Additional File 1:

Degenerate primers for cloning of *PoPer:*

Primer Name	Sequence (5'-3')	Corresponding Conserved AA sequence
MBF03_F	CTGCGTGATCTCCatgcaygaygg	CCVISMHDGL
GEF01_F	CCGTCCTACAACCAGCTGaaytayaayga	PSYNQLNYNE
GER02_R	GAAGAAGCGCTCGATGTTCtcrttrtartt	YNENIERFFK
MIR06_R	CGGTGCTTCTTCATCATCAACttytccatntc	DMEKLMMLKHR

Cloning procedure and real time qPCR primers:

Conserved blocks of amino acid sequence from known *period* genes in *Drosophila melanogaster*, *Apis mellifera*, *Bombus ardens*, and *Formica japonica* were identified with the CODEHOP program [36, 37]. Amplification of products from genomic DNA with CODEHOP degenerative primers was achieved using the standard protocol described in [36, 37] using Qiagen® PCR Core Kit reagents. Products of correct size were purified using Qiaquick PCR Clean-Up kits (Qiagen®) and cloned using a TOPO TA cloning kit (Invitrogen®). Clones were re-amplified in a new PCR reaction, purified with Sephadex® G50 spin columns and sequenced using an ABI 377 instrument with Big-Dye chemistry (ABI). Internal primers specific to *P. occidentalis* were designed and cDNA was amplified using these specific primers. Harvester ant-specific primers were designed from exon-coding regions to amplify a 90bp region for qPCR analyses. Clone sequences for PoRPII (endogenous control gene) and PoPer can be accessed on Genbank (Accession # FJ853425 & FJ853426). Real time primers (PoPerF: 5'-TCCTTCAGGTCGAAGCCGT-3'; PoPerR:5'-TGATAAAGGACGACCACTCGG-3') and Taqman® probe (PoPerT:5'DFAM-CAGATTCGCCGTGCAGAACGGG-3'DTAM) were designed using Primer Express® software (ABI). The endogenous control gene, RNA Polymerase II subunit 215 (*RPII*), was amplified with harvester ant *RPII*-specific forward and reverse primers (Forward: 5'-GAGAACCAAGTGAACAGGAT-3', Reverse: 5'-TTATTGTATTCAGTCAGGGATTTC-3') and TaqMan probe (5'DFAM-AGAGCCTCCAGTCTTGTCTCGA-3'DTAM).