Organocatalytic Total Syntheses of (+)- and (−)-Trigonoliimine A

**Significance:** The Zhu group reports an enantioselective Michael addition of methyl α-aryl-α-isocyanacetates to vinyl phenylselenone catalyzed by a cinchona-alkaloid derivative. The obtained enantiopure α-aryl-α-(2′-phenylselenonyl-ethyl)-α-isocyanacetates are successfully transformed into linear and cyclic quaternary α-amino acids, oxindoles, and pyrrolidinones. A concise total synthesis of (+) and (−)-trigonoliimine A (9 steps, 7.5% and 6.8% overall yield) from the shown Michael adduct was completed via a modified Bischler–Napieralski cyclization.

**Comment:** α-Isocyanacetates are well-established glycine templates for the synthesis of racemic α,α-disubstituted α-amino acids. Yet, the catalytic enantioselective alkylation of α-isocyanacetates remains underexploited. The reported Michael addition products are converted further without racemization into the corresponding amines and azides. The absolute configuration of the products obtained from the shown cinchona-alkaloid catalyst was determined after derivatization by X-ray analysis to be R.

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