

Eng Soon Teoh

Orchid Species from Himalaya and Southeast Asia Vol. 3 (R - Z)

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Southeast Asia Vol. 3 (R - Z)



Vanda tricolor var. *suavis* flourishing in the garden of Karen Tambayong in Cibodas, Java (© Teoh Eng Soon 2022)

Eng Soon Teoh

Orchid Species from
Himalaya and Southeast
Asia Vol. 3 (R - Z)

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*For Teoh Phaik Khuan, John, Kristine, Chrissie, Ning, and my
orchid friends and mentors*

Preface

In orchid circles today, discussions frequently centre on species, their discovery, identification and conservation. This publication reflects my effort to produce a photographic record of the orchid species that I have been privileged to come across.

This work is not a comprehensive *flora* of the region. No single sane person should try to write a comprehensive illustrated flora of the region, there being, I am told, 1256 species in India, 4000 species in Indonesia and new ones are continuously being added. Rather, the three volumes reflect a personal journey of half a century with *Orchidaceae*, this wonderful family of flowering plants. It features the orchid species that I have personally encountered and some of the hybrids that I have been privileged to see. It leaves out hybrids bred for the temperate regions because they are well covered by numerous experts in books and articles, and I am not so familiar with these orchids.

Depending on where we live and our exposure, we each have our preferences; therefore, the selected hybrids depicted here reflect my personal narrow perspective.

Comments are kept as brief as possible to provide maximum space for pictures. Nevertheless, they need to contain information that will help in the identification of the species and data on their habitat. I tried to provide a historical perspective in the hybrid section because the past informs on the direction we should be heading. Readers who may wish to know more about orchid cultivation should consult my *Orchids of Asia* or similar publications.

Singapore, Singapore

Eng Soon Teoh

Acknowledgements

I made many friends through my long association with orchids, and many of them accompanied me to search for orchids both in cities and in the wild. They were generous in sharing their time, knowledge, expertise, collections, photographs and connections. I am grateful to these special people who will always be remembered with fondness although most will not be mentioned by name. They are so many, I would inadvertently omit some were I to attempt listing all of them.

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Contents

94	<i>Renanthera</i> Thour.	1
	<i>Renanthera annamensis</i> Rolfe	1
	<i>Renanthera bella</i> J.J.Wood	2
	<i>Renanthera caloptera</i> (Rchb.f.) Kocyan & Schuit. [syn. <i>Ascoglossum calopterum</i> (Rchb.f.) Schltr.]	3
	<i>Renanthera citrina</i> Aver.	4
	<i>Renanthera coccinea</i> Lour.	4
	<i>Renanthera elongata</i> (Bl.) Lindl.	5
	<i>Renanthera elongata</i> (Bl.) Lindl. f. <i>flava</i>	6
	<i>Renanthera histrionica</i> Rchb.f. (syn. <i>Renanthera histrionica</i> Ridl.)	6
	<i>Renanthera imschootiana</i> Rolfe	6
	<i>Renanthera isosepala</i> Holtt.	8
	<i>Renanthera matutina</i> (Poir.) Lindl.	9
	<i>Renanthera matutina</i> (Poir.) Lindl. var. <i>angustifolia</i> Hook.f.	10
	<i>Renanthera monachica</i> Ames	11
	<i>Renanthera philippinensis</i> Ames & Quisumb.	11
	<i>Renanthera storiei</i> Rchb.f.	11
	<i>Renanthera storiei</i> f. <i>citrina</i> Valmayor & D.Tiu.	14
	<i>Renanthera vietnamensis</i> Aver.	14
	Hybrids	16
	References.	24
95	<i>Rhynchostylis</i> Bl.	25
	<i>Rhynchostylis coelestis</i> (Rchb.f.) A.H.Kent	25
	<i>Rhynchostylis coelestis</i> f. <i>alba</i> Kamemoto & Sagarik	26
	<i>Rhynchostylis gigantea</i> (Lindl.) Ridl.	26
	<i>Rhynchostylis gigantea</i> f. <i>alba</i>	27
	<i>Rhynchostylis gigantea</i> f. <i>Chang Daeng</i>	27
	<i>Rhynchostylis retusa</i> (L.) Bl.	29
	<i>Rhynchostylis retusa</i> f. <i>alba</i>	31
	Hybrids	31
	References.	34

