

TAXONOMIC STUDY ON SOME WILD ORCHIDS OF KENNEDY MOUNTAIN IN TEDIM TOWNSHIP, CHIN STATE

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Abstract

Chin state is mostly covering with subtropical evergreen forests and distribution with many wild orchids. The members of Orchidaceae from Kennedy Mountain, Tedim Township, Falam District in Chin State, the North-western part of Myanmar had been collected and studies. Its area is about 2410 square kilometer. The orchids were collected in all seasons within the December, 2019 to June, 2020. Altogether, 35 species of Orchidaceae in study area were collected, identified and classified. Of these, 6 genera and 10 species including 9 species epiphyte and 1 species lithophyte. All collected species are fully described with necessary photographs and figures. Moreover, on artificial key to the species of the plants, their local name, English name and flowering periods are also described of the 2 species of sub-family Vandoideae and 8 species of sub-family Epidendroideae were included. The system of Seidenfaden (1992) was adopted as the classification system in the present research.

Keywords: Wild Orchids, Morphological character

Introduction

Chin State is composed of three Districts and nine Townships. Falam district consists of Falam, Tedim and Tunzang Townships. The Chin State which lies in the west of Myanmar is situated on a mountain range far away from Myanmar proper. The study area is situated between 23° 19' 03" N latitude and 93° 45' 42" E longitude. The total land area of Tedim Township is 2410 km sq. Tedim Township lies on 1728 meter above sea level.

Kennedy Mountain is a 2703 meter (8868 ft) peak in the Tedim Township of the Chin State of Myanmar that dominates the Tedim Road. It is one of the world's ultra-prominent peaks, as it rises 4951 feet more than 1509 m above all other peaks nearby. It is the second highest mountain in Chin State. Instead, a rough road leads to the summit from Sozang village, about 15 miles from Tedim on the road back to Kalaymyo, which huge the base of the mountain.

Orchids are lacking, also in the most extreme desert environments though they may be found in oasis in sheltered desert canyons, and in cactus thorn shrub or thorn forest. Orchid plants may be abundant in drier forest, but such communities have relatively few orchid species are rarely found. Orchids are one of the most striking, elegant, glamorous flowers to be found in nature and it is very interested.

They are widely distributed throughout the country. Since 50% of the rain forest covering the world had been destroyed by human activities, the orchid population is at risk of extinction due to their habitat destruction. Therefore, it is essential to record the orchids of Kennedy Mountain, Tedim Township in Northern Chin State of Myanmar.

The aim and objectives of this research are to conduct and record the Orchidaceae flora of Kennedy Mountain in Tedim Township, Northern Chin State, to investigate the various species of orchids in study area, their distribution and morphological characteristics, to understand the value of natural orchid species from Kennedy Mountain, Tedim Township, to get the value information

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of species from the study area, and to give a partial fulfillment of the floristic information of Kennedy Mountain in Tedim Township, Chin State in Myanmar.

Material and Methods

Orchidaceae species are collected from Kennedy Mountain, Tedim Township, Falam District in Chin State, from December 2019 to June 2020, were preserved and use for identification and description. All the collected species are noted by photographs while flowering. The diagnostic characters are recorded in detail. Field notes are made of precise locations and its plant characters. Identification of an unknown specimen is carried out by referring to Flora of British India (1894), Flora of Ceylon (1918) Flora of Java (1963; 1968), Flora of Malaya (1964), the orchids of Indochina (1992). The first step is solving the generic name. Again the species names of the collected plants are resolved. The final verification is made by examination of the herbarium species from old records. The index for nomenclatural data referred in Index kewensis by which the names and synonyms of plant up to the rank of species being confirmed all of the nomenclatural studies were finalized by referring to the web site International Plant Name Index, ([http:// www ipni. org](http://www.ipni.org)).

All the collected specimens have been identified and described their characters, then constructed the artificial key to the genera and also to the species. Most of the plant specimens have been air dried and pressed.

