



Biodiversity of Raj Bhavan

Gangtok, Sikkim, India





सत्यमेव जयते



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Gangtok, Sikkim, India

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Dedicated to
Late Smt. Karuna Singh
(1943 to 2010)

First Lady of Sikkim

*whose passion for flowers
and work on rebuilding of the Raj Bhavan gardens
will remain everlasting
in its blooming flowers and plants.*

His Excellency
Shri Balmiki Prasad Singh,
Governor of Sikkim
who restored this silent witness of history
to its former glory in 2009



Contents



Lesser Yellow-nape *Picus flavinucha*

Foreword	1
Preface	5
Introduction	7
History	9
Retrofitting and Renovation of Raj Bhavan	13
State Symbols of Sikkim	15

Biodiversity of Raj Bhavan Complex, Gangtok	16
<i>Cymbidium whiteae</i>	23
PICTORIAL SECTION	
Orchids	24
Trees	28
Trees and Shrubs	32
Shrubs	33
Shrubs and Herbs	36
Herbs	38
Climbers	42
Climbers and Bamboos	45
Ferns	46
Ferns & Fern Allies	50
Mushrooms	51
Exotic Flora of Raj Bhavan	52
Animals	54
Birds	56
Butterflies	64
Moths and Cicada	67
Beetles and Dragonflies	68
Snail and Spiders	69
ENUMERATION	
Flora of Raj Bhavan Complex	70
Fauna of Raj Bhavan Complex	76



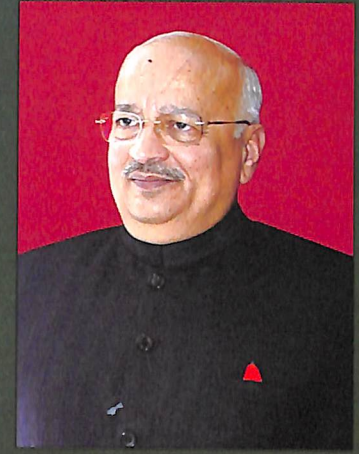
Foreword

Sikkim is a land blessed with rich biodiversity. From prehistoric times, the original inhabitants of Sikkim (Lepchas, Bhutias and others) have played major roles in conserving the flora and fauna of the land and in preserving the purity of water. The coming of the *Ramayan-Mahabharata* tradition and Hinduism to this region further advanced the ethic of conserving ecology. All these belief systems reinforced their intrinsic local values about the preservation of ecology. It is not surprising that the local people view the forests and mountains as abodes of their gods and goddesses and their preservation as a sacred duty.

Over the years the abundant biodiversity of Sikkim has attracted scholars and monks, botanists and nature lovers. Ever since the British Scholar J.D. Hooker spent two years exploring the eastern Himalayan region and produced a masterly study of Sikkim's flora in the late 1840s, Sikkim has fascinated botanists and lovers of nature.

The biodiversity profile of Sikkim, both wild and domesticated, is enriched by more than 4500 flowering plants, more than 523 species of wild and indigenous orchids, around 28 species of bamboos, seven species of canes, more than 350 species of ferns, around 450 species of birds, more than 600 species of butterflies and probably more than 2000 varieties of moths besides other species of insects (including micro-organisms) on land, in the air and in the water.

When I began residence in the Raj Bhavan, Sikkim, I was amazed by the beauty and tranquility of the place and its location. Although the campus was constructed in 1890 significant changes have since taken place, but the Raj Bhavan retains its natural ambience, peace and serenity.



B. P. Singh
Governor of Sikkim

With each passing day I came to discover the astounding variety and profusion of plants, animals, birds and insects in the Raj Bhavan compound. It presented a teeming microcosm of the biodiversity of Sikkim in general.

I could visualize how John Claude White, the first Political Officer and the founder of these magnificent premises, was attracted to this pristine site then located in sheer wilderness. White has paid a rich tribute to this discovery in the following words:-

“In my jungle wanderings around Gangtok, I came across a charming site in the midst of primeval forest which seemed suitable in every way, so I determined to build on it, felling only the trees which might possibly endanger the safety of the house, a necessary precaution, as many of them

were quite 140 feet high..... and in front the ground fell away with a magnificent view across the valley, where, from behind the opposite hills, Kanchenjunga and its surroundings snows towered up against the clear sky, making one of the most beautiful and magnificent sights to be imagined, and one certainly not to be surpassed, if equaled, anywhere in the world”.

The original biodiversity that existed on the Raj Bhavan campus included large Oaks, Chestnut, Magnolia, the beautiful Ironwood tree *Sygmingtonia populnea* locally called ‘Pipli’, small trees like the native Olive called ‘Bhadrasey’ *Elaeocarpus lanceaefolius*, fragrant shrubs like *Daphne* used for making local paper and thick groves of bamboo, useful for weaving mats.



Interestingly, at the beginning of the last century this campus was an entry-point for numerous exotic garden plants from around the world into Sikkim and her neighbouring States. Conversely, many indigenous plants from Sikkim such as alpine herbs, shrubs, trees and orchids reached distant continents through the efforts of successive Political Officers who resided here.

The natural richness of the biodiversity of Raj Bhavan as well as beauty of its campus was enhanced by the Political Officers (both British and Indian) and Governors who lived here. Several of them took a personal interest in the conservation of both the biodiversity and the beauty of its garden. However, the Raj Bhavan has also witnessed phases of indifference and neglect. Natural calamities, too, have adversely affected the biodiversity.

The first set-back to biodiversity in the post-1975 era was reduction in the size of the Raj Bhavan estate from 200 acres to the present 70 acres in order to meet housing and office accommodations for both the State Government and the Government of India. As a result, concrete structures and human habitations have replaced trees and shrubs, birds and butterflies, insects and moths, orchids and rhododendrons. Periods of indifference and neglect also meant human interference in gardens and construction of footpaths for movement of security and service staff with little attention to biodiversity needs. The earthquake of 2006 led to the decision to build a new Raj Bhavan in the campus over an area of 5 acres causing further destruction of trees and plants and the raising of concrete structures.

In addition, Raj Bhavan itself, a landmark heritage building, was in a state of disuse due to the damage caused by the earthquake February, 2006.