96	<i>Robiquetia</i> Gaudich.	35
	<i>Robiquetia cerina</i> (Rchb.f.) Garay	35
	<i>Robiquetia spathulata</i> (Bl.) J.J.Sm.	35
	<i>Robiquetia succisa</i> (Lindl.) Seidenf. & Garay	35
	References.	38
97	<i>Sarcanthopsis</i> Garay	39
	<i>Sarcanthopsis warocqueana</i> (Rolfe) Garay [syn. <i>Sarcanthopsis nagarensis</i> (Rchb.f.) Garay]	39
	Hybrids	39
	Reference	40
98	<i>Sarcoglyphis</i> Garay	41
	<i>Sarcoglyphis mirabilis</i> (Rchb.f.) Garay	41
	Hybrids	41
	References.	42
99	<i>Schoenorchis</i> Reinw. ex Bl.	43
	<i>Schoenorchis fragransi</i> (Par. & Rchb.f.) Seidenf. & Smit.	43
	<i>Schoenorchis gemmata</i> (Lindl.) J.J.Sm.	43
	<i>Schoenorchis juncifolia</i> Reinw. Ex Bl.	43
	<i>Schoenorchis secundiflora</i> (Ridl.) J.J.Sm.	45
	References.	45
100	<i>Seidenfadenia</i> Garay	47
	<i>Seidenfadenia mitrata</i> (Rchb.f.) Garay	47
	Hybrids	48
	References.	49
101	<i>Smitinandia</i> Holtt.	51
	<i>Smitinandia micrantha</i> (Lindl.) Holtt. [syn. <i>Saccolabium</i> <i>micranthum</i> Lindl.; <i>Cleisostoma micranthum</i> (Lindl.) King & Pantl.]	51
	References.	52
102	<i>Spathoglottis</i> Bl.	53
	<i>Spathoglottis affinis</i> de Vriese (syn. <i>Spathoglottis lobbii</i> Rchb.f.)	53
	<i>Spathoglottis aurea</i> Lindl.	53
	<i>Spathoglottis eburnea</i> Gagnep	54
	<i>Spathoglottis kimballiana</i> Hook f.	54
	<i>Spathoglottis kimballiana</i> var. <i>angustifolia</i> Ames	55
	<i>Spathoglottis plicata</i> Bl.	55
	<i>Spathoglottis plicata</i> Bl. f. <i>alba</i>	56
	<i>Spathoglottis portusfinschii</i> Kraenzl.	57
	Hybrids	57
	References.	58
103	<i>Spiranthes</i> Lindl.	61
	<i>Spiranthes sinensis</i> (Persoon) Ames	61
	<i>Spiranthes sinensis</i> (Persoon) Ames, f. <i>alba</i>	61
	References.	62

104	<i>Stereochilus</i> Lindl.	63
	<i>Stereochilus erinaceus</i> (Rchb.f.) Garay	63
	References.....	64
105	<i>Stichorkis</i> Thouars.	65
	<i>Stichorkis compressa</i> (Bl.) J.J.Wood [syn. <i>Liparis compressa</i> (Bl.) Lindl]	65
	References.....	66
106	<i>Taeniophyllum</i> Bl.	67
	<i>Taeniophyllum pusillum</i> (Willd.) Seidenf. & Ormerod (syn. <i>Taeniophyllum obtusum</i> Bl.)	67
	References.....	68
107	<i>Taprobanea</i> (L.) Christensen	69
	<i>Taprobanea spathulata</i> (L.) Christensen.....	69
	Hybrids	69
	References.....	71
108	<i>Thecopus</i> Seidenf.	73
	<i>Thecopus maingayi</i> (Hook.f.) Seidenf. (syn. <i>Thecopus quinquefida</i> Hook f.)	73
	<i>Thecopus secunda</i> (Ridl.) Seidenf.....	73
	References.....	75
109	<i>Thecostele</i> Rchb.f.	77
	<i>Thecostele alata</i> (Roxb.) Par. & Rchb.f.....	77
	References.....	77
110	<i>Thelasis</i> Bl.	79
	<i>Thelasis perpusilla</i> (Parish & Rchb.f.) Schuit	79
	Reference	79
111	<i>Thrixspermum</i> Lour.	81
	<i>Thrixspermum acuminatissimum</i> (Bl.) Rchb. f.	81
	<i>Thrixspermum calceolus</i> (Lindl.) Rchb.f.....	81
	<i>Thrixspermum centipeda</i> Lour. [syn. <i>Thrixspermum arachnitis</i> (Bl.) Rchb.f.]	82
	<i>Thrixspermum trichoglottis</i> (Hook.f.) Kuntze	83
	References.....	84
112	<i>Thunia</i> Rchb. f.	85
	<i>Thunia alba</i> (Lindl.) Rchb.f.....	85
	Hybrids	86
	References.....	86
113	<i>Trias</i> Lindl. (= <i>Bulbophyllum</i> Thouars, section <i>Trias</i>)	87
	<i>Trias oblonga</i> Lindl. [= <i>Bulbophyllum oblongum</i> (Lindl.) Rchb.f.]	87
	<i>Trias picta</i> (C.S.P. Parish & Rchb.f.) Hemsl. (= <i>Bulbophyllum pictum</i> C.S.P. Parish & Rchb.f.)	88
	References.....	88

