Check for updates

OPEN ACCESS

EDITED AND REVIEWED BY Chih-Horng Kuo, Academia Sinica, Taiwan

*CORRESPONDENCE Carolee T. Bull caroleebull@psu.edu

SPECIALTY SECTION

This article was submitted to Evolutionary and Genomic Microbiology, a section of the journal Frontiers in Microbiology

RECEIVED 14 September 2022 ACCEPTED 17 October 2022 PUBLISHED 15 November 2022

CITATION

Rosenthal E, Potnis N and Bull CT (2022) Corrigendum: Comparative genomic analysis of the lettuce bacterial leaf spot pathogen, *Xanthomonas hortorum pv. vitians*, to investigate race specificity. *Front. Microbiol.* 13:1044656. doi: 10.3389/fmicb.2022.1044656

COPYRIGHT

© 2022 Rosenthal, Potnis and Bull. 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: Comparative genomic analysis of the lettuce bacterial leaf spot pathogen, *Xanthomonas hortorum* pv. *vitians*, to investigate race specificity

Emma Rosenthal 10¹, Neha Potnis 10² and Carolee T. Bull 10¹*

¹Department of Plant Pathology and Environmental Microbiology, Pennsylvania State University, University Park, PA, United States, ²Department of Entomology and Plant Pathology, Auburn University, Auburn, AL, United States

KEYWORDS

bacterial plant pathogens, plant-microbe interactions, comparative genomics, *Xanthomonas*, effectors

A corrigendum on

Comparative genomic analysis of the lettuce bacterial leaf spot pathogen, *Xanthomonas hortorum* pv. *vitians*, to investigate race specificity

by Rosenthal, E., Potnis, N., and Bull, C. T. (2022). Front. Microbiol. 13:840311. doi: 10.3389/fmicb.2022.840311

In the published article, there was an error. In all instances, we refer the resistance gene of PI358001-1 as *Xcv1*, but the name should be corrected to *Xcvr*.

A correction has been made to the Introduction section, paragraph 1.

The sentence previously stated:

"Another identified source of resistance to *Xhv* race 1 strains isolated from Florida lettuce fields was the *Xcv1* R-gene from *L. serriola* PI358001-1 (Wang et al., 2016)."

The corrected sentence appears below:

"Another identified source of resistance to *Xhv* race 1 strains isolated from Florida lettuce fields was the *Xcvr* R-gene from *L. serriola* PI358001-1 (Wang et al., 2016)."

A correction has been made to the Introduction section, paragraph 1.

The sentence previously stated:

"Additional races of the pathogen were designated among those *Xhv* strains that did not result in HR in the *Xar1-* or *Xcv1-*enconding cultivars, but instead triggered HR in either *L. serriola* PI491114 (designated race 2) or *L. serriola* ARM-09-161-10-1 (designated race 3)."

The corrected sentence appears below:

"Additional races of the pathogen were designated among those *Xhv* strains that did not result in HR in the *Xar1-* or *Xcvr*encoding cultivars, but instead triggered HR in either *L. serriola* PI491114 (designated race 2) or *L. serriola* ARM-09-161-10-1 (designated race 3)."

A correction has been made to the **Introduction** section, paragraph 2.

The sentence previously stated:

"The results of this study corroborated previous work on *Xhv* diversity (Sahin et al., 2003; Fayette et al., 2016), and they found that the strains that induce HR upon injection into the *Xar1*- or *Xcv1*-encoding cultivars all belonged to sequetypes B, D, or E."

The corrected sentence appears below:

"The results of this study corroborated previous work on *Xhv* diversity (Sahin et al., 2003; Fayette et al., 2016), and they found that the strains that induce HR upon injection into the *Xar1*- or *Xcvr*-encoding cultivars all belonged to sequetypes B, D, or E."

A correction has been made to the **Introduction** section, paragraph 3.

The sentence previously stated:

"The presence of the R-genes *Xar1* and *Xcv1* in lettuce cultivars capable of HR exclusively to *Xhv* race 1 strains (Hayes et al., 2014; Wang et al., 2016) suggested the possibility that these strains might produce an effector that is recognized by those R-genes."

The corrected sentence appears below:

"The presence of the R-genes *Xar1* and *Xcvr* in lettuce cultivars capable of HR exclusively to *Xhv* race 1 (Hayes et al., 2014; Wang et al., 2016) suggested the possibility that *Xhv* race 1 might produce an effector that is recognized by those R-genes."

A correction has been made to the **Conclusion** section, paragraph 3.

The sentence previously stated:

"These resistant cultivars encode R-genes *Xar1* and *Xcv1*, which have been mapped to lettuce chromosome two, but the precise sequence has not yet been determined."

The corrected sentence appears below:

"These resistant cultivars encode R-genes *Xar1* and *Xcvr*, which have been mapped to lettuce chromosome two, but the precise sequence has not yet been determined."

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.

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

Fayette, J., Raid, R., Roberts, P. D., Jones, J. B., Pernezny, K., Bull, C. T., et al. (2016). Multilocus sequence typing of strains of bacterial spot of lettuce collected in the United States. *Phytopathology* 106, 1262–1269. doi: 10.1094/PHYTO-11-15-0302-R

Hayes, R. J., Trent, M. A., Truco, M. J., Antonise, R., Michelmore, R. W., and Bull, C. T. (2014). The inheritance of resistance to bacterial leaf spot of lettuce caused by *Xanthomonas campestris* pv. vitians in three lettuce cultivars. *Hortic. Res.* 66:14066. doi: 10.1038/hortres.2014.66

Sahin, F., Abbasi, P. A., Lewis Ivey, M. L., Zhang, J., and Miller, S. A. (2003). Diversity among strains of *Xanthomonas campestris* pv. vitians from lettuce. *Phytopathology* 93, 64–70. doi: 10.1094/PHYTO.2003. 93.1.64

Wang, Y., Lu, H., and Hu, J. (2016). Molecular mapping of high resistance to bacterial leaf spot in lettuce PI 358001-1. *Phytopathology* 106, 1319–1325. doi: 10.1094/PHYTO-09-15-0238-R