It was claimed that the building could not be restored and it was declared inhabitable. Even the upkeep and maintenance of the surrounding areas of Raj Bhavan comprising garden and compound with its own rich natural biodiversity, also seemed to lack the attention that it deserved. It was evident that the entire complex including the heritage house needed to be restored to its past glory.

On my arrival as Governor in July, 2008, I soon realized that the beautiful garden and the forested compound of Raj Bhavan urgently required attention both from aesthetic point of view and in order to prevent further loss and extinction of its once-renowned biodiversity.

However, before one could think of improvements to the garden and the compound, priority had to be given to restoration of the house. I recalled some of my earlier experiences in restoration and retrofitting works of monasteries and historical monuments during my tenure as the Union Culture Secretary and instinctively felt that the retrofitting of this house was feasible.

A high level committee of civilians, civil servants and experts together with a representative from Indian National Trust for Art Culture and Heritage (INTACH) was constituted. This proved to be a very useful approach. The retrofitting of the Raj Bhavan under the aegis of this high level Committee and under the technical supervision of Thapar University, Patiala, was commenced and was completed in August, 2009.

While the retrofitting and renovation work was going on, I thought it appropriate to initiate measures for improvement of the idyllic charm of the garden and the forested compound around Raj Bhavan.

There was, I felt, a need to adopt a comprehensive approach in terms of both improving the physical vistas but also to conserving whatever remained of the natural wealth of the estate (sizeable areas of Raj Bhavan land had been requisitioned for other developmental interventions by the State and the Central Government agencies).

In another context I have recorded my views about Raj Bhavan in the following words:-

“Raj Bhavan has a rich and inspiring history. Physically its majestic location, with a view embracing the Khangchendzonga mountain range and Gangtok valley, is a constant reminder of how human aspirations can blend with the magnificence of nature. Artistically, the campus now demonstrates how creative craftsmanship has fashioned a harmonious synthesis of British and Sikkimese architecture. Symbolically, Raj Bhavan is now a structure worthy of the Indian State and its constitutional attributes. To me, personally, the renewal of Raj Bhavan represents the confluence of preservation and progress, heritage and innovation, designed in ways acceptable to the diverse interests in the community within which it is situated. Raj Bhavan is indeed the measuring rod of Gangtok”.

During an environmental conservation programme held at Raj Bhavan in 2009, I took the opportunity to impress upon the officials and experts present the importance of recording and identifying the species of plants and trees within Raj Bhavan complex. It was decided to compile a systematic, documented book which could help scholars, researchers, administrators, teachers, students and laymen who may take interest in the natural heritage of the region. It is, I strongly believe, our responsibility to preserve, improve and assemble data on the bounty that nature has bequeathed to us. We have a sacred

duty to enrich these endowments so that the heritage of our habitat will not be lost to future generations.

The need is to recapture the achievements of the past. J.C. White, the builder of the campus, found the garden as “a great joy and an everlasting source of amusement and employment” to himself and to his wife. In his memoirs White feelingly recalls the beautiful green lawns that they enjoyed even in winter, the profusion of early spring bloom ‘seldom seen in England’, the delicate mauve of the abundant *Wisteria* on the house and the wealth of roses that ‘flowered in such profusion, thousands of blooms could be gathered without making the smallest impression’. It was “a sight worth coming miles to see”.

The authors of this book Smt. Usha Lachungpa, Shri. Sudhizong Lucksom and Smt. Dechen Lachungpa and their colleagues and staff deserve commendations for their valuable inputs and their unstinting efforts in preparing this beautiful monograph, its pictorial arrangement of flowers, birds and animals and the descriptive notes.

It is my hope that this book, while imparting information and pleasure, will strengthen our resolve to make the Raj Bhavan a microcosm of the rich biodiversity of the eastern Himalayan region in the future. In that sense, this volume is more than a record of what we have and what we have done – it is a pledge for the future.

Balmiki Berao Singh

(B.P. Singh)
Governor of Sikkim
Raj Bhavan, Gangtok
27th May, 2010



Preface



The very word 'Biodiversity' means the 'variety of life'. Sikkim as a renowned hotspot of biodiversity is famous world-wide and for its small size, perhaps the richest anywhere in various life forms. Few

realize that the survival of mankind is not possible without the diversity of other life on this planet. Biodiversity is life insurance for life itself. We need this diversity to feed, clothe and shelter us as well as keep us sane and healthy.

The Raj Bhavan Complex is a small remnant of the original dense forest that clothed Gangtok over a 100 years ago, providing water and energy security for the local people. The present initiative to improve the Raj Bhavan Gardens as desired by His Excellency the Governor of Sikkim Shri Balmiki Prasad Singh is a welcome one; more so because the Forest, Environment and Wildlife Management



Department is stepping into a new centennial era of modern scientific forestry. It is a tribute to the previous occupants of Raj Bhavan that the *Wisteria sinensis* planted there some 120 years ago, still survives and is depicted in this book. Recent plantation efforts include over 500 saplings of *Prunus* sp. and *Michelia* spp.

It was John Claude White who built the Raj Bhavan, then called the Residency, and it was also he who sent Crown Prince Sidkeong Tulku to Oxford for higher education, which effort culminated with the formal demarcation of Sikkim's forests by the Crown Prince. Thus started the era of modern forestry in Sikkim which perhaps finds no parallel in the rest of the country. Sikkim has a long history of conservation and sustainable use of natural resources. The laws, policies and programmes of the later years are rooted in those strong conservation ethics responsible for the survival to this day of Sikkim's extensive forest and wildlife protected area network making it the best in the country.

This book on the biodiversity of the Raj Bhavan Complex by our dedicated team has thus become a part of our centenary celebrations. The documentation of the extant flora and fauna of Raj Bhavan was a long felt need and we have strived to produce this well illustrated book with hope that readers will put this endeavour to good use.