114	<i>Trichoglottis</i> Bl.	89
	<i>Trichoglottis atropurpurea</i> Rchb.f. (syn. <i>Trichoglottis</i> <i>brachiata</i> Ames)	89
	<i>Trichoglottis bipunctata</i> (C.S.P.Parish & Rchb.f.) Tang & F.T. Wang	90
	<i>Trichoglottis geminata</i> (Teijsm. & Bonn.) J.J.Sm. (syn. <i>Trichoglottis wenzelii</i> Ames)	90
	<i>Trichoglottis lanceolaria</i> Bl.	91
	<i>Trichoglottis latisepala</i> Ames	91
	<i>Trichoglottis orchidea</i> (J.Koenig) Garay (syn. <i>Trichoglottis cirrhifera</i> Teijsm. & Binn.)	91
	<i>Trichoglottis paniculata</i> J.J. Sm.	92
	<i>Trichoglottis philippinensis</i> Lindl.	93
	<i>Trichoglottis pusilla</i> (Teijsm. & Binn.) Rchb.f.	93
	<i>Trichoglottis scaphigera</i> Ridl.	93
	<i>Trichoglottis simplex</i> J.J.Sm.	94
	<i>Trichoglottis smithii</i> Carr.	94
	<i>Trichoglottis subviolacea</i> (Llanos) Merr. (syn. <i>Trichoglottis bataanensis</i> Ames)	95
	<i>Trichoglottis tinekeae</i> Schuit.	96
	Subgenus <i>Stauroglottis</i>	96
	<i>Trichoglottis agusanensis</i> Ames & Quisimb. [syn. <i>Staurochilus</i> <i>agusanensis</i> (Ames & Quisimb.) Fessel & Luckel]	97
	<i>Trichoglottis loheriana</i> (Kraenzl.) L.O.Williams [syn. <i>Staurochilus loherianus</i> (Kraenzl.) Karas.]	97
	<i>Trichoglottis luzonensis</i> Ames [syn. <i>Staurochilus luzonensis</i> (Ames) Ames]	98
	<i>Trichoglottis tamesisii</i> Quisumb. & C. Schweinf. [syn. <i>Staurochilus tamesisii</i> (Quisumb. & C. Schweinf.) Fessel & Luckel]	98
	Hybrids	98
	References	101
115	<i>Trichotosia</i> Bl.	103
	<i>Trichotosia dasyphylla</i> (Parish & Rchb.f.) Kraenzl.	103
	<i>Trichotosia ferox</i> Bl.	103
	<i>Trichotosia vestita</i> (Wall ex Lindl.) Kraenzl.	104
	References	105
116	<i>Vanda</i> Jones ex R.Br.	107
	<i>Vanda alicaeae</i> Motes, L.M. Gardiner & R.D.L. Roberts	107
	<i>Vanda arcuata</i> J.J.Sm.	108
	<i>Vanda bicolor</i> Griff.	109
	<i>Vanda brunnea</i> Rchb. f.	109
	<i>Vanda celebica</i> Rolfe	110
	<i>Vanda coerulea</i> Griff. ex Lindl.	110
	<i>Vanda coerulescens</i> Griff.	112
	<i>Vanda cristata</i> Wall. ex Lindl. (syn. <i>Trudelia cristata</i> (Wall ex Lindl.) Senghas ex Roeth]	112

