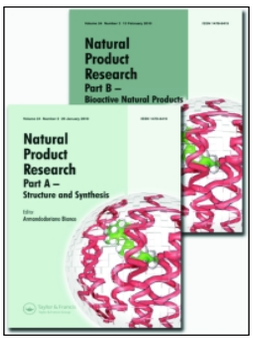

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New pyridocarbazole alkaloids from *Strychnos nitida*

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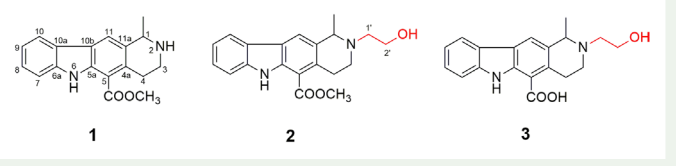
ABSTRACT

Phytochemical investigation of *Strychnos nitida* has led to the isolation of three new racemic pyridocarbazole alkaloids, (±)-stritidas A-C (**1**–**3**) and three known monoterpenoid indole alkaloids (**4**–**6**). Compounds **2** and **3** represent the first examples of pyridocarbazole alkaloids featuring an *N*-2-hydroxyethyl moiety. Their structures were determined by combined spectroscopic data (MS, UV, IR and NMR) and chemical methods.



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KEYWORDS
Strychnos nitida; pridocarbazole alkaloids; monoterpenoid indole alkaloids

1. Introduction

The genus *Strychnos* is comprised of approximately 190 species that are mainly distributed in tropical and subtropical areas. Previous chemical investigations on this genus have led to the isolation of alkaloids, iridoid glucosides, lignan glucosides, diterpenoids, triterpenoids and sterols (Thongphasuk et al. 2003; Zhang et al. 2003; Chien et al. 2004; Thongphasuk et al. 2004; Suarez et al. 2016; Wang et al. 2016; Sichaem et al. 2017), some of which showed antitrypanosomal, antiplasmodial and cytotoxic activities (Hoet et al. 2007; Gan et al. 2010; Tchinda et al. 2012).

Strychnos nitida is a medicinal plant endemic to Yunnan Province, China. A few chemical investigations have been previously reported on this species. As part of our continuing efforts to discover structurally intriguing substances from natural resources (Ahmed et al. 2017; Li et al. 2017), we undertook a chemical analysis of *S. nitida*, which obtained three new pyridocarbazole alkaloids, (±)-stritidas A–C (**1**–**3**), together with three known monoterpenoid indole alkaloids (**4**–**6**). Herein, we describe the isolation and structure elucidation of these compounds.

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