Results

The present study deals with (10) species of Orchidaceae. As a result of collection (10) species belong to (6) genera of 2 sub-families. They are collected from Kennedy Mountain, Tedim Township, Chin State. The list of collected species are shown in Table.1. All the resulting species are treated systematically. An artificial key to the species are constructed and stated.

Table 1 List of Collected Species

Sub-Families	Tribes	Sub-Tribes	Genus	Species
Epidendroideae	Arethuseae	<i>Coelogyneae</i>	1. <i>Coelogyne</i>	1. <i>Coelogyne viscosa</i> Rchb.f.
			2. <i>Pleione</i>	2. <i>Pleione praecox</i> Lindl.
	Epidendreae	<i>Dendrobieae</i>	3. <i>Bulbophyllum</i>	3. <i>Bulbophyllum pictum</i> Parish & Rchb. f.
			4. <i>Dendrobium</i>	4. <i>Dendrobium bellatulum</i> Rolfe.
				5. <i>Dendrobium cariniferum</i> Rchb.f.
				6. <i>Dendrobium peguanum</i> Lindl.
				7. <i>Dendrobium pendulum</i> Roxb.
				8. <i>Dendrobium sutepense</i> Rolfe ex Downie
Vandoideae	Cymbidieae	Sarwntheae	5. <i>Pelatantheria</i>	9. <i>Pelatantheria insectifera</i> Rchb.f.
			6. <i>Vanda</i>	10. <i>Vanda coerulea</i> Grift ex. Lindl.

1. Key to the Subfamilies

- 1 .Pollinia soft, waxy, without stipes-----1.**Epidendroideae**
- 1. Pollinia cartilaginous or bony, with stipes-----2.**Vandoideae**

Subfamilies Epidendroideae

Key to the Tribes

- 1 Pollinia with caudicles, superposed; plant with pseudobulbs of one internodes-----
-----**Coelogyneae**
- 1. Pollinia without caudicles, no superposed; plant with pseudobulbs of several internodes-----
-----**Epidendreae**

Tribe

Key to the Subtribe

- 1. Inflorescence terminal, lateral, or on a leafless scape; pollinia equal, 1-seriate, connected by not appendage-----**Dendrobieae**
- 1. Inflorescence terminal; pollinia subequal, 2-seriate, connected by appendage-----
-----**Coelogyneae**

Subtribe Coelogyneae

Key to the genera

- 1. Epiphytes; leaves linear-lanceolate; flowers white to orangish – white -----
-----**Coelogyne viscosa**
- 1. Lithophytes; leaves elliptic-oblongate; flowers pinkish purple-----
-----**Pleione praecox**

Coelogyne viscosa Reieghb. f. in Allgemein. Berline Gartenz. 1856.

Local Name - Ngwe-Hni-Phyu-Myo-Kywe

Flowering periods from December to January.

Sympodial epiphytes. Roots clinging cylindrical, white to brownish white, glabrous. Pseudobulbs one-jointed, narrowly ovoid to fusiform, yellow to yellowish-green glabrous. Leaves 2, at apex pseudobulbs; sessile, blade lanceolate to linear lanceolate, green. Inflorescence basal racemes, erect, 1-3 flowered; peduncular bracts, ovate to ovate-lanceolate, peduncle, slender, orangnish-yellow, glabrous. Flower 4.5-5.0cm across at anthesis, white to orangnish-white; floral bracts caducious; pedicels, cylindrical, orangnish-white, glabrous; dorsal sepal, elliptic, white; lateral sepal, linear-lanceolate, white; lateral petal, oblanceolate, coriaceous, lip 3 lobes, oblong, pale-yellow streaks, spur not distinct; column, flat, orangnish-white, anthercap, ovoid, pale-orange; pollinia 4, waxy, oblanceolate, yellow, visidium, ovate, yellow, glabrous; stigmatic surface, ovoid, orangnish-white; ovary, oblanceolate, orangnish-white, glabrous.

Specimen Examined: Chin State; Tedim Township; Kennedy; January 29. 2020; 23° 07' 29.8" N, 94° 01' 40.8"E; Ah Nge Htwe and groups; collection No.7.

2. *Pleione praecox* Lind., Coll. Bot. 37; in wall. Cat.1965.

