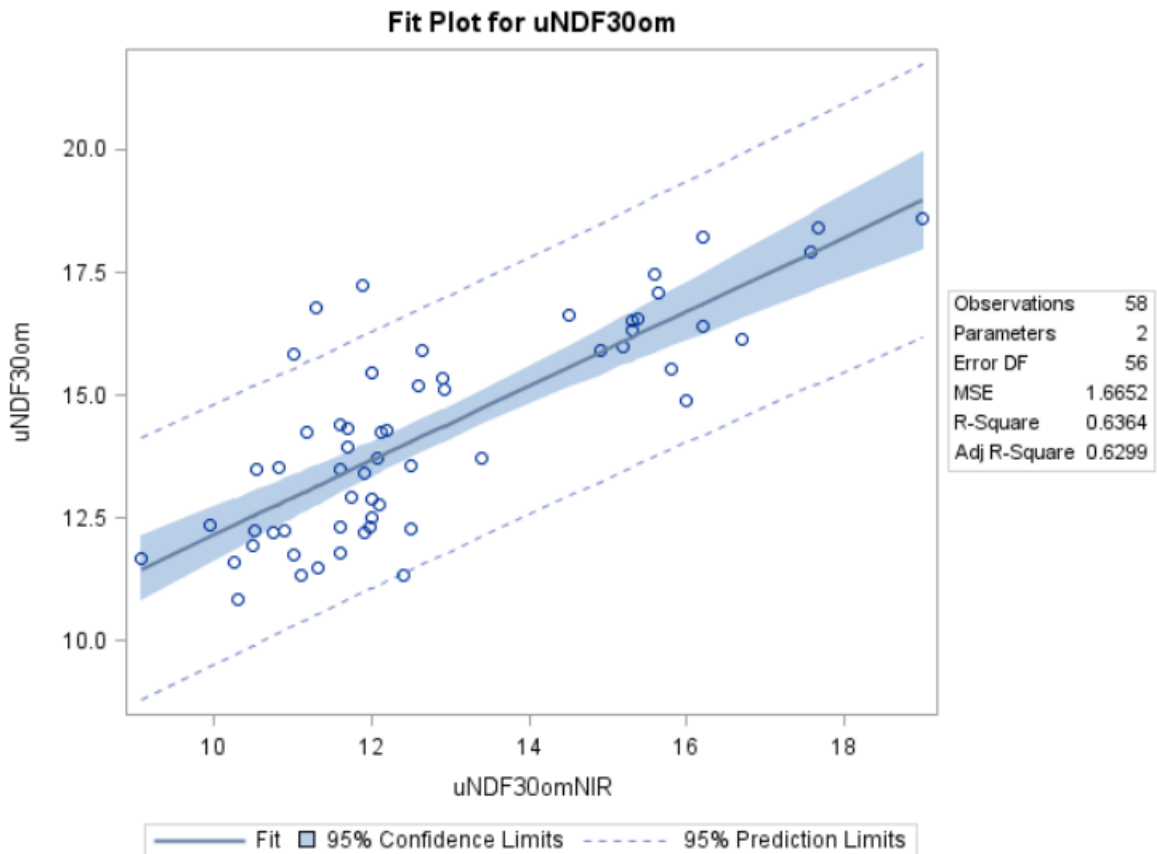


Figure A2. Linear regression between uNDF30om and uNDF30omNIR for fresh chop and at 120 days of fermentation for Miner Institute, Chazy, NY, and Adirondack Farms, Peru, NY, samples, BMR/non-BMR corn silage project, NNY, 2017.

