

***Malaxis inexpectata* and *Habenaria
paradiseoides* (Orchidaceae),
New Records for Peninsular Malaysia**

M. JUTTA¹

AND

Q.Z. FARIDAH^{1,2}

¹Institute of Bioscience, Universiti Putra Malaysia (UPM),
43400 Serdang, Malaysia.

²Biology Department, Faculty of Science, Universiti Putra Malaysia (UPM),
43400 Serdang, Malaysia.

Abstract

Two new records, *Malaxis inexpectata* (J.J.Sm.) J.B.Comber and *Habenaria paradiseoides* J.J.Sm., are reported for the Orchidaceae of Peninsular Malaysia. Until now, both were known only from Sumatra, *M. inexpectata* with two, and *H. paradiseoides* with one collection.

Malaxis inexpectata

Malaxis inexpectata (J.J.Sm.) J.B.Comber, Orchids of Sumatra (2001) 172.
syn. *Pseudoliparis inexpectata* (J.J.Sm.) Marg., Ann. Bot. Fennici. 40 (2003)
63. *Microstylis inexpectata* J.J.Sm., Bull. Jard. Bot. Buit. ser. 3, 10 (1928)
33.

Figure 1

Small herbs with closely spaced pseudobulbs, somewhat laterally compressed stems measuring 1.5 cm long by 0.6 cm wide. Leaves 4–5, the upper ones largest; lamina with three prominent veins, elliptic-ovate, apex acute-acuminate, margins undulate, 4.5 x 1.7 cm; petiole to 1 cm long, ending in a broad overlapping sheath. Inflorescence terminal; scape ~5 cm long; rachis bearing up to 20 flowers, opening 2–3 at a time; floral bracts narrowly lanceolate, acute, reflexed, 5 mm long. Flowers non-resupinate, orange. Median sepal ovate, obtuse, 4 x 2.2 mm; lateral sepals a little smaller, oblique; petals lanceolate, obtuse, 2.4 x 0.75 mm, recurved. Labellum including auricles about 3.4 mm long and 2.8 mm wide, not toothed; side lobes inconspicuous, midlobe curved up; fovea oblong with a distinct linear

median depression and a small raised callus at the base; auricles not touching, apex rounded, 1.6 mm long. Column short, curved, winged, with a distinct, papillose horn-like projection at the back below the dorsally positioned anther; pollinia four, club-shaped.

Specimens examined: KEDAH: Langkawi, Gunung Machinchang 10 Jan 2004 *Mariam Jutta LCO/F-H 1* (UPM-IBS Herbarium; flower spirit specimen); *Mariam Jutta LCO/F 148* (live collection, Astaka Orkid UPM).

Notes: The species was collected as a tiny bulb on the lower peak of Gunung Machinchang and flowered in the live collection at Astaka Orkid, Universiti Putra Malaysia (UPM). It could not be confidently identified using the key in Seidenfaden & Wood (1992). Based on floral characteristics, it keys out closest to *Malaxis prasina* (Ridl.) Seidenf. & Smitinand, the only Peninsular Malaysian species with an untoothed apex of the labellum, but it is distinct from all *Malaxis* species reported from Peninsular Malaysia in having a 'horn' on the dorsal part of the column. The dorsal horn plus the orange flower colour in *M. inexpectata* are characteristic of Sect. *Pseudoliparis*, and make this collection the first record of this section for Peninsular Malaysia.

Our specimen matches the original description by Smith (1928) in most vegetative and floral aspects except: length of the lip 3.4 mm vs. Smith's 2.4 mm; apex of labellum entire vs. 'a little erose'; dorsal horn on column papillose vs. hairy (Fig. 1). However, after discussion with Peter O'Byrne, it was concluded that the Langkawi specimen merits inclusion in *M. inexpectata*.

This paper applies the name *Malaxis inexpectata* (J.J.Sm.) J.B.Comber as accepted by the World Checklist of Monocots (Govaerts, 2004). The name *Pseudoliparis inexpectata* Marg. (Margońska, 2003) is treated as a synonym.

Habenaria paradiseoides

Habenaria paradiseoides J.J.Sm., Bull. Jard. Bot. Buit. ser. 3, 12 (1932) 105.

Figure 2

Small herb with closely spaced tufted stems, glabrous throughout. Stems short, each bearing about 8–10 linear, acute leaves, to 10 cm long by 0.5 cm wide. Stem above leaves 20–25 cm long, bearing a few leaf-like bracts, the lowest one up to 6 cm long; rachis to 10 cm long, with up to 20 white

