Check for updates

OPEN ACCESS

APPROVED BY Frontiers Editorial Office, Frontiers Media SA, Switzerland

*CORRESPONDENCE Shivani Singh ⊠ shivani386singh@gmail.com

RECEIVED 25 June 2023 ACCEPTED 10 July 2023 PUBLISHED 25 July 2023

CITATION

Singh S, Suri S and Singh R (2023) Corrigendum: Potential and unrealized future possibilities of browntop millet in the food sector. *Front. Sustain. Food Syst.* 7:1247312. doi: 10.3389/fsufs.2023.1247312

COPYRIGHT

© 2023 Singh, Suri and Singh. 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.

Corrigendum: Potential and unrealized future possibilities of browntop millet in the food sector

Shivani Singh¹*, Sukhneet Suri² and Ranjana Singh³

¹Department of Home Science (Foods and Nutrition), University of Delhi, New Delhi, India, ²Department of Food Technology, Vivekananda College, University of Delhi, New Delhi, India, ³Department of Food Technology, Shaheed Rajguru College of Applied Science, University of Delhi, New Delhi, India

KEYWORDS

browntop millet, physiochemical properties, nutrients, uses, benefits

A corrigendum on

Potential and unrealized future possibilities of browntop millet in the food sector

by Singh, S., Suri, S., and Singh, R. (2022). Front. Sustain. Food Syst. 6:974126. doi: 10.3389/fsufs.2022.974126

In the published article, the reference for Niharika V. et al., 2020 was not cited in the article due to referencing the studies of two different authors with similar names. The full reference is as follows: "Niharika, V., Rao, B. G., Tushara, M., and Rao, V. S. (2020). Studies on performance of browntop millet indigenous collections for grain yield and nutritional traits. *J. Pharmacogn. Phytochem.* 9, 2636–2638."

In the published article, the reference for Niharika V. et al., 2020 was incorrectly cited in a few places throughout the article as "Niharika, B., Jaipuriar, D. S., Ranjan, R., and Vaishnav, V. (2020). A study to explore the biochemical properties of locally grown millets. *Int. J. Res. Anal. Rev. (IJRAR)* 1, 375–382.". It should be "Niharika, V., Rao, B. G., Tushara, M., and Rao, V. S. (2020). Studies on performance of browntop millet indigenous collections for grain yield and nutritional traits. *J. Pharmacogn. Phytochem.* 9, 2636–2638."

These citations have been corrected in the following places.

Results, *Origin and production*, paragraph 4; **Results**, *Nutritional attributes*, Table 3; **Results**, *Nutritional attributes*, Table 4; **Results**, *Nutritional attributes*, paragraph 8; **Results**, *Nutritional attributes*, Figure 5 legend; **Results**, *Nutritional attributes*, Figure 6 legend.

In the published article, the reference for Niharika B. et al., 2020 was incorrectly written as "Niharika, B., Jaipuriar, D. S., Ranjan, R., and Vaishnav, V. (2020). A study to explore the biochemical properties of locally grown millets. *Int. J. Res. Anal. Rev. (IJRAR)* 1, 375–382." It should be "Niharika, B., Jaipuriar, D. S., Ranjan, R., and Vaishnav, V. (2020). A study to explore the biochemical properties of locally grown millets. *Int. J. Res. Anal. Rev.* 7, 375–382."

In the published article, there was an error in Table 3 as published. In the row "Browntop millet," the numeric values did not line up with the corresponding references. The corrected Table 3 appears below.

In the published article, there an error was Table 4 in as published. In the "Browntop row millet," the numeric values did not line up with the corresponding references. The Table 4 corrected appears below.

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

Publisher's note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

References

Gopalan, C., Rama Sastry, B. V., Balasubramanian, S. C. (revised by Rao, B. S. N., Deosthale, Y. G., and Pant, K. C.) (2021). *Nutritive Value of Indian Foods (NVIF)*. National Institute of Nutrition, Indian Council of Medical Research, Hyderabad, India.

Kishore, A. S., Rekha, K. B., Hussain, S. A., and Madhavi, A. (2021). Quality enhancement of nutri-cereal BTM through agronomic practices. *Curr. Sci.* 120, 468–470.

Longvan, T., Ananthan, R., Bhaskarachary, K., and Venkaiah, K. (2017). Indian Food Composition Tables (IFCT). Hyderabad: National Institute of Nutrition.

Niharika, B., Jaipuriar, D. S., Ranjan, R., and Vaishnav, V. (2020). A study to explore the biochemical properties of locally grown millets. *Int. J. Res. Anal. Rev.* 7, 375–382.

Niharika, V., Rao, B. G., Tushara, M., and Rao, V. S. (2020). Studies on performance of browntop millet indigenous collections for grain yield and nutritional traits. *J. Pharmacogn. Phytochem.* 9, 2636–2638.