Local Name - Phar-la-tet-thitkhwa

Flowering periods from November to December.

Sympodial lithophytes. Roots fibrous, cylindrical, white. Pseudobulbs, turbinate, dark green with purplish brown mottled. Leaves 2, top of the pseudobulbs, elliptic to elliptic-oblong, plicate, green. Inflorescences basal racemes, erect, 1-2 flowered; peduncular bracts, ovate-lanceolate, brownish-green blotch; peduncle, slender, green. Flower 5.0-6.0cm across at anthesis, pinkish purple flower, lip white with purple markings; floral bracts, oblong-lanceolate, brownish-white; pedicels, slender, yellowish-green; dorsal sepals, oblong-lanceolate, pinkish purple; lateral sepal, slightly oblique to ovate-lanceolate; lateral petal, linear lanceolate, pinkish purple; lip distinctly 3-lobed, sidelobe, oblong, pale purple, midlobe, margins deeply fimbriate, tips emarginated, white purple marking and yellow streaks; spur saccate, tips obtuse, white; column long flat, white; anthercap 2-loculed, ovoid, white, pollinia 4, waxy, 2 pairs of 4, clavate, yellow, stigmatic surfaces, quadrangular, pale purple, ovary, trigonous, yellowish-green.

Specimen examined: Chin State; Tedim Township; Kennely Mountain; December 14.2019; 23° 09' 29.8"N, 94° 01' 40.8" E; Ah Nge Htwe and groups; collection No.1.

Subtribe Dendrobieae**Key to the genera**

1. Caudicles and viscidium absent-----2
- 1 Caudicles and viscidium present-----***Bulbophyllum pictum***
 2. Anthercap oblong or orbicular-----3
 2. Anthercap ovate-----5
3. Spur significant; pseudobulbs without swollen internodes-----4
3. Spur insignificant;pseudobulbs with swollen internodes-----
 4. Leaves oblong; peduncular bract ovate; lateral petal elliptic-----***Dendrobium pendulum***
 4. Leaves linear-oblong; peduncular bract ovate-lanceolate; lateral petal oblong-----***Dendrobium cariniferum***
 4. Leaves linear-oblong; peduncular bract ovate-lanceolate; lateral petal oblong-----***Dendrobium peguanum***
5. Peduncular bract pubescent; dorsal sepal ovate-lanceolate; spur saccate-----***Dendrobium bellatulum***
5. Peduncular bract glabrous; dorsal sepal oblong; spur funnel-shaped-----***Dendrobium sutepense***

3. *Bulbophyllum pictum* E.C Parish & Rchb. f. Soc. London 30: 150. 1874.

Local Name - Unknown

Flowering periods from January to February.

Sympodial epiphytes. Pseudobulbs one-jointed, erect, ovate-lanceolate, green. Leaves 1, at apex of pseudobulbs, elliptic-lanceolate, margins entire, tips acute, green. Inflorescence lateral from the rhizomatose part, 1- flowered; peduncular bract, ovate, brown; peduncle slender, brown. Flower 1.0-1.5cm across at anthesis, sepals dirty yellow with many purple dots, petals dark purple, lip proximal part yellow with red dots, distal part reddish-purple; floral bract, ovate-lanceolate,

brown; pedicels, slender, green with red dots, glabrous; dorsal sepal, ovate-lanceolate, dirty yellow with many purple dots; lateral sepal, broadly ovate, dirty yellow with many purple dots; lateral petal, ovate, creamy-white with many purple dots, lip, auricles, proximal part yellow with red dots, glabrous; column stout, white, glabrous; column, slender, white; anthercap, obovoid, anther with a horn at apex, reddish-purple, glabrous; pollinia 4, waxy, obovoid, yellow, glabrous; caudicle absent; visidium minute, stigmatic surface, ovoid, white, glabrous; ovary, oblong, green, glabrous.

Specimen Examined: Chin State, Tedim Township; Kennedy Mountain; February 7, 2020; 23° 19' 03" N, 93° 45' 42" E; Ah Nge Hwe and groups; collection No.10.

