Short Communication

New records of Orchidaceae from Cambodia III

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In continuation of Schuiteman et al. (2015) and Schuiteman et al. (2016), we here report and illustrate nine orchid species not previously recorded from Cambodia. All but one were found in sterile condition in the field and could only be fully identified once the living specimens collected in November 2013 and May 2015 flowered in the glasshouses at the Royal Botanic Gardens, Kew (UK). The one exception is Cleisostoma birmanicum, which was in full flower when we encountered it. The following are new generic records for Cambodia: Diploprora, Sarcoglyphis, and Stichorkis.

In the interests of conservation we do not provide exact localities. Global distribution data follow Govaerts et al. (2016), unless indicated otherwise. Vouchers of all specimens mentioned are kept in the Kew Spirit Collection.

Species recorded

Cleisostoma birmanicum (Schltr.) Garay (Kew cult. 2015-1358; Figs 1 & 2)

This monopodial epiphyte was found in flower on 15 May 2015, growing in a patch of scrub-like forest on the summit of Mt. Bokor at 1,000 m asl (above sea level). It was previously recorded from Myanmar, Thailand, China (Hainan), Laos (Schuiteman et al., 2008) and Vietnam.

Dendrobium heterocarpum Wall. ex Lindl. (Kew cult. 2013-1685; Fig. 3)

Most of the species of Dendrobium sect. Dendrobium, to which D. heterocarpum belongs, are highly sought after by collectors, both for the horticultural trade and for traditional Chinese medicine (Schuiteman et al., 2008). This may explain why we only found a single specimen of this species in evergreen forest in the southern foothills of the Cardamom Mountains, lying on a forest trail, with its roots cleanly detached from whatever its support had been. It looked as if it had been accidentally dropped by a collector. This is a widespread species, ranging from Sri Lanka and India throughout tropical continental Asia to the Philippines and Indonesia, as far east as Sulawesi.

Dendrobium oligophyllum Simond ex Gagnep. (Kew cult. 2015-1258; Fig. 4)

This small member of Dendrobium sect. Distichophyllae was found about 46 km north of Sen Monorom, Mondulkiri Province, growing as an epiphyte in dry, open forest at 315 m asl. It was previously recorded from Thailand, Laos, and Vietnam.

Diploprora championii (Lindl.) Hook.f. (Kew cult. 2013-1718; Fig. 5)

This small monopodial orchid was found as an epiphyte in rather dry primary evergreen montane forest with little undergrowth at ca. 895 m asl. It is interesting to note that this species and C. birmanicum mentioned above both have a similar forked appendage at the lip apex, the
Nine new orchid records

Fig. 1 *Cleisostoma birmanicum* (Schltr.) Garay. In situ, Mt. Bokor.

Fig. 2 *Cleisostoma birmanicum* (Schltr.) Garay. Flowers.

Fig. 3 *Dendrobium heterocarpum* Wall. ex Lindl. Flower. Kew cult. 2013-1685.

Fig. 4 *Dendrobium oligophyllum* Simond ex Gagnep. Flowering plant. Kew cult. 2015-1258.
Fig. 5 Diploprora championii (Lindl.) Hook.f. Flowering plant. Kew cult. 2013-1718.

Fig. 6 Oberonia falcata King & Pantl. Inflorescence. Kew cult. 2015-1311.

Fig. 7 Phalaenopsis difformis (Wall. ex Lindl.) Kocyan & Schuit. Flowers. Kew cult. 2015-1166.

Fig. 8 Sarcoglyphis thailandica Seidenf. Flowers. Kew cult. 2015-1147.

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function of which (if any) is unknown. This widespread species ranges from Sri Lanka through tropical continental Asia, including Laos (Schuiteman et al., 2008), to Taiwan.

Oberonia falcata King & Pantl. (Kew cult. 2015-1311; Fig. 6)

With its somewhat anthropomorphic flowers this species resembles O. anthropophora Lindl. and O. rufiflora Lindl., both of which may occur in Cambodia, although only the latter has so far been found there. Oberonia falcata is easily distinguished by the elongate stems, as opposed to the stemless, fan-shaped habit of the two other species, and also by the very short floral bracts, which are (much) longer than the ovary in the other species. It was found as an epiphyte in evergreen montane forest at 940 m asl on Mt. Bokor, Kampot Province. This species was previously recorded from NE India, Nepal, Myanmar, China (Yunnan), Thailand, Laos (Schuiteman et al., 2008), Vietnam, and North Sumatra.

Fig. 9 Stichorkis gibbosa (Finet) J.J.Wood. Plant habit. Kew cult. 2015-1312.

Fig. 10 Stichorkis gibbosa (Finet) J.J.Wood. Inflorescence. Kew cult. 2015-1312.

Fig. 11 Thrixspermum pauciflorum (Hook.f.) Kuntze. Flowers. Kew cult. 2015-1120.
Phalaenopsis difformis (Wall. ex Lindl.) Kocyan & Schuit. (Kew cult. 2015-1166; Fig. 7)

Until recently this taxon was better known as Ornithochilus difformis (Wall. ex Lindl.) Schltr., but DNA evidence has suggested its placement in Phalaenopsis. This is one of many orchid species of which the occurrence in Cambodia was entirely predictable. We encountered it as an epiphyte in semi-deciduous forest at ca. 595 m asl, ca. 8.5 km north of Sen Monorom, Mondulkiri Province, and probably also in more humid, evergreen forest remnants near a waterfall at 640 m asl, ca. 14 km southeast of Sen Monorom, but we have not seen the last specimens in flower. This species, of which the flowers are striking close up but inconspicuous from a distance, was previously recorded from N & NE India, Nepal, Myanmar, southern China, Thailand, Laos, Vietnam, Peninsular Malaysia, Sumatra, and Borneo.

Sarcoglyphis thailandica Seidenf. (Kew cult. 2015-1147; Fig. 8)

Along with Thrixspermum pauciflorum, this is the least common of the species reported in this paper. Until now this monopodial orchid was believed to be endemic to Thailand, but we found it at a considerable distance from the Thai border in eastern Cambodia, in the Seima Wildlife Sanctuary, Mondulkiri Province. There it occurred as an epiphyte in disturbed evergreen dipterocarp forest at 340 m asl.

Stichorkis gibbosa (Finet) J.J.Wood (Kew cult. 2015-1312; Figs 9 & 10)

The last word has not been spoken on the complex taxonomy of subtribe Malaxidinae, which in Cambodia is represented by the genera Crepidium, Liparis, Oberonia, and now also by Stichorkis. The genus Stichorkis was usually considered to fall within the limits of the large genus Liparis, but molecular studies have shown that Liparis is polyphyletic (Cameron, 2005; Tang et al., 2015). One clearly monophyletic group within Liparis s.l. includes the present species; all its members are characterized by having distichous, flattened floral bracts, with the flowers opening in succession over a long period of time (not unlike many species of Thrixspermum). Stichorkis gibbosa is the most widespread taxon in the genus, being recorded from Myanmar, Thailand, Laos, Peninsular Malaysia, many parts of Indonesia, the Solomon islands, Vanuatu, and New Caledonia. We found it as an epiphyte in evergreen montane forest on Mt. Bokor, Kampot Province, at 940 m asl.

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References