<i>Vanda dearei</i> Rchb.f.	113
<i>Vanda denisoniana</i> Benson & Rchb.f.	114
<i>Vanda foetida</i> J.J.Sm.	115
<i>Vanda furva</i> (L.) Lind. [syn. <i>Vanda lindenii</i> Rchb. f.]	115
<i>Vanda hastifera</i> Rchb.f.	116
<i>Vanda hindsii</i> Lindl.	117
<i>Vanda insignis</i> Bl.	117
<i>Vanda jennae</i> O'Byrne & Vermeulen	118
<i>Vanda lamellata</i> Lindl.	118
<i>Vanda lamellata</i> var. <i>boxalii</i> Rchb.f.	119
<i>Vanda lamellata</i> var. <i>remediosae</i> Ames & Quisumb.	119
<i>Vanda limbata</i> Bl.	119
<i>Vanda lumbokensis</i> J.J.Sm	121
<i>Vanda luzonica</i> Loher ex Rolfe	122
<i>Vanda mariae</i> Motes	122
<i>Vanda merrillii</i> Ames & Quisumb.	123
<i>Vanda mindanaoensis</i> Motes, L.M.Gardiner & D.L.Roberts	125
<i>Vanda perplexa</i> Motes & Roberts	125
<i>Vanda roeblingiana</i> Rolfe	126
<i>Vanda sanderiana</i> Rchb.f. (syn. <i>Euanthe sanderiana</i> Schltr.)	126
<i>Vanda sanderiana</i> var. <i>albata</i> (Rchb.f.) Rchb.f.	127
<i>Vanda scandens</i> Holtt	128
<i>Vanda sumatrana</i> Schltr.	128
<i>Vanda tessellata</i> (Roxb.) Hook. ex G.Don (syn. V. roxburghii R. Br.)	129
<i>Vanda tricolor</i> Lindl.	129
<i>Vanda tricolor</i> Lindl. var. <i>tricolor</i>	130
<i>Vanda tricolor</i> var. <i>tricolor</i> f. <i>planilabris</i>	132
<i>Vanda tricolor</i> var. <i>suavis</i>	133
<i>Vanda tricolor</i> var. <i>suavis</i> f. <i>hrubhana</i> van Houtte.	137
<i>Vanda tricolor</i> var. <i>suavis</i> from Bali	137
<i>Vanda tricolor</i> var. <i>suavis</i> f. <i>purpurea</i> (syn. <i>Vanda tricolor</i> f. <i>purpurea</i> Carr).	137
<i>Vanda tricolor</i> var. <i>suavis</i> f. <i>flava</i> [<i>Vanda tricolor</i> sub. var. <i>flava</i> (Lindl.) A.H.Kent].	138
<i>Vanda tricolor</i> var. <i>suavis</i> f. 'Pallida'	138
<i>Vanda tricolor</i> var. <i>suavis</i> f. Merapi	138
<i>Vanda ustii</i> Golam, Claus. & de Mesa (syn. <i>Vanda luzonica</i> var. <i>immaculata</i>)	139
<i>Vanda vietnamica</i> (Haager) L.M Gard. (syn. <i>Christensonia</i> <i>vietnamica</i>)	140
Hybrids	140
Pink and Red Vanda	144
Yellow and Orange Colours	145
Spotted Vanda	146
A Pure White Vanda	147
Breeding for Fragrance	148
Breeding for Floriferousness and Miniaturization	149

Intergeneric Hybrids	152
A Southeast Asian Staple	154
References.	156
117 <i>Vandopsis</i> Pfitz.	159
<i>Vandopsis gigantea</i> (Lindl.) Pfitz.	159
<i>Vandopsis lissochiloides</i> (Gaud.) Pfitz.	159
<i>Vandopsis undulata</i> (L.) J.J.Sm.	160
<i>Vandopsis parishii</i> (Rchb.f.) Schltr. (see <i>Phalaenopsis</i> <i>hygrochila</i> J.M.H.Shaw)	161
Hybrids	161
References.	163
118 <i>Vanilla Plum</i> ex Miller	165
<i>Vanilla aphylla</i> Bl.	165
<i>Vanilla planifolia</i> Andrews.	165
<i>Vanilla x tahitensis</i>	166
References.	166
119 <i>Zeuxine</i> Lindl.	167
<i>Zeuxine affinis</i> (Lindl) Benth ex Hook f.	167
<i>Zeuxine longilabris</i> (Lindl.) Trimen.	168
References.	169
References	171
Index of Species.	175
Index of Countries.	179
Index of Hybrid.	181