S. T. Lachungpa, IFS

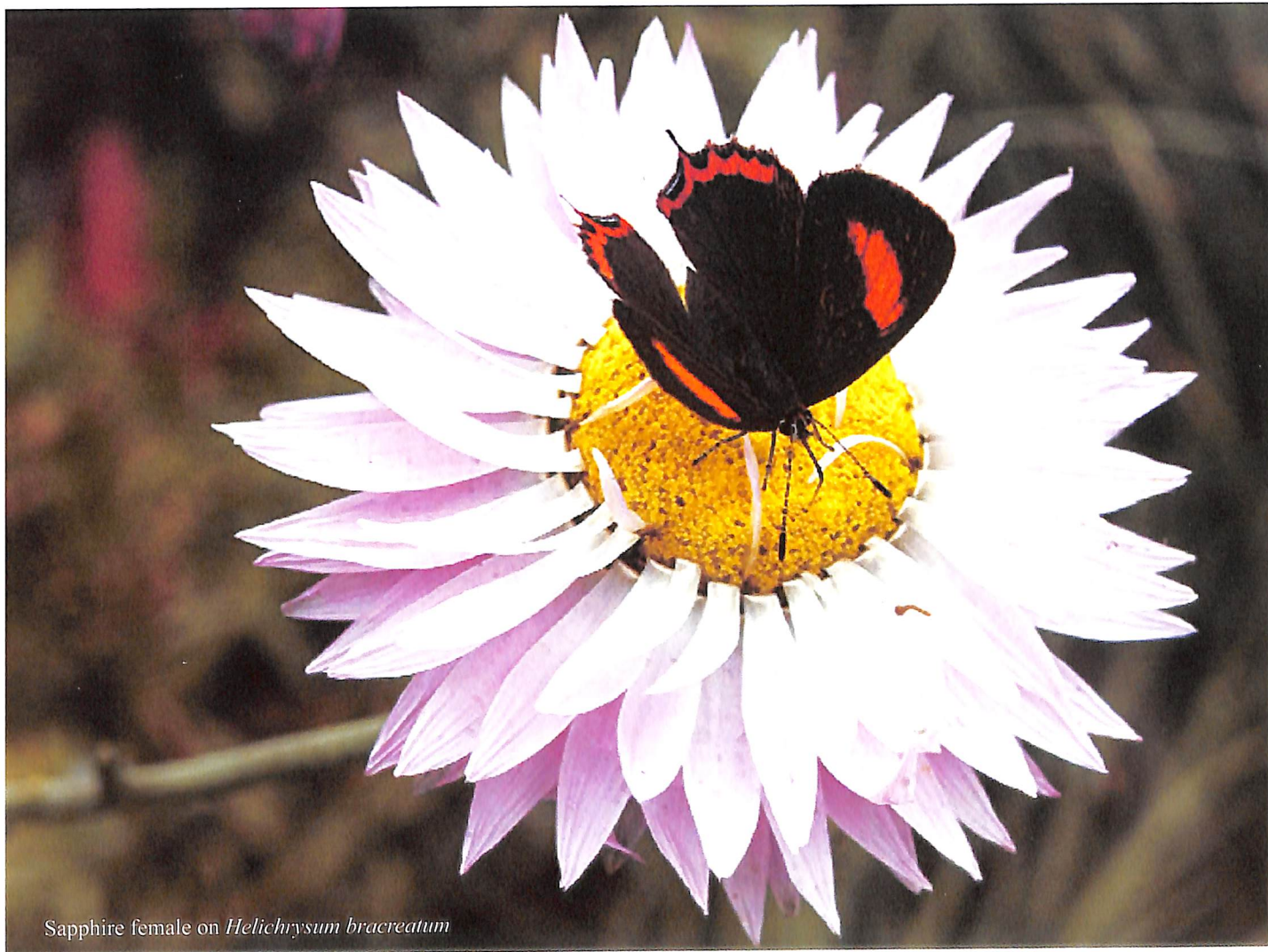
Principal Chief Conservator of Forests cum
Secretary
Government of Sikkim

Introduction

‘Raj Bhavan’, a name steeped in history for most and in mystery for the common man, is an exclusive secluded area located on a hill top above Gangtok township. Not many are privy to this part of the State Capital, hidden away behind a forested screen from the main road.

Earlier known as the Residency, a legacy left behind by Sikkim’s first Political Officer John Claude White, built in 1890, the property was renowned for its lawns and gardens and its European architecture. JC White recounts that the Residency garden was “a great joy and an everlasting source of amusement and employment”

to himself and his wife. He comments on the beautiful green lawns they enjoyed even in winter, the profusion of early spring bloom “seldom seen in England,” the delicate mauve of the abundant wisteria on the house and the wealth of roses that “flowered in such profusion, thousands of blooms could be gathered without making the smallest impression.” He adds: “Perhaps the most beautiful sight was my office, a building a few hundred yards from the house, which was completely covered, roof and chimney included, with roses, and was a sight worth coming miles to see” (kcl.ac.uk/about/history/archives/india/domestic/garden.html).



Sapphire female on *Helichrysum bracreatum*

You can still see today the famed Residency garden's trailing Wisteria with its blue showers of flowers planted by White himself 120 years ago, at the entrance of Raj Bhavan, as reminisced by our own forester-gardener Mr. K. C. Pradhan. Later European occupants had introduced bulbous flowers like Daffodils and Narcissus. Today the area still has well tended lawns and gardens with seasonal flowers like Tulips, Lilies, and hybrid orchids as well as many species of trees like Rhododendrons and Magnolias. Historically interesting also are the native *Beilschmiedia roxburghiana* and the introduced exotic *Cryptomeria japonica* trees, their large girths uncommon outside the sanctuary afforded by Raj Bhavan campus.

Many hidden treasures are lost to mankind simply because generally people are not aware of their presence and hence not able to appreciate the need for their conservation. This book is a result of the initiative of His Excellency the Governor of Sikkim Shri Balmiki Prasad Singh to bring this hidden treasure to the notice

of the layman and add to the eco-tourism initiatives of the Government of Sikkim, besides highlighting the role of gardeners, foresters and the general public in safeguarding this important piece of Sikkim's heritage. We hope this book achieves this goal.

Acknowledgements: We acknowledge the enthusiasm and encouragement of Mr. C. Lachungpa CCF (Land Use & Env.). Thank you Dr. Anna Balikci-Denjongpa of the Namgyal Institute of Tibetology, Gangtok for help with pictures and historical accuracy, Dr. Avishek Bhattacharjee for checking flora list for scientific accuracy, Mr. Bharat Prakash Rai for the Nepali names of birds, King's College, London for pictures of the Residency from its website, all 15 people who shared their photographs and Dependra Dewan, Sanjit and Mrinal Nandi for composing and designing this document.

