

Correction to "Comprehensive Synthesis of Monohydroxy— Cucurbit[n]urils (n = 5, 6, 7, 8): High Purity and High Conversions"

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Supporting Information

During our follow-up work on the conjugation of monohydroxylated cucurbiturils, we found that the reported yields of monohydroxylation of CB[n] (n=5-8), 90-95%, were incorrect. This was due to the misleading composition of the crude product, with an approximate 0.3/0.3/0.3 ratio of CB[n], $CB[n]-(OH)_1$, and $CB[n]-(OH)_2$, giving NMR signal integrals and peak positions that match the expected values for pure $CB[n]-(OH)_1$. After purification of the product via silica column chromatography using water/acetic acid/formic acid as eluent, the corrected yields are 5-37% for $CB[n]-(OH)_1$, with n=5-8. These results were confirmed by repeated experiments starting with 100 mg, and using up to 3 g, of CB[n].

The Supporting Information has been revised to include MS spectra of pure $CB[n]-(OH)_1$ and details of the column chromatography purification procedure for all $CB[n]-(OH)_1$.

Page 10238. The title should be revised to Comprehensive Synthesis of Monohydroxy—Cucurbit [n] urils (n = 5, 6, 7, 8).

Page 10238. In the Abstract, the 95–100% conversion reported for CB[n]– $(OH)_1$ should be corrected to 20–40%, depending on the CB[n] considered. Scale-up experiments were performed using up to 3 g of CB[n] with quartz reactors of 50 or 300 mL.

Page 10239. In the Synthesis section, the conversions given in the text and in Table 1 are incorrect due to the misleading 1 H NMR spectra, and should actually be 20–40%. The values in Table 1 are thus apparent conversions determined by 1 H NMR. Isolated yields have been determined and are given in the revised Supporting Information (5-37% for the CB[n]– $(OH)_{1}$ series).

Page 10242. In Table 3, likewise, the conversion of CB[8] toward the formation of CB[8]–(OH)₁ is an apparent conversion determined by ^{1}H NMR, where CB[8] is transformed to CB[8]–(OH)₁ and CB[8]–(OH)₂. Thus, the title of the table should be revised to "Apparent Conversion of CB[8] toward the Formation of CB[8]–(OH)₁".

■ ASSOCIATED CONTENT

S Supporting Information

The Supporting Information is available free of charge on the ACS Publications website at DOI: 10.1021/jacs.6b00188.

Procedure for the preparation of CB[n]-(OH), ¹³C NMR spectra, details of high resolution MS analyses, decay products of CB[8], details for the calculations of BDEs, and structures of each CB[n]· radical (revised) (PDF)

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