4. *Dendrobium bellatulum* L. Soc. 36: 10, 1903.

Local Name - Unknown

Flowering periods from January to March.

Sympodial epiphytes. Roots clinging, cylindrical, white. Pseudobulbs 3-6 jointed, erect, fleshy, cylindrical to fusiform, green. Leaves alternate and distichous, leafless at anthesis, ovate-oblong, green. Inflorescences terminal racemes, erect, 1-2 flowered; peduncular bracts, ovate, margins entire, tips acute, brown, pubescent; peduncle, cylindrical, pale green. Flower 4.5-5.0cm across at anthesis, creamy-white flower with bright orange lip; floral bracts, ovate, margins entire, tips acute, brown, pubescent; pedicels, slender, pale green, glabrous; dorsal sepal, ovate-lanceolate, creamy-white, glabrous; lateral sepals, oblanceolate, creamy-white, glabrous; lateral petal, oblong-lanceolate, creamy-white, glabrous; lip, oblong, tips by-fixed, lip with fleshy glossy medium band, on each side by laminate keel with crose denate edges; spur, saccate, white, glabrous; column stout, yellowish-white, glabrous; anthercap, ovoid, yellow, glabrous; pollinia 4, waxy, cohering in 2 pairs, ovoid, yellow; stigmatic surfaces, elliptic-ovate, white; ovary, ovate, pale-green.

Specimen Examined: Chin State; Tedim Township; Kennedy; January 25, 2020, 23° 07' 29.8" N, 94° 01' 40.8" E; Ah Nge Htwe and groups; collection No.6.

5. *Dendrobium cariniferum* Rchb. f. in Gard. Chron. 611. 1869.

Myanmar Name - Mahar-deiwi

Flowering periods from December to January.

Sympodial epiphytes. Roots clinging, cylindrical, white, glabrous. Pseudobulbs 3-6 jointed, erect, terete, pale green, pubescent with black. Leaves alternate and distichous, oblong, upper the dark green and beneath the pale green, glabrous. Inflorescence axillary and terminal racemes, erect and drooping, 2-3 flowered; peduncular bracts 2, ovate, pubescent with black; peduncle short, terete, green, glabrous. Flower 1.5-3.5cm across at anthesis, white flower sepal and petals creamy-white with yellow tips, midlobe of lip creamy yellow, sidelobe darker yellow, throat reddish orange and ciliated; floral bracts ovate-lanceolate, brownish-white, glabrous; pedicels, slender, greenish-white, glabrous; dorsal sepal, ovate, creamy-white, glabrous; lateral sepal, ovate-lanceolate, creamy white, glabrous; lateral petal, elliptical, creamy white, glabrous; lip distinctly 3-lobes, sidelobes, ovate, creamy white with darker yellow with streaks, glabrous; midlobe, oblong-reniform, creamy-white with dark yellow stain, glabrous; spur, funnel-shaped, tips tubular, white with reddish-orange, glabrous; column short, cylindrical, white, glabrous; column foot, slender, yellow, glabrous; anthercap, orbiculoid, white, glabrous; pollinia 4, waxy, cohering in 2 pairs, oblong, yellow, glabrous; stigmatic surface, obovoid, white, glabrous; ovary 6 ridge, oblongoid, creamy white, glabrous.

Specimens Examined: Chin State; Tedim Township; Kennedy; June 14, 2019; 23° 07' 29.8" N, 94° 01' 40.8" E; Ah Nge Htwe and groups; collection No.2.

6. *Dendrobium peguanum* Lindl., J. Proc. Linn. Soc. Bot. 3:19. 1859.

Local Name - Unknown

Flowering period from September to February.

