

## CORRECTION

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## Correction: Structural diversity, bioactivities, and biosynthesis of natural diterpenoid alkaloids

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Correction for 'Structural diversity, bioactivities, and biosynthesis of natural diterpenoid alkaloids' by Yong Shen et al., *Nat. Prod. Rep.*, 2020, **37**, 763–796, <https://doi.org/10.1039/D0NP00002G>.

The authors regret that there are errors within the article, and the corrections are listed as follows:

(1) The inclusion of 4 $\beta$ -H for structural types A-2–A-4 in Fig. 1 is not clear, since the alkaloids with 4 $\beta$ -OR (R = H, alkyl, or acyl) groups were not taken into consideration. 4 $\beta$ -R (R = H, OH, alkyl, or acyl) groups, instead of 4 $\beta$ -H, is a better way to represent structural types A-2–A-4 in Fig. 1. The corrected figure is shown below:

(2) After reviewing the two original references and corresponding NMR data, the alkaloids referred to as hemsleyaconitins and vimotenitins have the same chemical structure. The structure of skeleton B-8 (hemsleyaconitines) in Fig. 2 is incorrect, and should instead be B-9. Therefore, the skeleton B-8 has been deleted. The corrected Fig. 2 is shown below:

(3) The structures of compounds **79**, **80**, **82**, and **83** in Fig. 9 have been redrawn in the 8 $\beta$ -orientation instead of the 8 $\alpha$ -orientation. The 8 $\beta$ -OR (R = OAc, OEt, OAs) groups in C18- or C19-DAs are presented according to the Dreiding molecular model. The corrected figure is shown below:

(4) The structures of compounds **245** and **246** in Fig. 16 should be revised to **247** and **248**, respectively. The original articles for compounds **245** and **246** (ref. 106 in the original article, ref. 1 here) and **247** and **248** (ref. 2) reported the same NMR data but different structures. The incorrect structures, compounds **245** and **246** in Fig. 16, have been removed. The corrected figure is shown below:

(5) Ref. 57 should be removed from this sentence "Moreover, 19R-acetonyl-talatisamine (**49**) and hemaconitine D (**50**) share the same skeleton both bearing an additional-CH<sub>2</sub>COCH<sub>3</sub> group at C-19, which this substituent may be an artifact of isolation and/or purification procedures. 47, 48, 57" on p. 770.

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.

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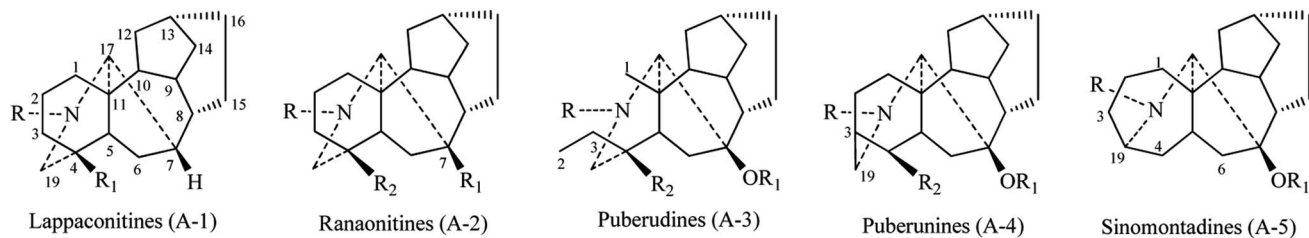


Fig. 1 Classes of  $C_{18}$ -diterpenoid alkaloids (rearranged classes: A-3–A-5).