**Usha Ganguli-Lachungpa, Sudhi Zong Luksom
and Dechen Lachungpa**



Wisteria sinensis



“Wallichianum Lillies”
Courtesy: King’s College London

It was White who built what is today the Raj Bhavan at Gangtok. He gives a vivid account of how he personally selected the site, why it appealed to him and his travails in building it in his memoirs first published in 1909.

“One of the first things to be done on my appointment to Sikkim was to build a house, not an easy task in a wild country where masons and carpenters were conspicuous by their absence, where stone for building had to be quarried from the hillsides and trees cut down for timber. In my jungle wanderings around Gangtok, I came across a charming site in the midst of primeval forest which seemed suitable

in every way, so I determined to build on it, felling only the trees which might possibly endanger the safety of the house, a necessary precaution, as many of them were quite 140 feet high, and in the spring the thunderstorms, accompanied by violent winds, were something terrible and wrought havoc everywhere. By levelling the uneven ground and throwing it out in front, I managed to get sufficient space for the house, with lawn and flower beds around it.

Behind rose a high mountain, thickly wooded, which protected us from the storms sweeping down from the snows to the north-east, and in front the ground fell away with a magnificent view across the valley, where, from behind the opposite hills, Kanchenjunga and its surrounding snows towered up against the clear sky, making one of the most beautiful and magnificent sights to be imagined, and one certainly not to be surpassed, if equalled, anywhere in the world”.

<http://kcl.ac.uk/about/history/archives/india/domestic/residency.html>White published a surprisingly detailed and long list of plants found in his gardens as part of his account of working life in Sikkim. He also includes an image of ‘Wallichianum Lillies’ found in the Residency garden, and a nearly identical image can be found in Beryl’s album. As her grand daughter informs us, Beryl shared her parents’ passion for gardening. Perceval Landon also describes the appeal of the Residency garden: ‘Double Residency gates open and shut behind one...through the tree ferns and the dying bamboos of the drive one emerges into the English roses and clean short turf of Mrs Claude White’s home-made Paradise.’



White retired in October 1908. The Residency he built was a lasting legacy he left behind. After White, all the incumbents of the post of Political Officer Sikkim, Bhutan and Tibet based in Gangtok enjoyed the comforts of the English villa-like Residency he had built. They were Sir Charles Bell, Major W. L. Campbell, Lt. Colonel W.F. O’Conner, Major F.M. Bailey, Major J.L.R. Weir, Frederick Williamson, Sir Basil Gould and Anthony J. Hopkinson. (Three more officers, David McDonald, Capt. R.K.M. Batty and H. Richardson also temporarily held the post).

A. J. Hopkinson was the last British Political Officer of Sikkim. When India gained independence from British rule in 1947, the Residency became the residence of the Indian Political Officer, locally referred to as ‘Barra Kothi’. A span of 86 years i.e. 1889-1975 (Claude White to Gurbachan Singh) lay between the first Political Officer’s appointment and the withdrawal of the last.

White’s completed Residency was a revelation, an object of much curiosity for the Sikkimese hitherto not exposed to such a house. They would often call on the Whites and request permission to wander around the house; to see how the Whites lived and what European furniture was like. The Residency had bay windows and a round dining table. This really fired the imagination of the local Sikkimese Kazis who also incorporated bay windows and copied the round table for their own residences.

In 1975, the institution of the Chogyal was abolished and Sikkim was formally inducted into the Indian Union as her 22nd State. For having made this culmination possible, Shri B.B. Lal was made Governor of Sikkim on 18th May, 1975 the very

day that the amending Bill received the President’s assent. This marked the conversion of Residency into Raj Bhavan. The list of his successors is as follows:

- 1 B.B. Lal
- 2 Homi J.H. Taleyarkhan
- 3 Kona Prabhakar Rao
- 4 Bhishma Narayan Singh
- 5 T.V. Rajeswar
- 6 S.K. Bhatnagar
- 7 R.H. Tahiliani
- 8 P. Shiv Shankar
- 9 K.V. Raghunatha Reddy (addl. charge)
- 10 Chaudhary Randhir Singh
- 11 Kidar Nath Sahani
- 12 V. Rama Rao
- 13 Sudarshan Agarwal
- 14 Balmiki Prasad Singh

In its previous designation as India House or “Barra Kothi”, it had been rated as one of the India’s best ambassadorial residences. Sited well above the town and insulated from the noise and fumes of the bazaar, the classic gabled structure blends into the greenery and trees of the landscape and looks upon the entire Khangchendzonga Range.

The area of the compound now consists of lawn and garden as well as kitchen garden, fruit trees and orchids. White’s Residency has stood as a silent spectator for over a 100 years as winds of change blew over Sikkim’s political landscape. However, the Valentine’s Day earthquake of 14 February 2006, the second big earthquake faced by this magnificent complex more than a century after the 1897 one that ripped through Gangtok’s bowels,



A view of the Residency, completed in 1890, showing the extensive gardens. Courtesy: King's College London

badly damaged the Raj Bhavan and rendered it structurally unstable. Fortunately, the then Governor was in his winter camp at Rangpo. A Camp Raj Bhavan was organized at the Circuit House below Ganesh Tok. In December 2007 the Camp shifted back to the old Raj Bhavan Annexe which was renovated. A new Raj Bhavan is being built in the complex.



The Residency, Gangtok around 1904



The Residency at Gangtok where Beryl White lived.
Courtesy: King's College London



Courtesy: King's College London



Retrofitting and Renovation of Raj Bhavan



One of the effects of the 14th February 2006 earthquake in Sikkim was damage to the Raj Bhavan, with severe cracks in its walls rendering it structurally unstable and in danger of collapse in the event of fresh tremors. The authorities immediately undertook construction of an annexe and shifted the incumbents

of Raj Bhavan therein. In July 2008 His Excellency Shri B. P. Singh became the next Governor of Sikkim. The Government of Sikkim agreed to his idea of retrofitting Raj Bhavan based on prior experience with some monasteries and historical monuments as Culture Secretary, Government of India.