Sympodial epiphytes. Roots clinging, cylindrical, white, glabrous. Pseudobulbs 2-3 jointed, erect, oblong-conical, green, glabrous. Leaves alternate and distichous, linear-oblong, green, glabrous. Inflorescence terminal racemes, erect, 3-6 flowered; peduncular bracts, ovate-lanceolate, glabrous; peduncle, slender, brownish-green, glabrous. Flower 1.0-2.0 cm across at anthesis, sepals and petals white, dark purplish brown veins on light brown lip; floral bracts, ovate, green, glabrous; pedicels, slender, brown, glabrous; dorsal sepal, oblong-ovate, white, glabrous; lateral sepals, oblong, white, glabrous; lateral petals, oblanceolate, white, glabrous; lip, oblong-orbicular, dark purplish brown veins on light brown lip, glabrous; spur, conical, green, glabrous; column, stout, green, glabrous; column foot, green, glabrous; anthercap, oblongoid, white, glabrous; pollinia 4, waxy, hard, ovoid, yellow, glabrous; stigmatic surface, oblong, white, glabrous; ovary, oblongoid, green, glabrous.

Specimen Examined; Chin State; Tedim Township; Kennedy Mountain; February 7.2020; 23° 07' 03"N, 93° 45' 42" E; Ah Nge Htwe and groups; collection No.9.

7. *Dendrobium pendulum* Roxb. Hort. Beng. 63. 1814.

Local Name - Mya-sity-kyo, Pan-kyan-sit

Flowering periods from February to April.

Sympodial epiphytes. Roots clinging, cylindrical, white, glabrous. Pseudobulbs 8-12 jointed, fleshy, pendulous, swollen internode, cylindrical, pale-green, glabrous. Leaves alternate and distichous, leafless at anthesis, 7.0-10.0cm long and 2.0-3.0cm wide, linear *lanceolate*, margins entire, tips slightly bi-lobed, sub-coriaceous, green, glabrous. Inflorescence lateral racemes on swollen internode of pseudobulbs, erect, 1-3 flowered; peduncular bracts, broadly ovate, pale-brown, glabrous; peduncle short, slender, green, glabrous. Flower 3.0-3.5cm across at anthesis, white sepals and petals with tips purple, lip pubescent with deep yellow blotch at base and lavender tip; floral bracts, ovate-oblong, pale-brown, glabrous; pedicels, slender, creamy-white, glabrous; dorsal sepal, oblong, margins entire, tips acute, white with tips purple, glabrous; lateral sepal, oblong, white with tips purple, glabrous; lateral petal 1.8-2.5cm long and 1.2-1.7cm wide, ovate, margins entire, tips obtuse, white with tip purple, glabrous; lip, ovate-orbicular, margins ciliate, tips obtuse, deep yellow blotch at base and purple tip, pubescent; spur, saccate, purple, glabrous; column, stout, white, glabrous; column foot 0.1-0.2cm long and wide, oblong, purple, glabrous; anthercap, oblongoid, white, glabrous; pollinia 4, waxy, ovoid, yellow, glabrous; stigmatic surface, oblongoid, white, glabrous; ovary, oblongoid, greenish-purple, glabrous.

Specimen Examined: Chin State; Tedim Township; Kennedy Mountain; February 7.2020; 23° 19' 03"N, 93° 45' 42" E; Ah Nge Htwe and groups; collection No.8.

8. *Dendrobium sutepense* Rolfe Kew Bull. p.374. 1925.

Local Name - Chin-dewi

Flowering periods from December to January.

Sympodial epiphytes. Roots clinging, cylindrical, white, glabrous. Pseudobulbs 3-5 jointed, erect, terete, pale-green, pubescent with black. Leaves alternate and distichous, oblong, upper the dark green and beneath the pale green, glabrous. Inflorescence terminal racemes, erect, 2-3 flowered; peduncular bracts, pale-brown, glabrous; peduncle, terete short, green, glabrous. Flower

1.5-3.0cm across at anthesis, white flower, lip white with yellow patch tip the base; floral bracts, ovate-elliptic, pale-brown, glabrous; pedicels, slender, greenish-white, glabrous; dorsal sepal, oblong, white, glabrous; lateral sepal, oblong-lanceolate, margins entire, tips acuminate, coriaceous, white, glabrous; lateral, oblong-lanceolate, margins undulate, tips acuminate, white, coriaceous, glabrous; lip distinctly 3-lobes, white with yellow stain; sidelobes, oblanceolate, margins sinuate, tips truncate, creamy white with yellow streak, coriaceous, glabrous; midlobe, oblong, creamy white with stain, glabrous; spur, funnel-shaped, tips tubular, coriaceous, creamy-white, glabrous; column short, slender, white, glabrous; column foot, oblong, creamy white, glabrous; anthercap, ovoid, white, glabrous; pollinia 4, waxy, cohering in 2 pairs, oblong, yellow, glabrous; stigmatic surface, ovate, white, glabrous; ovary 6-ridges, oblongoid, white, glabrous.

