Unravelling the Organocatalytic Facet of Vasicine

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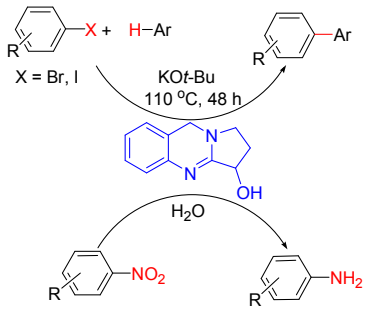
Organocatalysis has emerged as an attractive alternative to metallocatalysts in organic syntheses with regard to their selectivity, renewability and biodegradability. Owing to the functionalized structure and optically pure character of natural products such as carbohydatres, terpenes, alkaloids (proline and cinchona based organocatalyst), they have been efficiently utilized in various organocatalytic transformations.[1] Vasicine is an abundantly available quinazoline alkaloid mainly isolated from *Adhatoda vasica* leaves (present upto 1%) and is a privileged structure containing both Lewis acidic and basic sites, hence, able to activate both nucleophile and electrophile. Despite its medicinal importance in Ayurveda, its organocatalytic potential was not known before. Herein we disclose the prospects of vasicine as an efficient organocatalyst for transition metal free organic transformations *viz.* reduction and C-C bond formation reactions.[2]



References

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