



# Corrigendum: Novel Genomic and Evolutionary Perspective of Cyanobacterial tRNAs

## OPEN ACCESS

**Approved by:**  
Frontiers Editorial Office,  
Frontiers Media SA, Switzerland

**\*Correspondence:**  
Tapan K. Mohanta  
nostoc.tapan@gmail.com  
Hanhong Bae  
hanhongbae@ynu.ac.kr

**Specialty section:**  
This article was submitted to  
RNA,  
a section of the journal  
Frontiers in Genetics

**Received:** 14 February 2020  
**Accepted:** 20 February 2020  
**Published:** 10 March 2020

**Citation:**  
Mohanta TK, Syed AS, Ameen F and  
Bae H (2020) Corrigendum: Novel  
Genomic and Evolutionary  
Perspective of Cyanobacterial tRNAs.  
*Front. Genet.* 11:202.  
doi: 10.3389/fgene.2020.00202

Tapan K. Mohanta<sup>1\*</sup>, Asad S. Syed<sup>2</sup>, Fuad Ameen<sup>2</sup> and Hanhong Bae<sup>1\*</sup>

<sup>1</sup> School of Biotechnology, Yeungnam University, Gyeongsan, South Korea, <sup>2</sup> Department of Botany and Microbiology, College of Science, King Saud University, Riyadh, Saudi Arabia

**Keywords:** cyanobacteria, tRNA, evolution, intron, transition, transversion

## A Corrigendum on

### Novel Genomic and Evolutionary Perspective of Cyanobacterial tRNAs

by Mohanta, T. K., Syed, A. S., Ameen, F., and Bae, H. (2017). *Front. Genet.* 8:200.  
doi: 10.3389/fgene.2017.00200

In the original article, the **Tables 5, 6** were inadvertently given the wrong legends. The legend for Table 5 is for Table 6 and vice versa. The tables with their corrected legends appear below.

The authors apologize for this error and state that this does not change the scientific conclusions of the article in any way. The original article has been updated.

Copyright © 2020 Mohanta, Syed, Ameen and Bae. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.

**TABLE 5 |** Duplication, conditional duplication, and losses of cyanobacterial tRNAs.

tRNA	D/L score	Duplications	Conditional duplications	Losses
Alanine	797.5	163 (66.8%)	15 (6.14%)	553 (226.63%)
Arginine	712.5	131 (56.22%)	18 (7.72%)	516 (221.45%)
Asparagine	260.0	44 (53.01%)	11 (20.75%)	194 (233.73%)
Aspartate	287.5	53 (67.94%)	5 (6.84%)	208 (284.93%)
Cysteine	229.5	41 (59.42%)	4 (5.79%)	168 (243.47%)
Glutamate	304.5	57 (73.07%)	9 (11.53%)	219 (280.76%)
Glutamine	292.0	50 (56.81%)	5 (5.68%)	217 (246.59%)
Glycine	641.5	115 (65.34%)	17 (9.65%)	469 (266.47%)
Histidine	197.0	32 (52.45%)	7 (11.47%)	149 (244.26%)
Isoleucine	453.6	97 (85.08%)	6 (5.26%)	308 (270.17%)
Leucine	1081.5	193 (61.66%)	25 (7.98%)	792 (253.03%)
Lysine	372.5	67 (56.77%)	9 (7.62%)	272 (230.50%)
Methionine	598.0	108 (59.34%)	19 (10.43%)	436 (239.56%)
Phenylalanine	276.5	47 (56.62%)	8 (9.63%)	206 (248.19%)
Proline	699.5	133 (70.74%)	16 (8.51%)	500 (265.95%)
Serine	788.5	139 (55.60%)	23 (9.2%)	580 (232.00%)
Threonine	596.5	107 (57.83%)	15 (8.10%)	436 (235.67%)
Tryptophan	284.0	54 (70.12%)	5 (6.49%)	203 (263.63%)
Tyrosine	212.0	38 (57.57%)	6 (9.09%)	155 (234.84%)
Valine	485.5	85 (57.82%)	19 (12.92%)	358 (243.53%)

Highest transition/transversion bias was found in tRNA<sup>Trp</sup> whereas the lowest was found in tRNA<sup>Ile</sup>.

**TABLE 6 |** Transition/transversion bias of cyanobacterial tRNAs.

tRNA	k1 (Purines)	k2 (Pyrimidines)	R (Transition/Transversion Bias)	No. of sequences Studied
Alanine	1.494	1.515	0.732	258
Arginine	2.607	2.449	1.207	255
Asparagine	3.389	3.268	1.618	90
Aspartate	6.971	10.501	4.131	84
Cysteine	4.699	1.87	1.65	78
Glutamate	3.951	2.82	1.626	87
Glutamine	1.626	4.461	1.499	94
Glycine	3.2	3.426	1.631	192
Histidine	2.832	2.25	1.199	68
Isoleucine	0.231	1.512	0.39	124
Leucine	1.845	2.114	0.964	343
Lysine	3.149	3.386	1.623	126
Methionine	1.805	3.28	1.231	202
Phenylalanine	1.619	1.661	0.811	89
Proline	3.708	4.158	1.825	204
Threonine	3.133	3.453	1.618	202
Tryptophan	26.77	7.30	8.409	83
Tyrosine	5.114	10.015	3.658	76
Serine	0.914	1.82	0.654	271
Valine	1.959	2.169	1.018	159

Result showed loss of cyanobacterial tRNA gene predominate the duplication and conditional duplication event.