Specimens Examined: Chin State; Tedim Township; Kennedy; March 14.2019; 23° 07' 29.8" N, 94° 01' 40.8"E; Ah Nge Htwe and groups; collection No.3.

Subfamilies Vandoideae

Key to the genera

1. Sepal and petal with tessellation; color bluish-lavender; spur funnel-shaped-----
-----*Vanda coerulea*
1. Sepal and petal without tessellation; color green sepal and petal with reddish brown stipes, midlobe of lip red purple; spur conicle-shaped-----
----*Pelatantheria insectifera*

9. *Pelatantheria insectifera* (Rchb. f.) Ridl., J. Linn. Soc.32: 373. 1896.

Local Name - Unknown

Flowering periods from December to January.

Monopodial epiphytes. Roots clinging, cylindrical, greenish-white, glabrous. Stem leafy, erect, cylindrical, green, glabrous. Leaves alternate and distichous, oblong, green, glabrous. Inflorescences axillary racemes, erect, 2 to 4 flowered; peduncular bracts absent; peduncles short, stout, green, glabrous. Flower 1.3-1.5cm across at anthesis, green sepals and petals with reddish-brown stipes, midlobe of lip red purple; floral bracts, cuneate, brown, glabrous; pedicels, cylindrical, pale-green, glabrous; dorsal sepal, oblong, margins entire, tips obtuse, green with reddish-brown stripes, glabrous; lateral sepals, elliptical, green with reddish-brown stripes, glabrous; lateral petals, linear, green with reddish-brown stripes, glabrous; lip shallowly 3 lobed, cuneate, reddish-purple, margins undulate, tips acute, glabrous; spur, conical, tips obtuse, greenish-white, glabrous; column short, stout, white, glabrous; anthercap 2, ovoid, white, glabrous; pollinia 2, waxy, 1.0-2.0mm long and wide, globose, yellow, glabrous; caudicle absent; visidium 1, ovoid, white, glabrous; stigmatic surface, oblongoid, pale-green, glabrous; ovary 3, narrowly oblongoid, pale green, glabrous.

Specimen Examined: Chin State; Tedim Township; Kennedy; January 5.2020; 23° 07' 29.8" N, 94° 01' 40.8" E; Ah Nge Htwe and groups; collection No.5.

10. *Vanda coerulea* Grift. ex. Lindl., Bot. Reg. Sub. t. 30.1847.

Local Name - Moe-Lone-Hmine

Flowering periods from November to January.

Monopodial epiphytes. Roots long clinging, vermiform, white, glabrous. Stem densely leafy, erect, cylindrical, green, glabrous. Leaves alternate and distichous, flat, recurved, oblong, green, glabrous. Inflorescences axillary racemes, erect, 1-3 flowered; peduncular bracts 2-4,

sheathing, ovate, brownish-green, glabrous; peduncle, cylindrical, green, glabrous. Flower 6.5-7.1cm across at anthesis, fleshy, color bluish-lavender, tessellated; floral bracts, broadly ovate, brownish-green, glabrous; pedicels, slender, white, glabrous; dorsal sepal, ovate, flat, margins sinuate, tips rounded, bluish-lavender, glabrous; lateral sepal, flat, suborbicular, margins entire, tips rounded, bluish-lavender, glabrous; lateral petal, flat, elliptic-ovate, margins sinuate, tips rounded, bluish-lavender, glabrous; lip bi-lobed, erect, linear-oblong, purple, glabrous; spur, funnel-shaped, white to purple, tips obtuse, glabrous; column short, stout, white, glabrous; anthercap, ovoid, white, glabrous; pollinia 2, waxy, obovoid, yellow, glabrous; caudicle, cylindrical, white, glabrous; visidium, orbicular, white, glabrous; stigmatic surface, orbicular, white, glabrous; ovary, oblongoid, white, glabrous.

