

CORRECTION

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# Correction to: The effect of dietary tryptophan levels on oxidative stress of liver induced by diquat in weaned piglets

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**Correction to: *J Anim Sci Biotechnol.* 5, 49 (2014)**  
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Following publication of the original article [1], it was found that the Table 3 (the data of Plasma urea nitrogen) and Table 4 (the data of Plasma SOD and MDA) are incorrect.

The correct tables are provided below:

The original paper has been updated.

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## Reference

1. Mao X, et al. The effect of dietary tryptophan levels on oxidative stress of liver induced by diquat in weaned piglets. *J An Sci Biotechnol.* 2014;5:49  
<http://www.jasbsci.com/content/5/1/49>.

The original article can be found online at <https://doi.org/10.1186/2049-1891-5-49>.

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**Table 3** Effects of dietary tryptophan levels and diquat injection on the concentrations of tryptophan, large neutral amino acids (LNAA) and urea nitrogen in the plasma of the weaned piglets

Item	- diquat			+ diquat			SEM	P		
	Trp 0.18%	Trp 0.30%	Trp 0.45%	Trp 0.18%	Trp 0.30%	Trp 0.45%		Trp	diquat	Trp × diquat
Tryptophan, nmol/mL	45 <sup>b</sup>	50 <sup>b</sup>	61 <sup>a</sup>	29 <sup>c</sup>	40 <sup>b</sup>	44 <sup>b</sup>	4	< 0.05	< 0.05	0.08
LNAA, nmol/mL	497 <sup>b</sup>	411 <sup>c</sup>	453 <sup>bc</sup>	582 <sup>a</sup>	447 <sup>bc</sup>	421 <sup>c</sup>	17	< 0.05	0.05	< 0.05
Tryptophan/LNAA	0.09 <sup>b</sup>	0.13 <sup>a</sup>	0.14 <sup>a</sup>	0.05 <sup>c</sup>	0.09 <sup>b</sup>	0.11 <sup>ab</sup>	0.01	< 0.05	< 0.05	0.67
Plasma urea nitrogen, mg/L	108.46 <sup>b</sup>	75.30 <sup>c</sup>	76.21 <sup>c</sup>	134.53 <sup>a</sup>	67.11 <sup>c</sup>	74.75 <sup>c</sup>	5.90	< 0.05	0.29	< 0.05

+ diquat, intraperitoneal injection diquat; – diquat, intraperitoneal injection of sterile 0.9% NaCl solution; Trp 0.18%, dietary tryptophan level 0.18%; Trp 0.30%, dietary tryptophan level 0.30%; Trp 0.45%, dietary tryptophan level 0.45%; LNAA, large neutral amino acids (sum of valine, methionine, isoleucine, leucine, phenylalanine, tyrosine and histidine). <sup>a, b, c</sup>Mean values with unlike superscript letters were significantly different ( $P < 0.05$ ). (Mean values with their pooled standard errors,  $n = 6$ )

**Table 4** Effects of dietary tryptophan levels and diquat injection on the activities of antioxidant enzymes and the malondialdehyde concentration in the plasma and liver of the weaned piglets

Item	- diquat			+ diquat			SEM	P		
	Trp 0.18%	Trp 0.30%	Trp 0.45%	Trp 0.18%	Trp 0.30%	Trp 0.45%		Trp	diquat	Trp × diquat
Plasma										
SOD, U/mL	131.55	130.60	131.37	121.26	135.07	129.65	7.13	0.71	0.69	0.64
GPx, U/mL	698.32 <sup>b</sup>	811.76 <sup>a</sup>	810.08 <sup>a</sup>	665.55 <sup>b</sup>	768.24 <sup>ab</sup>	748.07 <sup>ab</sup>	38.60	0.62	0.08	0.66
MDA, nmol/mL	2.28	2.48	2.43	2.41	2.28	2.31	0.26	0.89	0.60	0.97
Liver										
SOD, U/mL	564.43 <sup>a</sup>	579.77 <sup>a</sup>	595.80 <sup>a</sup>	469.14 <sup>b</sup>	516.04 <sup>ab</sup>	527.69 <sup>ab</sup>	31.64	0.74	< 0.05	0.09
GPx, U/mL	95.63 <sup>a</sup>	95.71 <sup>a</sup>	95.56 <sup>a</sup>	76.04 <sup>b</sup>	90.03 <sup>a</sup>	99.44 <sup>a</sup>	5.20	0.18	< 0.05	0.05
MDA, nmol/mL	1.60 <sup>a</sup>	1.27 <sup>b</sup>	1.56 <sup>a</sup>	1.74 <sup>a</sup>	1.44 <sup>ab</sup>	1.59 <sup>a</sup>	0.14	0.23	0.09	0.06

+ diquat, intraperitoneal injection diquat; – diquat, intraperitoneal injection of sterile 0.9% NaCl solution; Trp 0.18%, dietary tryptophan level 0.18%; Trp 0.30%, dietary tryptophan level 0.30%; Trp 0.45%, dietary tryptophan level 0.45%; SOD, superoxide dismutase; GPx, Glutathione peroxidase, MDA, Malondialdehyde. <sup>a, b, c</sup>Mean values with unlike superscript letters were significantly different ( $P < 0.05$ ). (Mean values with their pooled standard errors,  $n = 5$  or 6)