Patil, R. B., Vijayalakshmi, K. G., and Vijayalakshmi, D. (2020). Physical, functional, nutritional, phytochemical and antioxidant properties of kodo millet (Paspalum scrobiculatum). *J. Pharmacogn. Phytochem.* 9, 2390–2393. doi: 10.20546/ijcmas.2020.909.348

Roopa, O. M. (2015). Nutritional Analysis and Development of Value-added Products from Brown-top Millet (Dissertation/Master's thesis). Department of Food Science and Nutrition, UAS, Bengaluru, India.

Cereal grain	Energy (kj) (*↑ ^{**} ↓)	Carbohydrates (gm) (*↑ ^{**} ↓)	Crude fiber (gm) (* \uparrow $^{**}\downarrow$)	Fat (gm) (* \uparrow ^{**} \downarrow)	Protein (gm) (* \uparrow ^{**} \downarrow)
Browntop millet (Roopa, 2015) (Niharika V. et al., 2020)	1,414	71.32	- 8.06	1.89	8.98 ↓16.24% 10.72
Rice (Longvan et al., 2017)	$1,491 \pm 15$ $\uparrow 5.4\%$	78.24 ± 1.07 $\uparrow 9.7\%$	$2.81 \pm 0.42 \ \downarrow 65.1\%$	$0.52 \pm 0.05 \ 172.5%	$7.94 \pm 0.58 \ \downarrow 25.9\%$
Wheat (Longvan et al., 2017)	$1,347 \pm 23 \ \downarrow 4.7\%$	$64.72 \pm 1.74 \ \downarrow 9.3\%$	11.23 ± 0.77 ↑39.3%	$1.47 \pm 0.05 \ \downarrow 22.2\%$	$10.59 \pm 0.60 \ \downarrow 1.2\%$
Sorghum (Longvan et al., 2017)	$1,398 \pm 13 \\ \downarrow 1.1\%$	$67.68 \pm 1.03 \\ \downarrow 5.1\%$	$10.22 \pm 0.49 \\ \uparrow 26.8\%$	$1.73 \pm 0.3 \ \downarrow 8.5\%$	$9.97 \pm 0.43 \ 17.0\%$
Pearl millet (Longvan et al., 2017)	$1,456 \pm 18$ $\uparrow 3.0\%$	$61.78 \pm 0.85 \ \downarrow 13.4\%$	11.49 ± 0.62 $\uparrow 42.5\%$	5.43 ± 0.64	10.96 ± 0.26 $\uparrow 2.2\%$
Proso millet (Longvan et al., 2017)	$1,388 \pm 10 \\ \downarrow 1.8\%$	$66.19 \pm 1.19 \ 17.2\%$	$6.39 \pm 0.60 \\ \downarrow 20.7\%$	2.55 ± 0.13 ↑34.9%	$8.92 \pm 1.09 \ \downarrow 16.8\%$
Finger millet (Longvan et al., 2017)	$1,342 \pm 10 \\ \downarrow 5.1\%$	$\begin{array}{c} 66.82 \pm 0.73 \\ \downarrow 6.3\% \end{array}$	11.18 ± 1.14 $\uparrow 38.7\%$	1.92 ± 0.14 $\uparrow 1.6\%$	$7.16 \pm 0.63 \ \downarrow 33.2\%$
Little millet (Longvan et al., 2017)	$1,449 \pm 19$ $\uparrow 2.5\%$	$65.55 \pm 1.29 \ \downarrow 8.1\%$	7.72 ± 0.92 $\downarrow 4.2\%$	$3.89 \pm 0.35 \\ \uparrow 105.8\%$	$10.13 \pm 0.45 \ \downarrow 5.5\%$
Barnyard millet (Gopalan et al., 2021)	1,284 ↓9.19%	65.5 ↓8.8%	9.8 ↑21.6%	2.2 ↑16.4%	6.2 ↓42.2%
Foxtail millet (Gopalan et al., 2021)	1,384 ↓2.1%	60.9 ↓14.6%	8 ↓0.7%	4.3 ↑127.5%	12.3 ↑14.7%
Kodo millet (Patil et al., 2020)	$1,500 \pm 10.62$ $\uparrow 6.1\%$	$71.80 \pm 0.60 \\ \uparrow 0.7\%$	$\begin{array}{c} 6.12\pm0.10\\ \downarrow24.1\%\end{array}$	4.48 ± 0.52 $\uparrow 137.0\%$	$7.7 \pm 0.05 \ \downarrow 28.2\%$

Table 3 Energy and macro-nutrient content of different millets and staple cereals compared with the browntop millet (in percent).