Thapar University, Patiala, was appointed as Consultant and retrofitting was initiated under the leadership of Professor Abhijeet Mukherjee. A team from the Indian National Trust for Art and Cultural Heritage (INTACH) had also previously visited Raj Bhavan following the quake, and together formed an advisory group with some local people. All strongly advised conservation of the historical and architectural values as well as need to ensure

minimal visible impact of any rehabilitation measures. Retrofitting work involving about a 100 people working upto 18 hours a day was initiated on 4th December 2009 under Shri Raj Mohan Pradhan, Additional Chief Engineer, Government of Sikkim. Raj Bhavan has now gained its former glory in addition to several internal strengthening measures, ensuring that this heritage structure lives to see yet another century or more.





STATE SYMBOLS OF SIKKIM

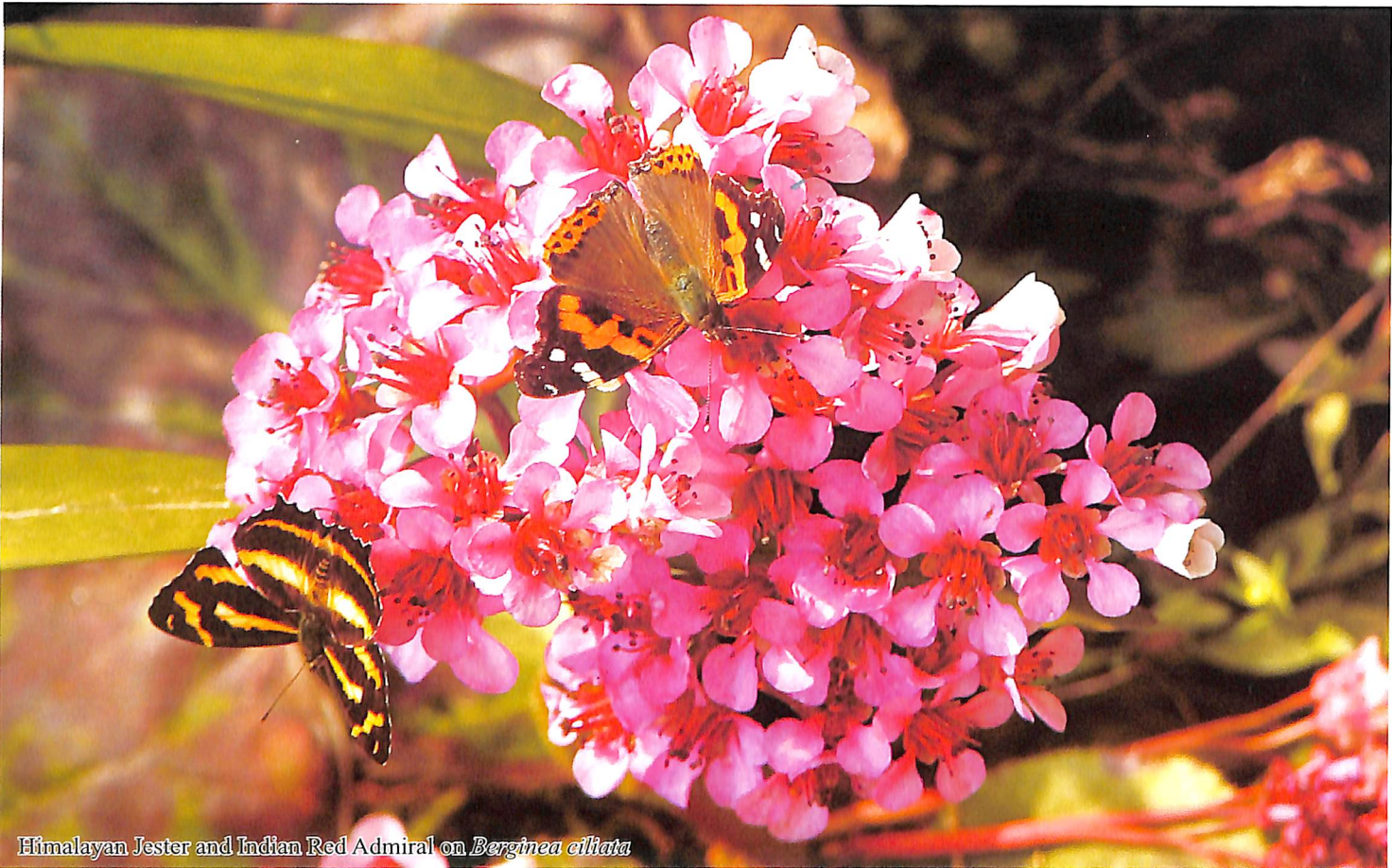
STATE SYMBOLS OF SIKKIM



STATE TREE: Snow-leaved Rhododendron *Rhododendron niveum* 'Huin-paatey Gurans' (Nep), 'Kheym-mitok' (Bhu) by Usha Lachungpa
 STATE ANIMAL: Red Panda / Cat-Bear / Firefox *Ailurus fulgens* 'Pude-Koondo' (Nep), 'Op-donka' (Bhu) by Axel Gebauer
 STATE BIRD: Blood Pheasant *Ithaginis cruentus* 'Chillimey' (Nep), "Xemu" (Bhu) by Basant Kr. Sharma
 STATE FLOWER: Nobile Orchid *Dendrobium nobile* by Ganden Lachungpa



Biodiversity of Raj Bhavan Complex, Gangtok



Himalayan Jester and Indian Red Admiral on *Bergenia ciliata*

The diversity of life forms in Gangtok's Raj Bhavan Complex is to be seen to be believed. The entire Complex, spread over an area of almost 10 hectares at an altitude of about 1800m is contiguous at its upper end and to its east with Ganesh Tok-Pinetum-cum-Smritivan and the Himalayan Zoological Park at Bulbuley which links further up with the Ratey Chu Reserve Forest (RF) almost all the way to

the Cho La Range bordering the Chumbi Valley. At its lower end and to its west it links up the last green lung of Gangtok, the Forest Colony at Balwakhani, going further down to the Rani Khola (River) separating it from the bird-rich Fambong Lho Wildlife Sanctuary (WLS). It thus forms a vital part of the forested Oxygen-Bank and more importantly, Water-Bank on which depends the very survival of the state capital, Gangtok.