About the Author



Eng Soon Teoh, MD, FRCOG, FACS, is a Singaporean gynaecologist with experience in laboratory and clinical research. He is a past president of the Orchid Society of South East Asia and an award judge of the society. His parents loved orchids. This inspired Dr Teoh to begin studying orchids over 50 years ago, focusing on Asian species and orchid biology. He is the author of several popular books and numerous articles on orchids. *Medicinal Orchids of Asia* (2016) and *Orchids as Aphrodisiac, Medicine or Food* (2019), both, published by Springer, received high praise by their reviewers.

Dr Teoh's books on orchids are beautifully illustrated with his photographs, and his earlier *Asian Orchids (Orchids of Asia)* sold 25,000 copies. *Lotus: Photographs and Chinese Poems*, a recent book, was praised by Dr Henry Oakeley as 'truly beautiful, erudite, and a masterpiece'.



Spectacular *Renanthera* is the source of red (vermillion) in vandaceous orchids (Fig. 94.1). However, Eric Holttum pointed out that the true base colour is yellow, as demonstrated by yellow forms of *Renanthera elongata* and *Renanthera storiei* and such hybrids as *Aranthera Beatrice* Ng ‘Conference Gold’ AM/MOS.

There are around 20 species distributed from eastern Himalaya to Southeast Asia from sea level to 1400 m in swamps, coastal forests, limestone, scrub and forest edges, always in bright light. Plants are monopodial, epiphytic, or saxicolous, clambering over bushes or trees and producing offshoots when the stem is bent and some of its vascular channels are interrupted. However, seeds commonly germinate on the ground, and many *Renanthera* begin life as terrestrials. Stems are robust, slim and short or stout, long and elongate, bearing persistent, short, oblong, retuse, leathery, dark green leaves arranged in two ranks, jointed to their sheaths which envelop the stem. Flowers are brightly coloured, in red or yellow, and spotted in some species. They are star-shaped, taller than broad. Dorsal sepal and petals are narrow, linear-oblong, spreading. Lateral sepals are elliptic, much broader than the dorsal, margins sometimes undulate. Lip is 3-lobed, small, side lobes erect, mid-lobe bearing calli at the base.

Renanthera are popular with orchid growers in the tropics because they bear large sprays of red or yellow flowers which last for several weeks

on the plants. Of the many bigeneric and trigeneric hybrids that have been bred, only those which contain *Arachnis* (e.g., *Aranthera*, *Holttumara*) are suitable as cut flower because by itself, *Renanthera* does not impart heavy substance to its hybrids. Many *Renanthera* species are large plants and this characteristic is often passed on to their hybrids. A new direction in breeding would be to produce short, compact hybrids.

***Renanthera annamensis* Rolfe**

Renanthera annamensis is endemic to Vietnam, occurring in the South Indochinese endemism centre that is home to 19 additional endemic Vietnamese orchid species. The area covers the lowland region of southern Vietnam adjacent to Cambodia with elevations below 300 m hosting dry evergreen, semi-deciduous and deciduous dipterocarp forests. Ground is covered by silicate basement rock (granite, sandstone, etc.) and it is acidic. *Renanthera annamensis* is rare and critically endangered. Photographs of the orchid purporting to be of the species are generally those of *Ren. citrina* which it closely resembles. *Renanthera annamensis* is illustrated in drawing in *Curtis's Botanical Magazine* [Vol. 133 (ser.4 vol. 3) t. 8118 (1907)], shown here as Fig. 94.2, and in Gunnar Seidenfaden's *Opera Botanica, the Orchids of Indochina*, Fig. 246



Fig. 94.1 *Renanthera bella* J.J. Wood (© Teoh Eng Soon 2021. All Rights Reserved)

(Seidenfaden and Wood 1992). In the colour illustration, flowers are finely spotted with grey; additionally, sepals are also spotted with red, and petals are marked with a patch of red at the tips. Lip and anther cap are red (Fig. 94.2). Side lobes of the lip of *Ren. annamensis* are small, short and not prominent unlike those of *Ren. citrina*. Midlobe is cordate, apex pointed, whereas midlobe of lip in *Ren. citrina* forms an isosceles triangle that is rounded at the lower angles (Fig. 94.3).

