Table 1- Reactor operation data

HRT (days)	**OLR (kg VS/(m^3·d))**	**Pump flow (L/h)**	**Feeding cycles a day (30 min.)**	**Feed rate (L/d)**
20	2.0	30	5	75
16.7	2.1	30	6	90
12.5	3.5	30	8	120
10	4.5	30	10	150

Table 2- Composition of dairy manure, solid and liquid fractions.

	Raw Manure	SSF	SLF
Mass distribution (%)	100	18	82
TS (%)	9.2	25.3	5.8
VS (%)	7.3	22.7	4.2
VS/TS	0.79	0.90	0.72
TKN-N (g/L)	3.8	4.3	3.6
P_T (g/L)	1.1	1.4	1.0

Table 3- Steady-state data for affluent and effluent of CSTR reactor (Mean ± SD)

	HRT: 20 days	HRT: 16.7 days	HRT: 12.50 days	HRT: 10 days
		Influent		
pH	6.7 ± 0.1	6.9 ± 0.1	6.7 ± 0.1	6.6 ± 0.1
COD_T (g/L)	51.6 ± 2.5	46.8 ± 1.5	57.4 ± 2.0	59.6 ± 3.1
COD_{VFA} (g/L)	9.2 ± 1.1	6.4 ± 0.7	12.4 ± 1.1	14.3 ± 0.6
TS (g/L)	56.4 ± 1.6	51.7 ± 2.1	60.3± 2.4	62.7 ± 3.3
VS (g/L)	40.5 ± 1.7	35.8 ± 1.2	43.4 ± 1.5	44.9 ± 2.6
TKN-N (g/L)	3.4 ± 0.3	3.0 ± 0.3	3.7 ± 0.3	4.0 ± 0.4
NH_4^+-N (g/L)	2.3 ± 0.2	1.6 ± 0.3	1.9 ± 0.2	2.1 ± 0.3
P_T (g/L)	0.98 ± 0.05	0.90 ± 0.08	1.1 ± 0.1	1.1 ± 0.1
		Effluent		
pH	7.7 ± 0.1	7.8 ± 0.1	7.9 ± 0.1	7.8 ± 0.1
COD_T (g/L)	30.2 ± 2.1	29.3 ± 1.8	33.2 ± 1.9	36.9 ± 2.6
COD_{VFA} (g/L)	0	0	0. 27 ± 0.09	0.69 ± 0.10
TS (g/L)	39.2 ± 2.1	37.7 ± 1.9	41.1 ± 1.8	45.3 ± 1.2
VS (g/L)	23.7 ± 1.6	22.4 ± 2.5	25.1 ± 2.3	27.8 ± 1.6
TKN-N (g/L)	3.2 ± 0.3	2.9 ± 0.3	3.5 ± 0.3	3.8 ± 0.3
NH_4^+-N (g/L)	2.3 ± 0.1	2.1 ± 0.2	2.1 ± 0.2	2.2 ± 0.2
P_T (g/L)	0.95 ± 0.03	0.88 ± 0.05	1.0 ± 0.1	1.0 ± 0.1

Table 4- Specific biogas and methane production and volumetric biogas and methane production rates during CSTR operation

HRT (days)	**20**	**16.7**	**12.5**	**10**
L biogas/ kg VS	327	336	349	328
L CH_4/ kg VS	206	219	220	223
m^3 biogas (m^3·d)	0.66	0.72	1.21	1.47
m^3 CH_4/(m^3·d)	0.42	0.47	0.76	1.00