Supplementary material

Table S1. Physicochemical analysis (Na, Mg, Ca, S, Cu, Zn, Fe, Mn and B) of raw and treated dairy slurry (DS2), in the beginning of the storage test (t=0 d) and after 15, 30 and 60 days (t=15, t=30 and t=60 d) (Mean, n=3). Slurry samples were acidified to pH 5.0 (AC), alkalinized to pH 9.5 (AL), and a combined treatment alkalinization/neutralization (NE) was also tested.

DS	Time (days)	g kg^{-1}(DM)				mg kg^{-1} (DM)				
		Na	Mg	Ca	S	Cu	Zn	Fe	Mn	B
RS	0	8.4^{cd}	5.8^{def}	14.0^{bc}	3.8^{g}	38^{a}	219^{cd}	1779^{def}	220^{abc}	27^{ab}
	15	7.6^{de}	6.4^{bcd}	16.2^{a}	4.1^{g}	43^{a}	246^{abc}	2185^{ab}	245^{abc}	22^{bcdef}
	30	9.2^{bc}	7.2^{ab}	17.8^{a}	4.2^{g}	41^{a}	258^{ab}	2352^{a}	264^{ab}	23^{bcd}
	60	8.8^{bc}	7.3^{a}	17.6^{a}	4.5^{g}	44^{a}	267^{a}	2122^{abcde}	248^{abc}	32^{a}
AC	0	6.7^{fgh}	5.5^{ef}	12.0^{cd}	41.3^{a}	36^{a}	221^{cd}	2154^{abcd}	210^{abc}	22^{bcde}
	15	6.6^{gh}	5.1^{f}	12.2^{cd}	36.1^{b}	34^{a}	214^{cd}	1859^{bcdef}	197^{bc}	15^{f}
	30	7.6^{e}	6.1^{cde}	15.7^{ab}	36.3^{b}	40^{a}	240^{abc}	2177^{abc}	272^{a}	19^{cdef}.
	60	6.4^{h}	6.4^{bcd}	12.3^{cd}	29.9^{c}	58^{a}	213^{cd}	1786^{cdef}	185^{c}	26^{abc}
AL	0	7.2^{efg}	5.0^{f}	11.5^{d}	4.1^{g}	34^{a}	214^{cd}	1991^{abcdef}	198^{bc}	24^{bcd}
	15	7.5^{ef}	5.3^{ef}	13.1^{cd}	3.7^{g}	34^{a}	211^{cd}	1803^{bcdef}	202^{abc}	18^{def}
	30	10.2^{a}	6.9^{abc}	17.2^{a}	3.8^{g}	36^{a}	230^{bcd}	2078^{abcdef}	265^{ab}	20^{bcdef}
	60	9.3^{bc}	6.5^{abcd}	15.8^{ab}	4.1^{g}	36^{a}	221^{cd}	1720^{f}	208^{abc}	27^{abc}
NE	0	7.3^{efg}	5.4^{ef}	12.3^{cd}	22.4^{d}	37^{a}	239^{abc}	2170^{abcd}	213^{abc}	26^{abc}
	15	7.3^{efg}	5.1^{f}	12.5^{cd}	18.9^{ef}	36^{a}	202^{d}	1741^{ef}	198^{bc}	16^{ef}
	30	10.4^{a}	7.2^{ab}	17.8^{a}	19.9^{de}	37^{a}	235^{abcd}	2104^{abcdef}	248^{abc}	20^{cdef}
	60	8.9^{bc}	6.6^{abcd}	16.3^{a}	16.4^{f}	37^{a}	231^{bcd}	1836^{bcdef}	215^{abc}	27^{ab}
Two-way ANOVA										
Slurry treatment (T)		***	***	***	***	n.s.	***	**	*	***
Storage time (t)		***	***	***	***	n.s.	***	***	***	***
T X t		***	**	***	***	n.s.	***	***	n.s.	n.s.

DS = Dairy slurry; RS = Raw slurry; AC = Acidified slurry; AL = Alcalinized slurry; NE = Neutralized slurry. *, **, *** = significant at P ≤ 0.05, 0.01, and 0.001, respectively. For each parameter, values followed by the same letter do not differ significantly according to the Tukey test (P < 0.05). n.s. = not significant.