FLORAL DIVERSITY includes various species of native and exotic trees like Oaks, Chestnuts, Himalayan Alder, Rhododendrons, Magnolias, Michelias, *Cryptomeria japonica*, Japanese Cherry *Prunus cerasoides*; shrubs like the paper-yielding *Edgeworthia gardneri* with its attractive blossoms hanging in small yellow bunches, a magnet for various bird species; the thorny *Rubus ellipticus* bushes with tasty yellow berries, and the un-edible red and yellow varieties of the exotic Night Queen or 'Raat-Raani' *Cestrum* shrubs with their white and red berries respectively; so also the many varieties of attractive ferns including the large primitive Tree-Fern and fern-allies like *Selaginella*, *Lycopodium* and *Equisetum* greening the edges and untended nooks of the Complex.

Many of the large old *Engelhardtia spicata* trees with their long inflorescences and winged seeds can be seen festooned with varieties of epiphytes like the orchids *Pleione*, *Dendrobium*, the red-flowered *Agapetes serpens*, climbers like *Rhapidophora*, the itchy *Mucuna*, large and small ferns, mosses and lichens.

Bamboo diversity can be seen in species like *Sinarundinaria intermedia*, *Sinarundinaria hookeriana* and *Dendrocalamus hamiltoni*. Many exotic shrubs have also established well in this complex over the century, providing valuable shelter to small birds and animals. The ground flora consists of varieties of grasses and herbs including some valuable medicinal plants like *Artemisia vulgaris* and *Astilbe rivularis*. Many seasonal flowering plants like Calendulas, Petunias, Asters, Marigolds, Primulas, Sweet Peas, Lilies, Roses, Hybrid Orchids and Calla Lily *Zantedeschia* are lovingly maintained by the Raj Bhavan gardeners, providing splashes of colour on



Indian Tortoiseshell on *Magnolia campbellii*

the lawns, while the heady scent of the large flowered *Michelia doltsopa* trees flavour the air delicately. A rare annual treat is the *Rhododendron arboreum* in flower, its blood-red blossoms lighting up this lovely tree, truly an incandescent gift of nature.

FAUNAL DIVERSITY includes a variety of small mammals, birds, reptiles, amphibians, butterflies, moths, beetles, dragonflies and many other insects. In fact the entire complex is part of an Important Bird Area or IBA which encompasses the Gangtok township, Ratey Chu Reserve Forest, Bulbuley and the Fambong Lho Wildlife Sanctuary. The most commonly seen animal is the brown Himalayan Squirrel *Dremomys lokriah*. The occasional Large Palm Civet *Paguma larvata* locally called 'Kala' can be seen clambering on the *Engelhardtia* trees. Yellow-throated Martens or 'Malsapro' have also been seen here as are the smaller weasels ('Nyauri Musa') which chase after small birds and mice.



Selaginella monospora

The most magnificent however are the rarer Flying Squirrels *Petaurista magnificus* locally called 'Rajpankhi'. Occasionally some Barking Deer and Jackal also stray into the fringes of the Complex from surrounding forested areas or can be heard during dawn or nights.

The most easily sighted wildlife however are the large numbers of birds seen and heard within the Complex and surrounding areas.

The earliest to call at around 4.30 am are at least four species of owls including the Himalayan Wood Owl, Collared Scops Owl, Jungle and Barred Owlets. These silent predators keep the Complex clear of rats and mice providing a valuable but free service. As the sky lightens, the Raj Bhavan wakes to a dawn chorus of

bird-song. The Great Barbet or 'Nyaul', Green-backed Tit or 'Chichinkotey', the blue-green Verditer Flycatcher or 'Hareni', the White-throated Fantail, various Laughingthrushes,



Silver-eared Mesia *Leiothrix argentauris*



STATE SYMBOLS OF SIKKIM



Red-tailed Minla *Minla ignotincta*



Rhinoceros Beetle



Rhododendron arboreum



Crimson-tailed Marsh Hawk (Dragonfly)

Dipankar Ghose

Scimitar Babblers, Red-tailed and Blue-winged Minlas, Whiskered Yuhina, Rufous Sibia, Himalayan Treepie, Tree Sparrows, iridescent Sunbirds are but some of the glamorous birdlife. At least 10 species of Cuckoos, a parasitic species of bird that lays its eggs in other birds' nests, can be heard in the spring season here. Some are easy to recognize by their distinct calls such as the Large Hawk-Cuckoo calling "Brain-fever, Brain-fever" incessantly.



A sighting of the red and blue dragonflies and golden-green damselflies are a sure sign that the nearby water sources are clean and fresh. These 'tigers of the air' are a wonderful biological control for mosquitoes in summer. The diversity of web-weaving, ground dwelling and ant-mimicking spiders, another of nature's marvels and silent predators of pesky flies and

In February-March, one can hear Bar-headed Geese and other waterbirds flying overhead in the dark, on return migration to their northern breeding grounds across the mighty Himalayas. Their calls in flight give them the local name 'Karang-Kurung'.

As the day brightens and warms up, the manicured flower beds, lawns and other areas of the Complex attract varieties of butterflies and bees. Commonest among these are the Indian Tortoiseshell, Indian Red Admiral, Himalayan and Common Jesters which breed on Stinging Nettle shrubs or 'Sisnu'. Golden, Azure and Purple Sapphire butterflies fly like living jewels, giving little indication that their life cycles depend utterly on underground dwelling ants, while the Common Five-Ring and other brown coloured butterflies prefer the more shaded bamboo brakes and grassy patches. You can see the sun-loving Tortoiseshell, a very territorial butterfly chasing away much larger Swallowtails like Red Helen and Spangle from their basking areas.

mosquitoes, is astonishing. This area is also good for various species of beetles, bugs, praying mantises like Stick-Insects, Moths, Grasshoppers and Crickets.

Occasionally in the vegetation you might be lucky to spot a Japalura lizard like a miniature green dinosaur or a shiny Skink chasing after insects. Other reptiles known to occur but seldom seen in the complex are Rat Snakes, Himalayan Pit Vipers and Cobras.





STATE SYMBOLS OF SIKKIM



Red-vented Bulbul *Pycnonotus cafer*



White-crested Laughingthrush
Garrulax leucolophus



Archaeoattacus edwardsii



Tree Fern *Cyathea spinulosa*



Hesperid Butterfly on Petunia

One may also find the harmless but beautiful Glass Snake or Glass Lizard *Ophiosaurus gracilis* gracing the area its back shining an electric blue pattern. These beautiful but shy creatures also provide silent yeoman service to mankind. Smaller snakes like *Trachesium guentherii* form valuable food for birds such as the Blue Whistling Thrush which is perhaps Raj Bhavan's best songster.

