## Vanilla norashikiniana R. Go et A. Raffi sp. nov., A New Orchid Species From Peninsular Malaysia

## AKMAL RAFFI<sup>1</sup>, FARAH ALIA NORDIN<sup>2</sup>, NUR ASHIKIN PSYQUAY ABDULLAH<sup>1,3,</sup> PUAT DAHALAN<sup>5</sup> and \*RUSEA GO<sup>1,2,4</sup>

**Abstract :** A new species, *Vanilla norashikiniana* R. Go et A. Raffi, from Peninsular Malaysia is described and other aspects of interest discussed. It is so far known from a population in lower dipterocarp forests in Hutan Lipur Chemerong, Hulu Dungun, Terengganu and Hutan Simpan Semangkok, Selangor. A field key to the Peninsular Malaysian taxa (including *Vanilla shenzhenica*) is also provided.

Key words: Vanilla, lower dipterocarp forest, Terengganu, Selangor, Peninsular Malaysia

## INTRODUCTION

Species composition of the genus *Vanilla* in Malaysia is most likely represented by seven species (Soto Arenas and Cribb, 2010) including a long lost taxa, *V. montana* and the newly described *V. sanguineovenosa* (Go and Raffi, 2017). The region is largely considered as the centre of diversification for vanillas (Portères, 1954), which to date accounts 20 % of the known species in South-East Asia and New Guinea. The genus, which suggested *V. griffithii* to be locally abundant is distributed in constantly sparse, widespread and in many habitats.

This new species was first collected in Hutan Simpan Semangkok, Selangor near streams in 2011 without flowers as living collections. It flowered in 2014 with only one not fully opened flower. In April 2015 during a random orchid diversity survey fieldwork to Hutan Lipur Chemerong, Hulu Dungun, Terengganu Malaysia, we found the same species with an inflorescence of 3 flowers and a few buds. Through this specimen we were able to determine the true identity of the species not only through its morphological characters but also through DNA evidence. This species is found in partially shaded forest near streams where the relative humidity is high. The species has distinct flower characteristics of having brilliant red coloured stripe lip, presence of appendages, and a split apex, which is unique among the existing species in Peninsular Malaysia.

<sup>&</sup>lt;sup>1</sup>Biodiversity Unit, Institute of Bioscience, Universiti Putra Malaysia 43400 UPM Serdang, Selangor, Malaysia

<sup>&</sup>lt;sup>2</sup>Department of Biology, Faculty Science, Universiti Putra Malaysia 43400 UPM Serdang, Selangor, Malaysia

<sup>&</sup>lt;sup>3</sup>Department of Crop Science, Faculty of Agriculture and Food Sciences, Universiti Putra Malaysia Bintulu Campus, 97008 Bintulu

<sup>&</sup>lt;sup>4</sup>Laboratory Of Bioresource Management (BIOREM), Institute of Tropical Forestry And Forest Products,

Universiti Putra Malaysia 43400 UPM Serdang, Selangor, Malaysia

<sup>&</sup>lt;sup>5</sup>Selangor State Forest Department, 3rd Floor, Bangunan Salahuddin Abdul Aziz Shah, 40660 Shah Alam, Selangor \*Corresponding author: rusea@upm.edu.my