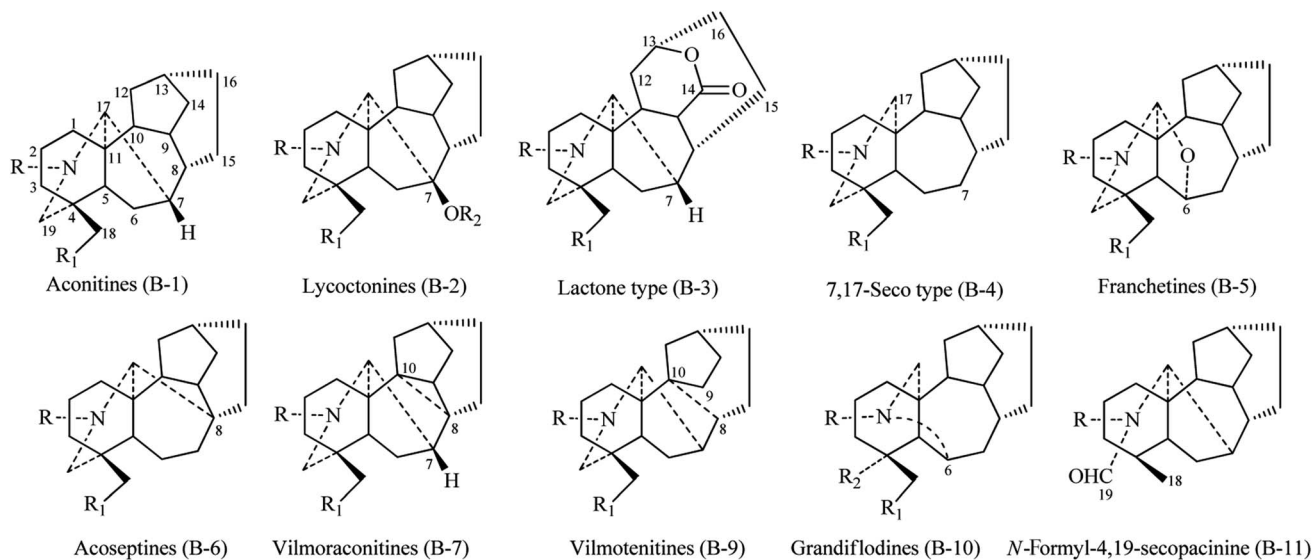


Fig. 2 Classes of  $C_{19}$ -diterpenoid alkaloids (rearranged classes: B-6–B-11).

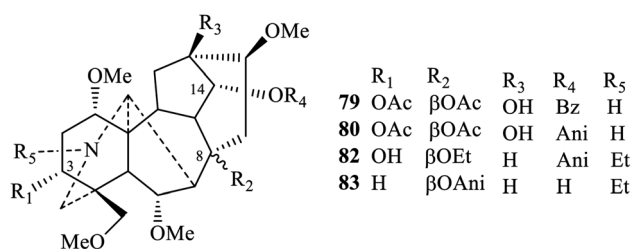


Fig. 9 Structures of alkaloids **79**, **80**, **82** and **83**.



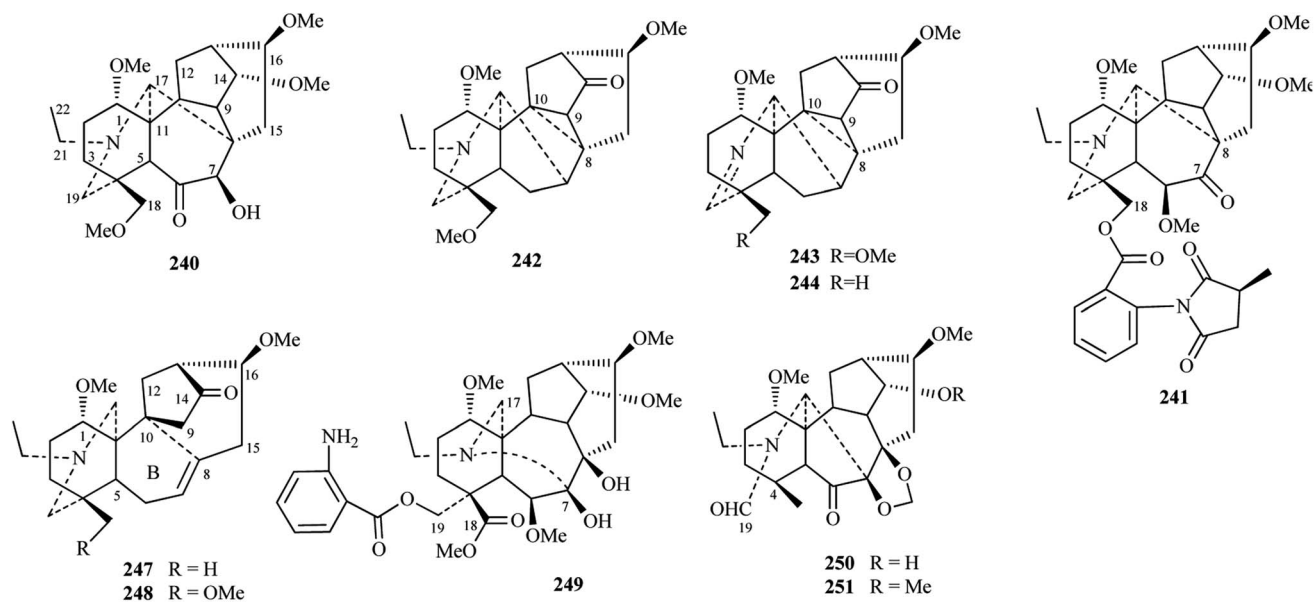


Fig. 16 Structures of alkaloids 240–251.

## References

- 1 Y. Shen, A. X. Zuo, Z. Y. Jiang, X. M. Zhang, H. L. Wang and J. J. Chen, *Helv. Chim. Acta*, 2011, **94**, 268.
- 2 L. Cai, H. X. Fang, T. P. Yin, J. Yu, Z. J. Li, J. W. Dong and Z. T. Ding, *Phyt. Lett.*, 2015, **14**, 106.

