

**Supplementary Table S1. Sequences of primers for quantitative real-time PCR.**

Gene		Sequence(5' - 3')	Amplicon
fsh- $\beta$	Forward	CTGTGGCCAGAACTGCAAG	120
	Reverse	GTCAATGTAGGACGGACGGG	
	Probe	GCAGGAAACACGTACTGCGGGCG	
fsh- $\beta$ (standard)	Forward	GGGCTGAACAGAAAGTCTGC	228
	Reverse	TCAAGTCATGTGACACAAAGATAA	
lh- $\beta$	Forward	GTGATGTTCCCTTTGATGTTGAGT	137
	Reverse	CACTTTGGACAGCCTTCCTTCT	
	Probe	TGCAGCGGCCTTCCAGCTGC	
lh- $\beta$ (standard)	Forward	TACAGGTCGGCAGAGTGATG	218
	Reverse	CTTGATGACAGGGTCCTTCG	

**Supplementary Table S2. Egg collection in rearing tanks and oocyte stages in females.**

Experimental group	n	24h	48h	72h
Control	7	- NI	- NI	- TY-I (6), AO(1)
MW	7	- NI	- NI	+ TY-I (4), OV(3)

-, no eggs in the rearing tank: +, eggs were collected. TY-I, tertiary yolk stage-I: OV, ovulatory egg stage: AO, atretic oocyte stage. ( ) shows the number of individuals in each oocyte stage. NI, no individual sampling.