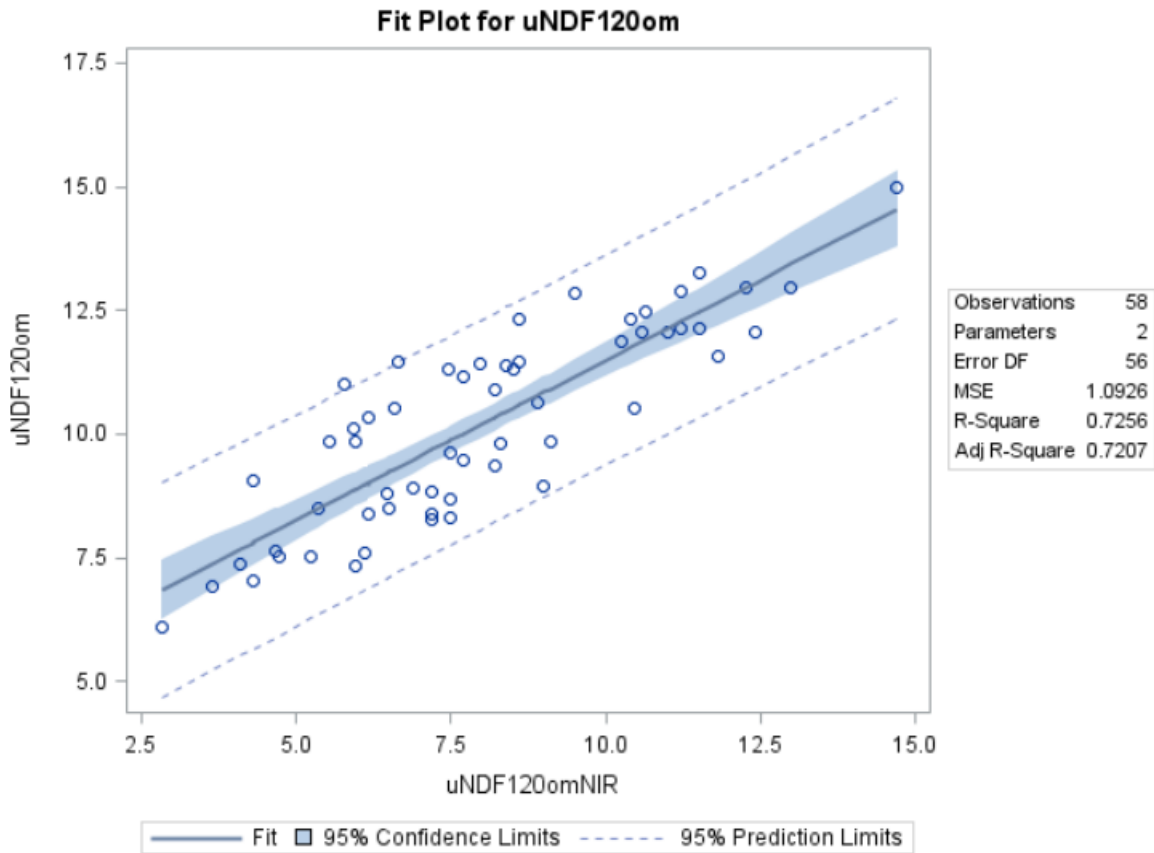


Figure A3. Linear regression between uNDF120om and uNDF120omNIR for fresh chop and at 120 days of fermentation for Miner Institute and Adirondack Farms samples, BMR/non-BMR corn silage project, NNY, 2017.

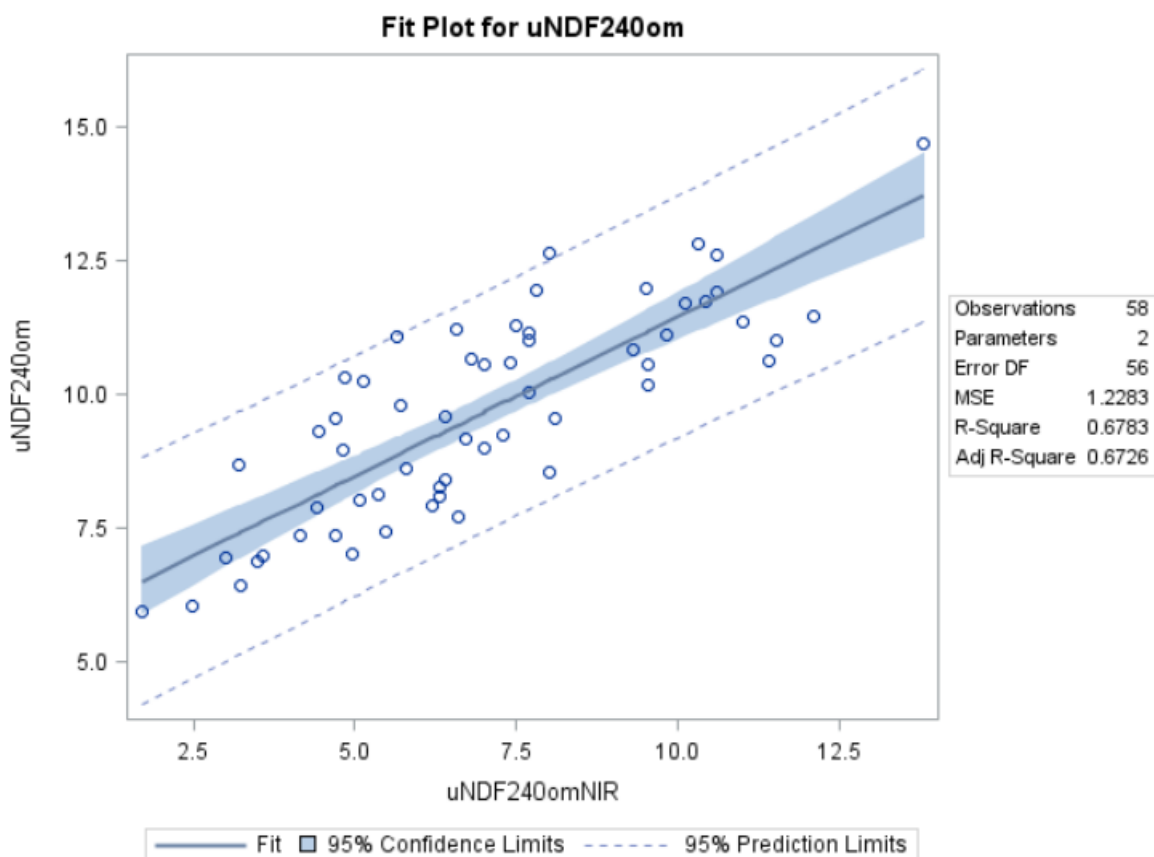


Figure A4. Linear regression between uNDF240om and uNDF240omNIR for fresh chop and at 120 days of fermentation for Miner Institute and Adirondack Farms samples, Miner Institute, Chazy, NY, BMR/non-BMR corn silage project, NNY, 2017.