**Table S1.** Growth performance of post-weaning piglets fed seaweed (SW)

Sow diets (SD) Piglet diets (PD)*	CR		L	LR		<i>p</i> -value		
	CT	SW	CT	SW	SEM <sup>1</sup>	SD	PD	SD x PD
No. of piglets**	10	10	10	10				
BW <sup>2</sup> (kg)								
d 0	6.19	6.19	6.66	6.36	0.55	0.509	0.595	0.590
d 7	6.86	7.21	7.58	6.89	0.59	0.712	0.565	0.087
d 15	9.56	10.72	10.62	9.32	0.98	0.852	0.886	0.018
d 21	12.41 <sup>b</sup>	14.14 <sup>a</sup>	13.64	12.13	1.17	0.713	0.850	0.010
$ADG^{2}\left( g/d\right)$								
d 0 to 7	51.86	101.30	157.50	100.20	62.74	0.106	0.901	0.099
d 7 to 15	346.85 <sup>b</sup>	447.64a	375.05ab	298.14 <sup>bc</sup>	60.95	0.310	0.698	0.007
d 15 to 21	471.65	567.97	527.00	491.98	73.17	0.780	0.409	0.083
d 0 to 15	202.76	279.59	275.82	211.51	55.73	0.955	0.824	0.017
d 0 to 21	276.15 <sup>b</sup>	358.55a	345.63	289.71	52.20	0.993	0.616	0.013
FI <sup>2</sup> (kg/period)								
d 0 to 7	1.08	1.36	1.56	1.38	0.31	0.123	0.757	0.152
d 7 to 15	3.87	4.34	4.19	3.47	0.58	0.598	0.665	0.049
d 15 to 21	4.31 <sup>b</sup>	$5.00^{a}$	$4.45^{ab}$	3.53 <sup>c</sup>	0.48	0.127	0.644	0.002
d 0 to 15	5.18	5.92	5.60	4.70	0.84	0.596	0.851	0.060
d 0 to 21	9.63ab	11.07a	9.96ª	8.13 <sup>b</sup>	1.17	0.234	0.743	0.009
$ADFI^{2}\left( g/d\right)$								
d 0 to 7	154.46	194.17	222.59	196.79	44.58	0.123	0.757	0.152
d 7 to 15	483.86	542.20	523.48	433.50	72.35	0.598	0.665	0.049
d 15 to 21	717.62	833.07	741.10	588.15	80.39	0.127	0.644	0.002
d 0 to 15	345.07	394.71	373.65	313.38	56.11	0.596	0.851	0.060
d 0 to 21	458.59ab	527.04ª	474.17a	387.27 <sup>b</sup>	55.81	0.234	0.743	0.009
$G: F^3$								
d 0 to 7	0.59	0.48	0.70	0.57	<mark>0.27</mark>	0.377	0.198	0.960
d 7 to 15	0.65	0.79	0.74	0.72	0.12	0.853	0.152	0.065
d 15 to 21	0.68	0.71	0.68	0.76	0.09	0.509	0.085	0.426
d 0 to 15	0.55 <sup>b</sup>	0.75 <sup>a</sup>	0.71	0.67	0.16	0.561	0.125	0.033
d 0 to 21	0.62	0.73	0.70	0.70	0.08	0.457	0.068	0.050

CR: sow diet with  $\omega$ 6: $\omega$ 3 ratio=13:1 during gestation, starting from day 28 (G28) and 10:1 during lactation; LR: sow diet with  $\omega$ 6: $\omega$ 3 ratio=4:1 from G28 until the end of lactation. CT: post-weaning piglets dietary supplemented without intact seaweed powder. SD: sow diets, PD: piglet diets. BW: body weight, ADG: average daily gain, ADFI: average daily feed intake, G:F: gain: feed ratio.

\* The trial was performed from weaning to d 21 of post-weaning with 4 g seaweed supplementation per kg of feed. Feed residual and daily feed intake of each piglet were recorded every morning, from day 0 (weaning) – 21 post-weaning to calculate average daily feed intake and feed conversion ratio. Individual body weight of piglets was measured on day 0, 7, 15 and 21 of post-weaning.

- \*\* Piglets were kept in individual pens (0.47 m2) with ad libitum feed and water.
- <sup>1</sup> SEM: Standard error of the means. Means are presented as least square means.
- <sup>2</sup> have normal distribution so Mixed procedure was performed.
- <sup>3</sup> do not have normal distribution so GENMOD procedure (GEE model) was performed.