The most familiar amphibians in the complex are the Himalayan Bullfrog *Nanorana liebigii*, Himalayan Toad *Duttaphrynus himalayanus*, and some *Philautus* species of scrub or tree-frogs; the latter's 'tic-tic-tic' calls providing nightlong orchestras during monsoon breeding season.

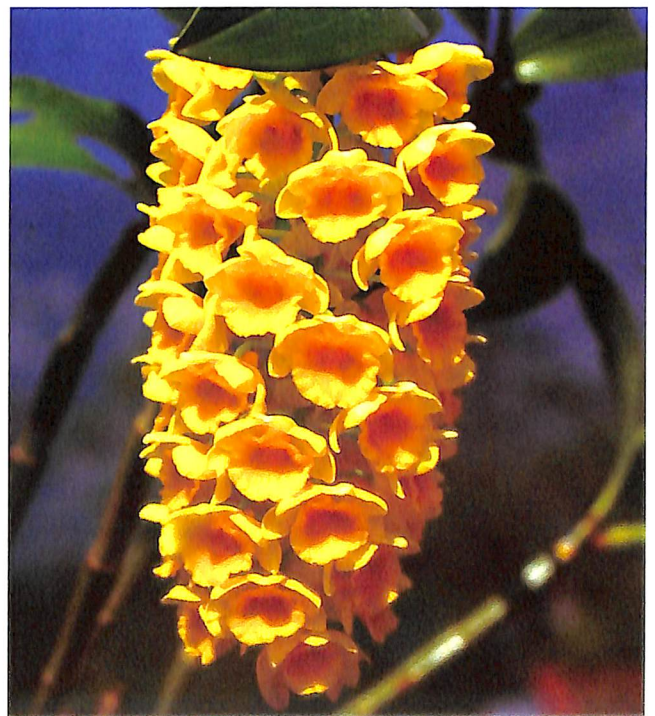


Sapphire Butterfly on *Erigeron karvinskianus*

The entire complex is strategically located such that one can get grand panoramic views of the mighty Khangchendzonga Range, India's highest and the world's third highest mountain peak, but more importantly, Sikkim's Guardian Deity. This, combined with the fresh clean air, calm serenity and soothing weather makes the Gangtok Raj Bhavan Complex a perfectly hidden paradise worthy of all the care and love lavished on its maintenance. It is indeed a treasure and pride of Sikkim.



Green-backed Tit *Parus monticolus*



Dendrobium densiflorum

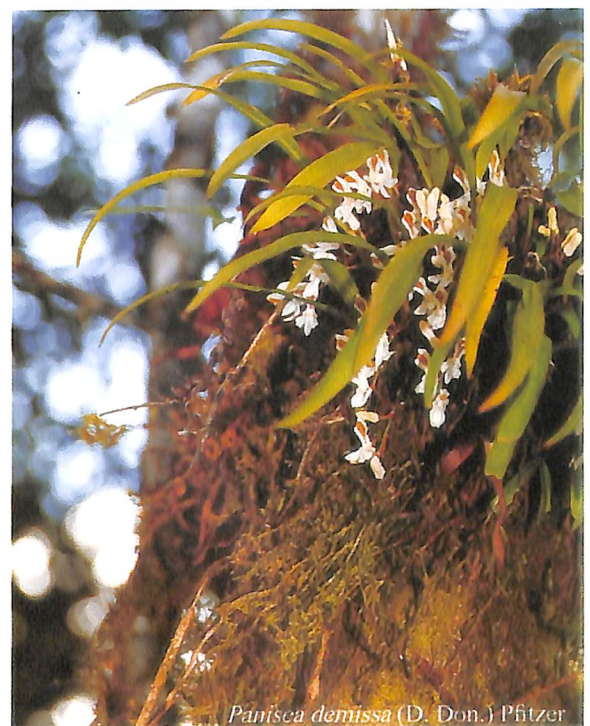
Cymbidium *whiteae*



Cymbidium whiteae perhaps the most beautiful among wild epiphytic orchids in the world, is today on the verge of extinction. Its natural history was previously unknown. Nina Ranken, wife of John Claude White the then Political Agent to Government of Sikkim first discovered this orchid from Gangtok during 1889. King and Pantling, authors of "The Orchids of Sikkim" named it after her.

Till then the species was safe and well guarded in the deep woods of Gangtok Township at 1700m and surrounding areas, hanging from tree-top branches. Its short hanging inflorescences laden with whitish-green flowers studded with minute purple speckles was not only unique in appearance but also a perfect camouflage.

Cymbidium whiteae is endemic to Sikkim and exclusively confined to Gangtok Township. However it was recently recorded from Rumtek on the fringes of the Fambong Lho Wildlife Sanctuary opposite Gangtok where it needs to be conserved *in situ*.



Orchids



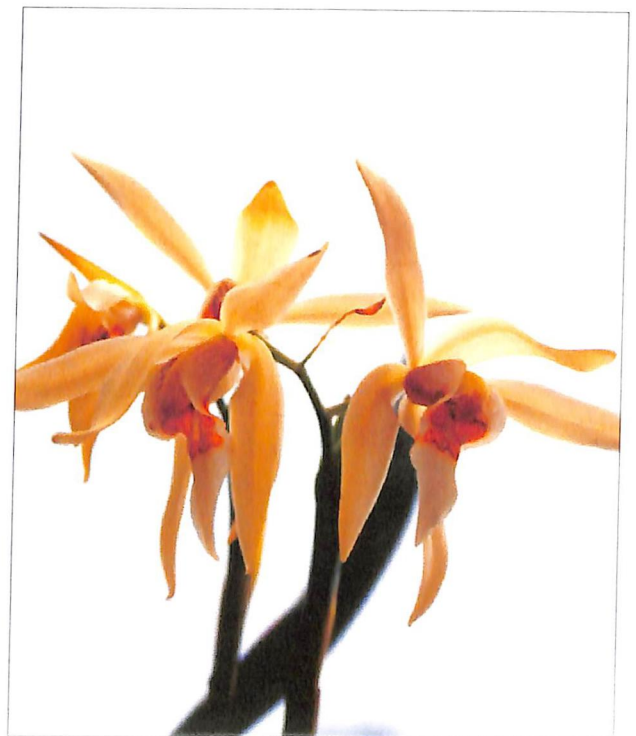
Coelogyne stricta: Epiphytic or Lithophytic. Flowers whitish yellow to a shade of pink. Flowers from September-December at altitude about 1000-1200m. It is the most common species of Orchids.



