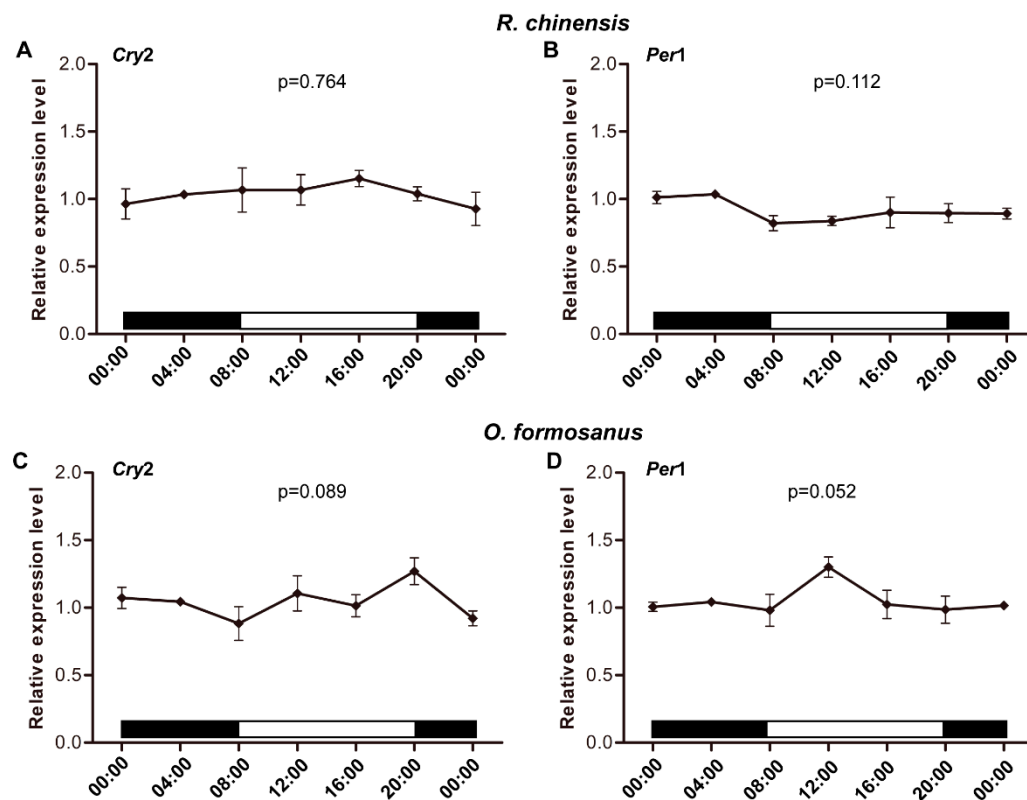


Supplementary information



Supplementary Figure 1. The patterns of *Cry2* and *Per1* genes expression in the two termite species. (A) The patterns of *Cry2* expression in the termite *R. chinensis* under LD condition ($n = 9$). **(B)** The patterns of *Per1* expression in the termite *R. chinensis* under LD condition ($n = 9$). **(C)** The patterns of *Cry2* expression in the termite *O. formosanus* under LD condition ($n = 9$). **(D)** The patterns of *Per1* expression in the termite *O. formosanus* under LD condition ($n = 9$). The data in the figures are the mean \pm SEM, and different letters express significant differences according to Tukey's HSD test. The mRNA levels were normalized relative to the two termite species collected at 04: 00. White and black bars represent subjective day and subjective night, respectively.

Supplementary Table S1. The distribution of the four colonies of *R. chinensis* for each experiment*

Experiments	Replicates	Colonies
Circadian rhythms of locomotor activity	9-10	Number 1, 2, 3
Expression of <i>Per1</i> and <i>Cry2</i>	8-9	Number 2, 3, 4
RNAi efficiency for <i>Per1</i> and <i>Cry2</i>	4-7	Number 2, 3, 4

* All the four colonies of *R. chinensis* were collected from Shizi hill in Wuhan City, Hubei Province, China.

Supplementary Table S2. The distribution of the seven colonies of *O. formosanus* for each experiment*

Experiments	Replicates	Colonies
Circadian rhythms of locomotor activity	9-10	Number 1, 2, 3
Expression of <i>Per1</i> and <i>Cry2</i>	8-9	Number 2, 3, 4
RNAi efficiency for <i>Per1</i> and <i>Cry2</i>	4-7	Number 5, 6, 7

* All the seven colonies of *O. formosanus* were collected from Shizi hill in Wuhan City, Hubei Province, China.

Supplementary Table S3. Primers used for qRT-PCR analyses

Species	Gene Name	Orientation	(5'→3') Primer Sequence
<i>R. chinensis</i>	β -actin	Forward	AGCGGTCACTCATTCCTTG
		Reverse	ATTCCTGACGTACTGTGC
	<i>Hsp 70</i>	Forward	GCTAAGCGTCTTATTGGGCG
		Reverse	CTTTGGTTTTCCACCGTCGC
	<i>Cry2</i>	Forward	AGTTCTTTGCACATGGCCG
		Reverse	CGTGAAGGACTGAACTCTGCT
	<i>Per1</i>	Forward	CTTCAGCCAACCACAGCTCTA
		Reverse	TGGTTCCGCTTTCACGGATA
<i>O. formosanus</i>	β -actin	Forward	CTGGAGAAGTCATACGAGTTG
		Reverse	AGAAGGAAGGCTGGAACA
	<i>NADH</i>	Forward	TTGGTGAGATTGGTCTGCTG
		Reverse	ACAATGTGTAAGCCGCACTA
	<i>Cry2</i>	Forward	TCTTACCCGTGGCGATCTCT
		Reverse	AAGCGCACTGGACAATAGCA
	<i>Per1</i>	Forward	GGAACATTGCCATGGGGTCA
		Reverse	TCCTTGGCATAAAGGGGACAC

Supplementary Table S4. Primers used for cloning the dsRNA template

Species	Gene Name	Orientation	(5'→3') Primer Sequence
<i>R. chinensis</i>	<i>Cry2</i>	Forward	GAGGTGTCATTTTAGGGCGA
		Reverse	TTCAAGGAATGGGGCACTAC
	<i>Per1</i>	Forward	ACGAAGAGCCCTCTGGGATA
		Reverse	GCAGCATTGGACTGAACGTC
	<i>GFP</i>	Forward	CTTGAAGTTGACCTTGATGCC
		Reverse	TGGTCCCAATTCTCGTGGAAC
<i>O. formosanus</i>	<i>Cry2</i>	Forward	TCGCCCTAAAATGACACCTC
		Reverse	CACCACGGGTAAGAAAGCAT
	<i>Per1</i>	Forward	CCTCATATTGAGGGAGGCAA
		Reverse	TGGGTTGTTGTACTGGCAAA
	<i>GFP</i>	Forward	CTTGAAGTTGACCTTGATGCC
		Reverse	TGGTCCCAATTCTCGTGGAAC