

Comments on:

Identification and temporal expression of putative circadian clock transcripts in the amphipod crustacean *Talitrus saltator*

Joseph O'Grady, Laura Hoelters, Martin Swain, David C Wilcockson

Line 45. It will be better expressed: “the period of the rhythm is temperature compensated”. The sentence as it is written allow the reader to assume that the clock mechanism is temperature compensated when actually the period of the rhythm is the one that compensate the changes in temperature.

Line 45. The environmental cues must be **periodical** to actually work as a zeitgeber.

Line 51. The authors must use the in line referencing style of the PeerJ journal, all the “et al.” phrases lack the comma after it and before the year along the text.

Line 68. The circa 24 h period exhibited in the expression of circadian proteins is shown in constant conditions, because in entrained ones, the period is 24 hrs. I recommend that the authors make a note explaining that fact.

Line 85. There is a space before a period at the end of the first sentence.

Line 141-142. The authors does not state which value is ambient temperature. Also, they say that the LD cycle is 12:12 and in phase with natural cycles. This is not clear: I think not all the year have a 12:12 light dark regime in the latitude the work was done, so it is important to write clearly the external (local) time at which the lights were on and off, or simply leave the sentence without the statement of the “phase with natural regime”.

Line 153-154. I recommend the authors use the MIQE guidelines (Bustin et al., The MIQE Guidelines: Minimum Information for Publication of Quantitative Real-Time PCR Experiments For all RNA stabilization. *Clinical Chemistry* 55:4 611–622 (2009)). to report all Molecular Biology procedures. In this part of the text is very important to know if the authors used some kind of RNA stabilizing agent (like RNAlater, Ambion) to minimize RNA deterioration during storage.

Line 172. There is a space between 1 and % symbol that it is not necessary.

Line 231. In the circadian rhythms terminology, is preferred to say that a rhythm peak is in the “subjective night” than “in the middle of the expected night”.

Line 233. It is necessary a space between 24.1 and h.

Line 270. The correct word is “localization”.

Line 308-309. The authors missed the accession number of the *Pacifastacus leniusculus* clock sequence.

Line 329. The sentence lack of the final period.

Line 423. The period after *P. americana* is not needed.

Line 515. The 12 h period is not considered a circadian one. I recommend the use of the term ultradian when referring to short rhythms (between 12 and 19 h) and circadian for the true ones (between 19-27 h).

Line 525. I recommend to use the term “subjective night” at the beginning of the line.

Line 542. In line references must be in chronological order, please correct this.

Line 662. The term circalunar is preferred when referring to a rhythm entrained by the moon light.

Figure 1. The terms “expected day and night” can be replaced by the more correct ones (in chronobiology terminology) subjective day and night. The authors do not mention that the rhythm has also an ultradian component of about 12 hrs. This component is very common in aquatic animals in the intertidal zone. I think it is worth mentioning it. Panel A do not have any indication of the temporal scale in X. please correct. In chronobiology studies is better to begin the data plot in ZT0 or CT0.