Coelogyne corymbosa: Epiphyte; flowers pure white and fragrant; flowering season is from May-June; Altitude 1800-2800m; not very common.



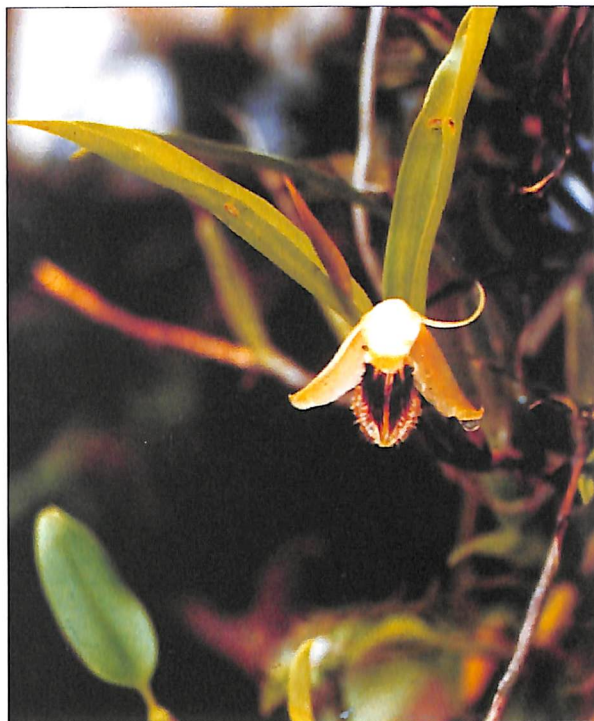
Coelogyne longipes: Epiphyte; flowers 2cm across, pale green with yellow. Flowering season is from May-July; grows at altitude of 1800-2300m; commonly found.



Coelogyne oculata: Epiphyte; flowers white with some oblique yellowish brown and two large blotches on the lip, strongly scented. Flowering season is from March-April; grows at altitude of 2000-2800m; an uncommon species.



Coelogyne cristata: Epiphytic or Lithophytic; flowers white and sweet scented. Flowering season is March-April; grows at altitude of 1330-2000m; common.



Coelogyne fimbriata: Epiphytic; flowers pale brown. Flowering season is Sept-Nov; altitude of 800-2200m, common.



Coelogyne fuscescens: Epiphytic, flowers pinkish brown; glabrous. Flowering season Oct-Dec; Altitude 800-1800m, common.



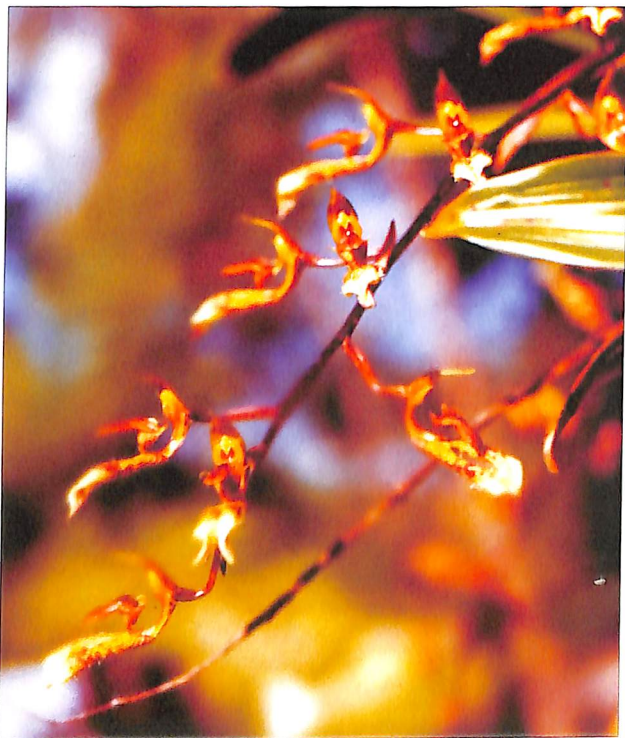
Bulbophyllum trichophyllum var. *capitatum*: Lithophyte; flowers whitish yellow tinged with green, no fragrance; Flowering season August; altitude 600-700m, not common.



Cymbidium longifolium: Epiphytic, pale lemon yellow occasionally flushed with pink. Flowering season Oct-Nov; at an altitude of 1700-2300m, common.



Cymbidium hookerianum: Epiphytic; Flowers spread 6-10.3 cm across, yellowish green with spotted lip with brownish purple dots. Flowering season Feb-May; at an altitude of 2000-2400m. Not so uncommon but threatened.



Monomeria barbata: Epiphytic, spreads 2-2.5cm long yellowish green with large brown markings. Flowering season Nov-Feb at an altitude to 1200-1830m. Common.



Eria coronaria: Epiphytic, spread 2-3.2 cm across. Flowers cream white tinged with violet and lip yellow. Flowering season Oct-Feb at an altitude of 1160-2300m, common.



Pleione praecox: Epiphytic, spread 7-10cm across, flowers white suffused with purple. Flowering season Sept-Dec at an altitude of 1500-3400m, most common.



Pleione humilis: Epiphytic, lithophytic, spread 6-7 cm across, flowers white, flowering season Jan-Mar at an altitude on 1800-3200m, not uncommon.



Epigeneium amplum: Plant 15-20cm tall, roots branching, flowers 1-2 cm across, non resopinate, pendant, whitish brown suffused with purple brown, glabrous; Flowering season September at an altitude of 2500-3500m. Rare.



Epigeneium rotundatum: Epiphytic or lithophytic. Flowers 4-4.5 cm across, pale chestnut brown, slight spreading, Flowering season Sept-Oct; at an altitude of 900-1770m. Rare.