Specimen Examined: Chin State; Tedim Township; Kennedy Mountain; December 17.2019; 23° 07' 29.8" N, 94° 01' 40.8"E; Ah Nge Htwe and groups; collection No.4.



A. *Coelogyne viscosa*
Rchb.f.



B. *Pleione praecox*
(Sm.) D.Don



C. *Bulbophyllum pictum*
Par. & Rchb.f.



D. *Dendrobium bellatulum*
Rolfe



E. *Dendrobium cariniferum*
Rchb. f.



F. *Dendrobium pegunum*
Lindl.



G. *Dendrobium pendulum*
Roxb.



H. *Dendrobium sutepense*
Rolfe. ex Dowine



I. *Pelatantheria insectifera*
Rchb.f.



J. *Vanda coerulea*
Grift. ex Dowine

Discussion

The present study deals with taxonomic study on some wild orchids in Kennedy Mountain, Tedim Township, Chin State. The research work consists of 6 genera and 10 species including 9 species epiphytes and 1 species lithophyte. According to the distribution of vegetation types in Myanmar by Krees *et al.* (2003), the study area is covered by evergreen forests and semi-evergreen forest.

The sub-family Epidendroideae are the major orchid group, with more than half of all orchid species in this two sub-family. Most are epiphytes with some terrestrial. The popular *Dendrobium* sp., *Coelogyne* has with large, showy flowers. The ever-popular *Dendrobium* is one of the most recording orchids to grow, being handsome, “floriferous” and hardy. Pseudobulbs some in all sorts of shapes. They are long vertical cones up to 1.5m in length in the horn *Dendrobium*, dangling pendulous rods in the noble *Dendrobium* round. The members of orchids are belonging to *Bulbophyllum pictum*, *Dendrobium bellatulum* and *Dendrobium sutepense* are not reported in this study. Therefore, I have reported these 3 species in Tedim Township, Northern Chin State.

Five species of *Dendrobium* was collected in this area. Dorsal sepals of *Dendrobium pendulum* and *Dendrobium sutepense* are oblong but these of rest species *Dendrobium bellatulum*, *Dendrobium cariniferum* and *Dendrobium pegunum* are ovate-lanceolate, ovate and oblong-ovate. Ovary of *Dendrobium sutepense* and *Dendrobium cariniferum* are white and creamy-white; *Dendrobium bellatulum* and *Dendrobium peguanum* are pale-green and green but the rest of one species is *Dendrobium pendulum*.

One species of *Bulbophyllum pictum* is found in the study area. The distinctive characters are 1-leaves at apex pseudobulbs, lip auricles and anther with a horn at apex but *Coelogyne viscosa* is distinctive 2-leaves at apex pseudobulbs, lip oblong and anther without a horn at apex. Only one species of lithophyte is found in the study area. This species is defined as *Pleione praecox* Lind., Wall. Cat. 1965. The distinctive characters are roots fibrous, 2 leaves plicates, stigmatic surface quadrangular and ovary trigonous. This sub-families Vandoideae consists of *Pelatantheria insectifera* and *Vanda coerulea* species are 2 pollinia but rest of another sub-families Epidendroideae species are 4 pollinia in the study area.

In Chin State, orchid plants that are pride of the state and once thrived abundantly are now endangered due to over collection and deforestation. It is needed to conserve the orchid’s resources from extinctions of rare species. The loss of national resources of Myanmar could be prevented by prohibiting collection and selling of orchids without due consideration, protecting and conserving the forests is a National duty for the state and future generation.

Orchids are not only significant worldwide in the horticulture industry, but in many countries, they are valued locally for their medicinal, national and ornamental qualities. Therefore, it is inevitably our sole duty at least to record the orchid flora and to prevent the loss of Myanmar treasure plant, the orchid.

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