

Supplementary Materials: Regression Model to Predict Higher Heating Value of Poultry Waste from Proximate Analysis

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Table S1. Proximate analyses, ultimate analyses and HHV of Poultry Waste (PW) samples

No.	Proximate Analysis (wt. %)					Ultimate Analysis (wt. %)					HHV (MJ/kg)	Raw Material Type	Ref.
	M	FC	VM	ASH	C	H	O	N	S	Cl			
1	43.00	1.70	38.90	16.40	28.17	3.64	34.43	3.78	0.55	0.63	10,620 kJ/kg	Poultry Litter	[3]
2	11.30	6.10	57.80	24.80	28.20	5.00	35.00	3.40	0.90		5074 Btu/lb	Chicken Litter	[4]
3	10.59	-	54.72	26.58	29.09	5.11	-	3.44	0.80	-	5166 Btu/lb	Chicken Litter	[29]
4	10.43	-	54.43	25.27	30.66	5.07	-	3.35	0.76	-	5299 Btu/lb	Chicken Litter	[29]
5	11.43	-	49.25	34.62	26.13	4.69	-	4.74	1.28	-	4281 Btu/lb	Chicken Litter	[29]
6	9.44	-	34.83	53.85	16.75	3.35	-	3.68	1.24	-	2915 Btu/lb	Chicken Litter	[29]
7	-	13.36	71.26	15.49	53.45	6.92	32.25	6.11	0.53	0.41	18.02 GJ/t	Poultry Litter	[1]
8	9.29	13.06	43.48	34.28	37.38	4.19	15.64	3.76	0.74	0.50	13.52 GJ/t	Poultry Litter	[1]
9	-	14.40	47.82	37.79	60.09	6.73	25.14	6.04	1.19	0.80	14.9 GJ/t	Poultry Litter	[1]
10	18.16	9.04	56.17	16.64	37.31	4.41	-	9.96	0.73	-	2992 kcal/kg	Poultry Litter	[30]
11	22.90	12.40	53.60	33.90	30.80	4.00	27.20	3.30	0.69	-	5323 Btu/lb	Poultry Litter	[31]
12	24.40	15.40	62.70	21.90	36.60	4.90	32.00	3.90	0.78	-	6382 Btu/lb	Poultry Litter	[31]
13	14.00	15.00	66.30	18.70	38.10	4.40	29.00	8.90	0.96	-	6039 Btu/lb	Poultry Litter	[31]
14	15.70	17.20	71.90	10.90	43.40	5.40	38.80	1.40	0.20	-	7516 Btu/lb	Poultry Litter	[31]
15	25.50	14.00	62.20	23.90	35.60	4.60	29.80	5.30	0.90	-	6048Btu/lb	Poultry Litter	[31]
16	27.40	9.80	47.30	15.70	27.22	3.72	23.10	2.69	0.33	0.71	6394 Btu/lb	Poultry Litter	[32]
17	43.01	1.66	38.91	16.42	39.57	5.11	48.27	5.31	0.77	0.88	10.62	Poultry Litter	[33]
18	37.26	12.74	71.11	16.16	42.26	5.47	29.94	4.55	0.63	-	17.11	Poultry Litter	[34]
19	27.01	13.36	61.49	25.15	-	-	-	-	0.79	-	6315 Btu/lb	Poultry Litter	[35]
20	5.60	21.50	62.70	10.90	43.90	6.50	32.80	5.70	0.20	-	18.30	Chicken Manure	[36]
21	8.20	-	60.20	15.40	40.00	5.40	33.50	5.60	0.10	-	16.00	Poultry Litter	[37]

22	18.10	23.20	75.30	1.60	52.10	6.00	-	0.20	0.20	-	20.90	Poultry Waste	[38]
23	10.90	17.30	57.00	14.80	43.70	6.60	44.90	4.00	0.80	-	16.80	Chicken Litter	[39]
24	20.00	7.70	55.30	17.00	38.10	5.60	30.90	3.50	0.60	-	14874 kJ/kg	Poultry Litter	[40]
25	-	27.00	42.30	30.70	51.07	3.79	15.63	4.45	0.61	-	19.03	Poultry Litter	[41]
26	-	35.50	18.30	46.20	45.91	1.98	10.53	2.07	0.63	-	14.75	Poultry Litter	[41]
27	7.60	15.30	63.60	13.50	43.98	5.16	31.98	4.63	0.75	-	16.80	Poultry Litter	[42]
28	20.20	5.50	67.90	26.60	39.50	4.10	23.10	5.80	0.70	-	13.30	Chicken Manure	[43]
29	9.40	9.60	65.70	24.70	37.20	5.00	27.00	5.60	0.80	-	14.70	Chicken Manure	[43]
30	-	12.80	65.56	21.65	35.59	4.57	35.52	4.98	1.45	-	13.15	Chicken Manure	[44]
31	9.30	13.10	43.00	34.30	34.10	3.80	14.40	3.50	0.67		14240 kJ/kg	Chicken Litter	[45]
32	39.88	8.61	37.05	16.05	41.20	4.88	22.65	4.54	0.42	0.52	10.79	Poultry Litter	[46]
33	20.00	11.10	50.02	18.70	-	-	-	-	-	-	12.80	Poultry Litter	[46]
34	-	25.90	14.30	59.80	-	-	-	-	-	-	11.712	Poultry Waste	[20]
35	5.00	3.20	68.00	24.80	28.17	3.64	34.43	3.78	0.55	0.63	10.62	Chicken Manure	[47]
36	-	55.60	26.70	17.70	55.90	8.20	6.20	10.60	1.10	0.28	27.90	Poultry Waste	[48]
37	30.20	4.70	75.10	20.20	41.70	5.10	29.50	4.70	0.80	-	12.80	Poultry Litter	[49]
38	7.34	13.25	54.34	25.07	31.84	3.98	27.50	3.52	0.75	-	12.77	Poultry Litter	[50]
39	24.40	11.70	63.10	25.20	35.00	4.20	-	6.80	0.40	-	11.00	Poultry Manure	[38]
40	7.50	8.40	40.30	43.80	39.10	6.70	48.30	4.70	1.20	-	10.00	Chicken Litter	[39]
41	-	8.80	74.30	16.90	42.15	5.23	34.80	3.67	0.58	-	15.11	Poultry Litter	[41]
42	7.30	4.20	53.70	34.80	25.20	3.50	22.25	6.70	0.25	-	10333 kJ/kg	Chicken Litter	[51]
43	9.90	-	-	17.20	33.00	4.40	29.10	5.60	0.30	0.50	14590 kJ/kg	Chicken Manure	[52]
44	11.00	-	-	25.10	30.70	4.20	25.20	3.20	0.20	0.40	13670 kJ/kg	Chicken Manure	[52]
45	27.50	-	-	22.90	39.50	4.30	27.30	3.90	0.80	1.28	6572 Btu/lbg	Poultry Litter	[53]
46	62.50	-	26.56	10.60	14.81	8.16	-	2.39	-	-	14.587	Poultry Manure	[13]
47	12.83	-	64.43	15.41	36.02	5.73	-	1.85	-	-	11.552	Poultry Manure	[13]
48	20.10	3.30	54.30	-	43.30	6.60	6.00	5.70	1.20	-	10.10	Poultry Litter	[54]