**↑ indicates percent (%) higher amount compared to BTM. **↓ indicates percent (%) lower amount compared to BTM.

Baseline data adapted from Roopa (2015), Longvan et al. (2017), Niharika V. et al. (2020), Patil et al. (2020), and Gopalan et al. (2021).

Table 4 Comparison of micro-nutrients content of millets and staple cereals with the browntop millet (in percent).

Cereal grain	Ash content (gm) ($\uparrow ~\downarrow$)	Calcium (mg) ($^{*}\uparrow$	Iron (mg) ([*] ↑ ^{**} ↓)	Phosphorus (mg) (* \uparrow ** \downarrow)	Zinc (mg) ($^{*}\uparrow ^{**}\downarrow$)
Browntop millet (Kishore et al., 2021)	2.13 ± 0.21	28	7.72 ↓12.9%	276	2.5
(Niharika V. et al., 2020)	-	13.97 ↓50.1%	8.86	-	2.11 ↓15.6%
Rice (Longvan et al., 2017)	$0.56 \pm 0.08 \ 173.7\%$	$7.49 \pm 1.26 \ \sqrt{73.2\%}$	$0.65 \pm 0.11 \ \downarrow 92.7\%$	$96 \pm 16.30 \ \downarrow 65.2\%$	$1.21 \pm 0.17 \ ightarrow 51.6\%$
Wheat (Longvan et al., 2017)	$1.42 \pm 0.19 \ \downarrow 33.3\%$	39.36 ± 5.65 $\uparrow 40.6\%$	$3.97 \pm 0.7 \ 8 \ \downarrow 55.2\%$	315 ± 41.8 $\uparrow 14.1\%$	$2.85 \pm 0.65 onumber 114\%$
Sorghum (Longvan et al., 2017)	$1.39 \pm 0.34 \ ightarrow 34.7\%$	27.60 ± 3.71 $\uparrow 1.4\%$	$3.95 \pm 0.94 \ ightarrow 55.4\%$	$274 \pm 35.7 \\ \downarrow 0.7\%$	$1.96 \pm 0.31 \ \downarrow 21.6\%$
Pearl millet (Longvan et al., 2017)	$1.37 \pm 0.17 \\ \downarrow 35.7\%$	$27.35 \pm 2.16 \ \downarrow 2.3\%$	$6.42 \pm 1.04 \\ \downarrow 27.5\%$	289 ± 25.3 $\uparrow 4.7\%$	2.76 ± 0.36 $\uparrow 10.4\%$
Proso millet (Longvan et al., 2017)	$1.72 \pm 0.27 \\ \downarrow 19.2\%$	$15.27 \pm 1.28 \ \downarrow 45.5\%$	$2.34 \pm 0.46 \ 173.6\%$	$101 \pm 5.2 \ \downarrow 60.4\%$	$\begin{array}{c} 1.65\pm0.18\\ \downarrow34\%\end{array}$
Finger millet (Longvan et al., 2017)	$\begin{array}{c} 2.04\pm0.34\\ \downarrow4.2\%\end{array}$	364 ± 58.0 ↑1200%	$4.62 \pm 0.36 \ \downarrow 47.9\%$	$\begin{array}{c} 210\pm 58.4\\ \downarrow 23.9\%\end{array}$	2.53 ± 0.51 $\uparrow 1.2\%$
Little millet (Longvan et al., 2017)	$1.34 \pm 0.16 \ \downarrow 37.1\%$	$16.06 \pm 1.54 \ \downarrow 42.6\%$	$1.26 \pm 0.44 \ \downarrow 85.8\%$	$130 \pm 27.5 \\ \downarrow 52.9\%$	$1.82 \pm 0.14 \ \downarrow 27.8\%$
Barnyard millet (Gopalan et al., 2021)	4.4 ↑106.6%	20 ↓28.6%	5.0 ↓43.6%	280 ↑1.4%	3.0 ↑20%
Foxtail millet (Gopalan et al., 2021)	3.3 ↑54.9%	31 ↑10.7%	2.8 ↓68.4%	290 ↑5.1%	2.4 ↓4%
Kodo millet (Patil et al., 2020)	$1.96 \pm 0.05 \ \downarrow 1.9\%$	39.63 ± 0.76 $\uparrow 41.5\%$	$3.55 \pm 0.32 \ ightarrow 59.9\%$	378.65 ± 1.04 $\uparrow 37.2\%$	$2.08 \pm 0.20 \ \downarrow 16.8\%$

*↑ indicates percent (%) higher amount compared to BTM. **↓ indicates percent (%) lower amount compared to BTM.

Baseline data adapted from Longvan et al. (2017), Niharika V. et al. (2020), Patil et al. (2020), Gopalan et al. (2021), and Kishore et al. (2021).