***Renanthera bella* J.J.Wood**

Renanthera bella is endemic to Mount Kinabalu in Sabah, growing in ultramafic forest especially on serpentine rock outcrops at 400 – 1200 m. It is commonly epiphytic on *Gymnostoma sumatranum* (*Casuarinaceae*). Its habitat was ravaged by fire in 1990, and the species is critically endangered (Rice 2008).

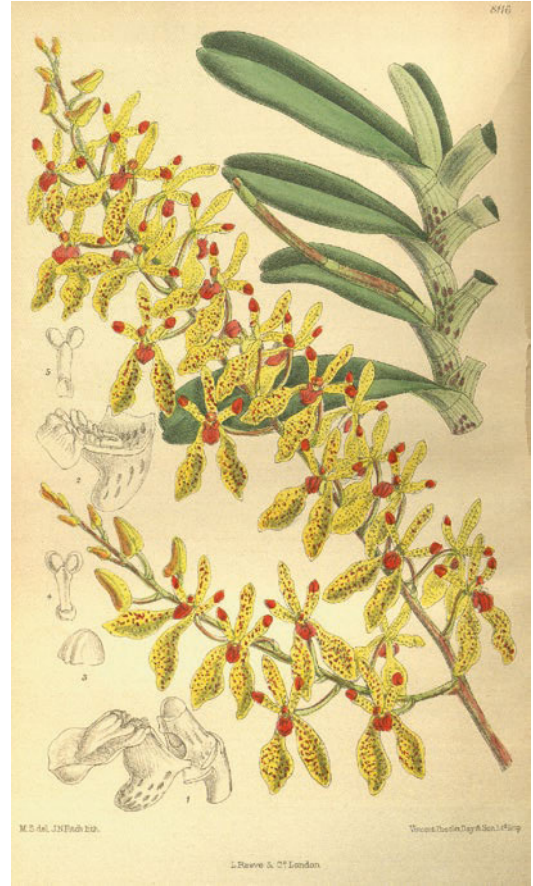


Fig. 94.2 *Renanthera annamensis* Rolfe. (From: *Curtis Botanical Magazine* Vol. 133 (ser. 3 vol. 3) t. 8118 (1907))

Plant is compact. Stem is up to 75 cm tall bearing dark green, coriaceous, bilobed leaves, 12 – 13 × 1 – 1.1 cm. Inflorescence is 45 cm long with 1 – 2 side branches, carrying 12 – 16 flowers, 6 cm across, orange, overlaid with red blotches. Dorsal sepal is erect, lanceolate. Lateral sepals are spreading, about 15 degrees from the midline, lanceolate, narrowed at the lower third to 2 mm near its attachment. Petals are lanceolate, falcate, similarly narrowed at the base, spreading 10 degrees above the horizontal, apex pointing upwards, margins undulate, reflexed along the middle third. Lip is small, 3-lobed (Figs. 94.1 and 94.4).

Plants flower more than once a year and flowers last for a month.



Fig. 94.3 *Renanthera citrina* Aver. (© Teoh Eng Soon 2021. All Rights Reserved)

***Renanthera caloptera* (Rchb.f.) Kocyan & Schuit. [syn. *Ascoglossum caloptera* (Rchb.f.) Schltr.]**

Renanthera caloptera is distributed in the Philippines (mostly in Mindanao but also found in Dinagat), Maluku, Sulawesi, New Guinea and Solomon Islands growing as epiphyte from sea level to 300 m (Cootes 2001). Stem is upright bearing rigid, coriaceous leaves, 20 × 2.5 cm. Inflorescence is branching, paniculate, carrying 60 – 80 flowers, 1.7 cm across. Sepals and petals are oblo-lanceolate, reflexed. Lateral sepals are narrow at the base, undulate over the expanded portion. Lip is 3-lobed with a long, straight spur that ends in a sac (Fig. 94.5). Its synonym (in practice, its common name) refers to this sac, Greek *ascos* ‘sac’; *glossa* ‘tongue’. The flowers are not attractive; nevertheless, several attractive hybrids have been bred from *Ren. caloptera*.



