

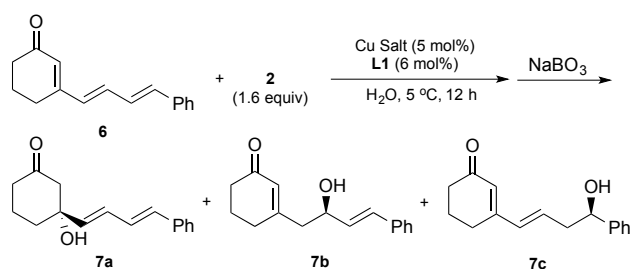
Heterogeneous and Homogeneous Chiral Cu(II) Catalysis in Water: Enantioselective Boron Conjugate Additions to Dienones and Dienoesters

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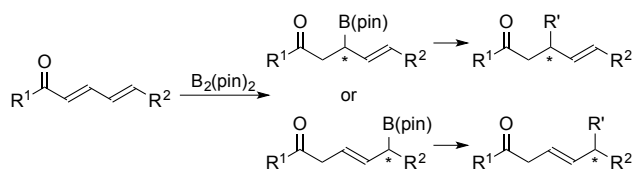
Electronic Supplementary Information For Additional Table, Schemes, and Figures

Table S-1 Additions to Trienone

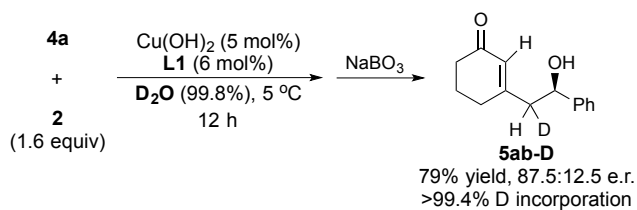


Entr y	Cu salt	Yield (%)	7a/7b/7c	E.r.
1	Cu(OH) ₂	71	< 1/74/26	86:14 (7b) 73:27 (7c)
2 ^a	Cu(OH) ₂	86	> 99/< 1/< 1	96:4 (7a)
3	Cu(OAc) ₂	87	> 99/< 1/< 1	95.5:4.5 (7a)

^a 6 mol% AcOH was added.



Scheme S-1 Boron Conjugate Addition to $\alpha,\beta,\gamma,\delta$ -Unsaturated Dienones and Dienoesters



Scheme S-2 Deuteration of cyclic dienone **4a** in D_2O

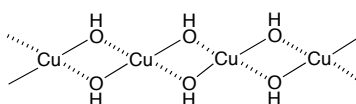


Fig. S-1 Polymeric μ -hydroxide Cu

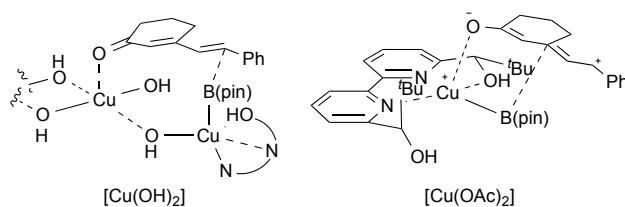


Fig. S-2 Plausible intermediate structures of $Cu(OH)_2$ - and $Cu(OAc)_2$ -catalyzed reactions of cyclic dienone **4a**