

***Vanilla montana* Ridl.: A NEW LOCALITY RECORD IN PENINSULAR MALAYSIA AND ITS AMENDED DESCRIPTION**

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Abstract: Among the seven *Vanilla* species native to Peninsular Malaysia, *Vanilla montana* was the first species to be described. But due to its rarity, it took more than 100 years for the species to be rediscovered in two other localities. This paper describes the first record of *V. montana* in Negeri Sembilan with preliminary notes on its floral development and some highlights on the ecological influences. We also proposed a conservation status for the species. The data obtained will serve as an important botanical profile of the species, and it will add to our knowledge gaps on the distribution of this distinctive orchid in Malaysia.

Keywords: Biodiversity, florivory, endangered *Vanilla*, Orchidaceae, Negeri Sembilan.

Introduction

In Peninsular Malaysia, the genus *Vanilla* Plum. ex. Mill. has been a recent topic of interest as the native species had been extensively investigated via the classical and advance botanical approaches to respond to the crop improvement calls for their commercialised sister species, *Vanilla planifolia* Jacks ex Andrews (Ong, 2018; Raffi & Go, 2019). Only seven species are known to be native to the peninsula (Raffi *et al.*, 2017a; 2017b). *Vanilla montana* Ridl., once collected from Gunung Korbu in Perak, which is located on the Titiwangsa Range in Peninsular Malaysia, was the first species of *Vanilla* described by Henry Nicholas Ridley in 1915. However, its occurrence and distribution are difficult to locate as the taxonomic identification of the species is challenging due to its rarity, scarcity of flowering materials and the fact that its vegetative characteristics highly resemble other *Vanilla* species. Since its last sighting, this long-lost species was then claimed to be ‘missing’ for more than a century, and was unaccounted for during a series of orchid biodiversity surveys of the montane areas in

the peninsula (Go *et al.*, 2015a). Surprisingly, it was rediscovered in another undisclosed location by Ong (2017). A third locality for *V. montana* was recorded during two different field excursions at a summit region on the tail-end of the Titiwangsa Range. Initially, the species identification was hampered since the entire locality was represented by a single capsule, but the taxonomic work was validated when some of the vines produced flowers three months later. A total of three short inflorescences with seven flowers were retrieved. The discovery was important as it allowed in-situ observations of the flowering stages, and additional data on the geographical range and threat risks could be gathered. This paper aims to document the new *V. montana* locality, present the preliminary notes on its floral development with some highlights on the ecological influences, update the geographical distribution pattern and provide a provisional conservation status for this species. The results of this study would serve as a fundamental source of information on the botanical profile of the species for its conservation management.