Fig. 94.4 *Renanthera bella* J.J.Wood (© Teoh Eng Soon 2021. All Rights Reserved)

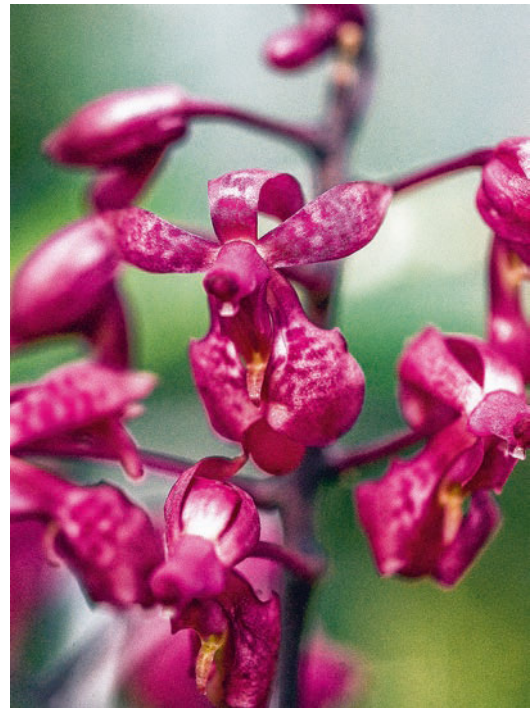


Fig. 94.5 *Renanthera caloptera* (Rchb.f.) Kocyan & Schuit. [syn. *Ascoglossum caloptera* (Rchb.f.) Schltr.] (© Teoh Eng Soon 2021. All Rights Reserved)

***Renanthera citrina* Aver.**

Renanthera citrina is endemic to Vietnam growing as epiphyte on karst in strong sunlight, but it is cool growing at 500 – 800 m. Plants are 15 – 25 cm tall, stout, leafy throughout. Leaves are oblong, unequally bilobed, coriaceous, 7 – 10 × 0.9 – 1.1 cm, persistent. Inflorescence is axillary, branching, to 30 cm long, many to 70 flowers (Figs. 94.3, 94.6 and 94.7). Flowers are 2.5 – 4.5 cm across, pale yellow with few red spots on sepals, petals and anther cap. Dorsal sepal is erect, oblong, spatulate, obtuse. Lateral sepals are 1.5 times longer than the dorsal and much wider, narrow at the basal 10 percent, thereafter expanded, narrowly ovate, undulate,



Fig. 94.6 *Renanthera citrina* Aver. (© Teoh Eng Soon 2021. All Rights Reserved)

sometimes twisted over the apical portion. Petals are linear, spreading, shorter than the dorsal sepal, straight, slightly or obviously falcate. Lip is 3-lobed. Side lobes are large (as large as the midlobe), erect, divergent, trapezoid, apex acute, white or cream with two crimson stripes. Midlobe forms an isosceles triangle, flat at the apex and rounded at the angles, yellow at the base fading to white at the apex. Two tall, yellow calli are present on the mesochile. Flowers last for a month. They are not fragrant.

***Renanthera coccinea* Lour.**

Renanthera coccinea is distributed from southern China to Myanmar, Thailand and Indochina. It is the first *Renanthera* species to be cultivated in Singapore, and it was formerly very popular in Malaya. Stems are tall, climbing, bearing light green leaves, 6 × 3 cm, bilobed at the apex. Inflorescence is horizontal, branching in one plane, with 60 – 80 Chinese-red flowers, laxly arranged, 4 cm across, 6 – 7 cm tall. Dorsal sepal is oblong, narrowly elliptic; lateral sepals are ovate, widening from a linear base; margins are undulate, bright red, spreading vertically downwards, slightly parted or overlapping each other. Petals are linear, shorter than the dorsal sepal, red spotted with darker red. Lip is small, 3-lobed, side lobes yellow with red stripes, midlobe covered with red calli at the base, pointed at the apex, exposed surface red (Figs. 94.8, 94.9, and 94.10).

A well-branched plant 2 m high may have a number of inflorescences together and makes a fine display of colour unusual among orchids (Figs. 94.9 and 94.10). Such a plant will have some flowers during a good part of the year (Holttum 1964). That explained its former popularity in Singapore and Malaya before it was outshone by hybrids.