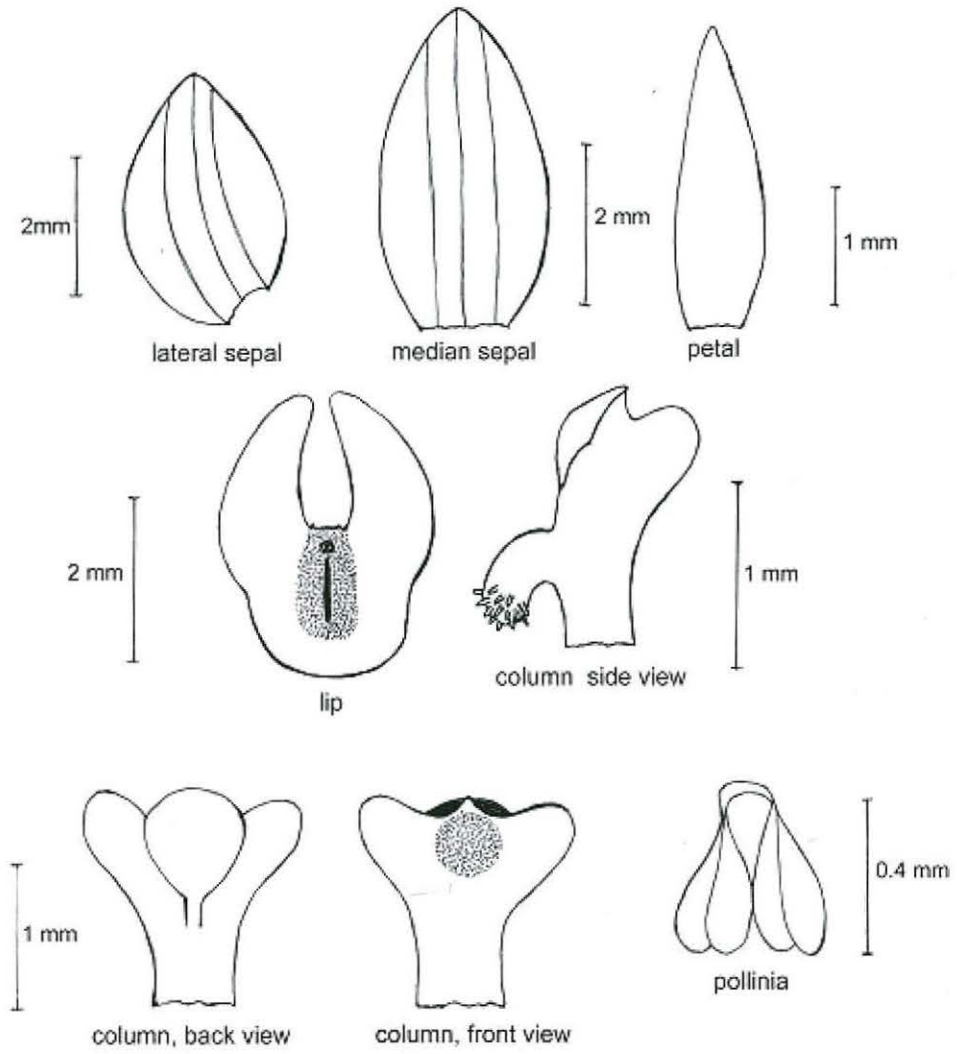


Figure 1. Flower parts of *Malaxis inexpectata* (J.J.Sm.) J.B.Comber.

flowers; floral bracts persistent, triangular acuminate, to 1.5 cm long. Flowers predominantly white. Median sepal about 3 mm long, broadly elliptic, white flushed with green at the back, and forming a hood with the obliquely lanceolate petals; lateral sepals of two unequal halves, oblique, 5.5 mm long, recurved, in-rolled. Labellum with conspicuous, winged, often lacinate side lobes measuring about 2 cm across; midlobe linear, obtuse, 7 mm long; spur 1.4 cm long, thickened towards the base, and curved forward. Column 2.0 mm long by 2.5 mm wide; anther canals compact, short, bent upwards.

Specimens examined: TERENGGANU: Pasir Raja Forest Reserve (FR) 8 June 2004 *Mariam Jutta LCO/F 150* (live collection Astaka Orkid UPM); 5 April 2005 *Mariam Jutta LCO/F-H 9* (UPM-IBS Herbarium); 11 April 2005 *Mariam Jutta LCO/F 544* (live collection, material passed to Singapore Botanical Garden June 05). PAHANG: Jerantut, Gunung Aais FR, *Markandan Moorthy FRI 49202* (KEP, SAN, SING).

Notes: *Habenaria paradiseoides* is considered as having no near allies within the genus (Smith, 1932). Its closest relatives among the Peninsular Malaysian species are *H. reflexa* Blume and *H. kingii* Hook.f., which have a similar habit, but differ in being limestone species opposed to *H. paradiseoides* that was found on granite. Flowers, though sharing some similar characteristics in the lateral sepals and spur, show distinct differences between *H. paradiseoides* and the other two species, especially in structure of the labellum and spur (both *H. kingii* and *H. reflexa*) and of the anther canals (*H. reflexa*).

This species was collected twice in Peninsular Malaysia from similar habitats (exposed locations in narrow gaps between rocks lining the banks of large rivers, often prone to strong currents) in Pahang and Terengganu. Both the description and habitat recorded by Smith (1932) match these specimens. Variations in the side lobes of the labellum are common, even on the same plant (Fig. 2), ranging from almost entire to deeply lacinate margins and either two- or three-sectioned lobes, the former being more common.

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