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CORRECTION

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# Correction: *cis* or *trans* with class II diterpene cyclases

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Correction for '*cis* or *trans* with class II diterpene cyclases' by Meirong Jia, *et al.*, *Org. Biomol. Chem.*, 2017, **15**, 3158–3160.

Further investigation indicates that our assignment of the product resulting from AgAS:D621A reacting with the alternative substrate (*Z*,*Z*,*Z*)-nerylneryl diphosphate (NNPP, **2**), produced by a previously identified NNPP synthase (NNPS),[1] was incorrect (page 3160 of print/pdf of the article). Specifically, upon further reacting this product with the subsequently acting sclareol synthase from *Salvia sclarea* (SsSS), which promiscuously reacts with a side variety of such precursors, catalyzing heterolytic lysis of the allylic diphosphate ester and addition of water to the ensuing tertiary carbocation to yield a tertiary hydroxyl derivative,[2,3] the final product was found to be manool (Fig. 1). This was further verified by NMR, with polarized optical spectra demonstrating that this manool was of 'normal' (+) configuration (data not shown). Given that manool is produced by SsSS from normal labda-8(17),13*E*-dienyl diphosphate,[2] and the configuration of the carbon–carbon double bond at carbon-13 (C13) is lost during the SsSS catalyzed reaction, this result strongly indicates that AgAS:D621A reacts with NNPP to produce normal labda-8(17),13*Z*-dienyl diphosphate in which the produced decalin bicycle has *trans* substituents across the C5–C10 bridgehead carbons. Accordingly, Scheme 2 in the published Communication should be replaced with Scheme 1 shown here. The authors apologize for this erroneous assignment.

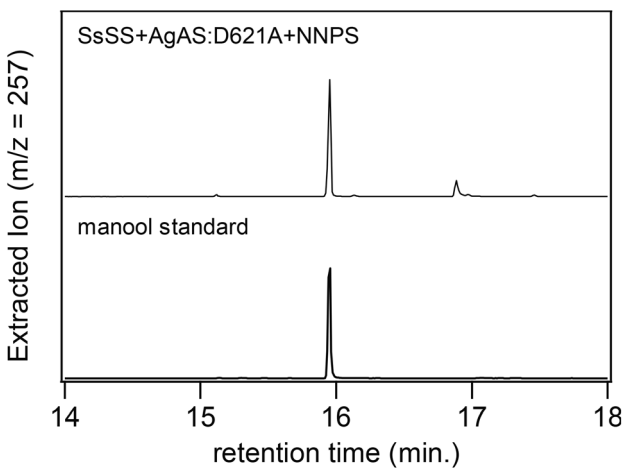


**Fig. 1** The combined activity of NNPS + AgAS:D621A + SsSS produces manool. GC-MS chromatograms of (top) an extract from a culture of *E. coli* engineered to co-express all three enzymes and (bottom) an authentic sample of manool (as indicated).

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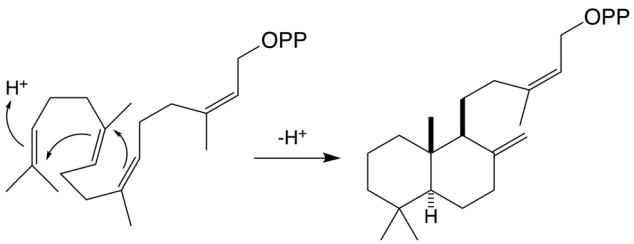


**Scheme 1** Reaction catalyzed by AgAS:D621A with **2**.

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

## References

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