Table S2. Physicochemical analysis (Na, Mg, Ca, S, Cu, Zn, Fe, Mn and B) of raw and treated pig slurry (PS3), in the beginning of the storage test (t = 0d) and after 15, 30 and 60 days (t = 15, t=30, t =60 d) (Mean, n=3). Slurry samples were acidified to pH 5.0 (AC), alkalinized to pH 9.5 (AL), and a combined treatment alkalinization/neutralization (NE) was also tested.

PS	Time (days)	g kg^{-1}(DM)				mg kg^{-1} (DM)				
		Na	Mg	Ca	S	Cu	Zn	Fe	Mn	B
RS	0	11.6^{g}	10.2^{bc}	21.0^{def}	7.8^{e}	159^{ab}	674^{a}	1912^{a}	545^{ab}	56^{i}
	15	14.2^{fg}	10.0^{bcd}	20.1^{def}	5.5^{f}	156^{ab}	621^{ab}	1504^{bc}	476^{bcd}	48^{hi}
	30	17.1^{fg}	12.7^{a}	27.8^{a}	5.8^{ef}	168^{a}	660^{a}	1912^{a}	586^{a}	58^{ghi}
	60	18.5^{fg}	12.2^{a}	24.3^{abcd}	6.3^{ef}	168^{a}	643^{a}	1630^{abc}	504^{bcd}	62^{fgh}
AC	0	12.4^{f}	9.7^{cd}	19.4^{f}	42.5^{a}	150^{ab}	600^{ab}	1579^{abc}	480^{bcd}	50^{efgh}
	15	12.6^{f}	9.8^{cd}	20.2^{ef}	38.6^{b}	149^{ab}	603^{ab}	1501^{bc}	450^{cd}	45^{efgh}
	30	14.5^{f}	11.3^{ab}	23.7^{bcde}	39.2^{b}	155^{ab}	601^{ab}	1668^{abc}	516^{abc}	49^{efgh}
	60	13.3^{ef}	10.3^{bc}	21.5^{cdef}	37.5^{b}	152^{ab}	578^{ab}	1395^{c}	438^{d}	54^{defgh}
AL	0	12.5^{de}	9.7^{cd}	19.8^{f}	6.6^{ef}	159^{ab}	623^{ab}	1739^{abc}	517^{abc}	51^{cdefg}
	15	12.9^{d}	8.7^{d}	18.9^{f}	4.7^{f}	143^{b}	534^{b}	1396^{c}	444^{d}	41^{cdef}
	30	17.6^{c}	12.2^{a}	26.2^{ab}	5.4^{f}	155^{ab}	607^{ab}	1756^{ab}	581^{a}	47^{bcdef}
	60	17.1^{b}	12.2^{a}	25.2^{ab}	5.4^{f}	160^{ab}	622^{ab}	1708^{abc}	529^{ab}	55^{bcde}
NE	0	12.8^{b}	9.8^{cd}	19.4^{f}	22.1^{c}	151^{ab}	626^{ab}	1723^{abc}	519^{abc}	48^{bcd}
	15	13.0^{b}	9.7^{cd}	20.7^{def}	18.3^{d}	159^{ab}	599^{ab}	1614^{abc}	494^{bcd}	43^{abc}
	30	17.3^{ab}	12.4^{a}	26.2^{ab}	19.5^{d}	159^{ab}	617^{ab}	1804^{ab}	585^{a}	48^{ab}
	60	15.9^{a}	12.0^{a}	25.0^{abc}	18.5^{d}	157^{ab}	590^{ab}	1592^{abc}	500^{bcd}	53^{a}
Two-way ANOVA										
Slurry treatment (T)		***	***	***	***	**	**	**	***	***
Storage time (t)		***	***	***	***	*	*	***	***	***
T X t		***	**	*	**	n.s	n.s	n.s	n.s	n.s

PS = Pig slurry; RS = Raw slurry; AC = Acidified slurry; AL = Alcalinized slurry; NE = Neutralized slurry. *, **, *** = significant at P ≤ 0.05, 0.01, and 0.001, respectively. For each parameter, values followed by the same letter do not differ significantly according to the Tukey test (P < 0.05). n.s. = not significant.