

## ANNEX

### HIGHLIGHTS OF ORCHIDS OF THE ANDES

#### ***Brassia aurantiaca***

This species is a high elevation cool-to-cold growing epiphyte (plant that grows on another plant for support) found in Colombia and Venezuela, and is pollinated by hummingbirds. It has an arching or nodding inflorescence that carries between seven and 18 bright orange semi-tubular flowers. These flowers are semi-open, with the sepals, petals and lip spreading outwards only from midpoint.



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#### ***Cyrtochilum macranthum***

This species occurs at elevation of up to 3,000m in the montane cloud forests of Ecuador, Peru and Colombia. It produces the largest flower within the genus *Cyrtochilum*, and is also known as “The Large Flowered *Cyrtochilum*”. The long, twining inflorescence has many branches. Each branch carries two to five long-lasting flowers, and the flowers can grow up to 10cm in diameter. Sepals are dull yellow-brown, while petals are golden-yellow, and the showy brilliance of the colours makes this an impressive specimen.



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#### ***Epidendrum medusae***

This species with bizarre-looking flowers is a cool growing epiphyte (plant that grows on another plant for support) found in the moist cloud forests of Ecuador at elevations between 1,800m and 2,700m. It has clustered, cane-like arching pendulous stems and overlapping fleshy leaf-sheaths. Each stem produces between one and three terminal flowers (flowers that bloom at the end of the stem). The deep maroon lip of the orchid with its fringed margin is likened to Medusa’s hair of snakes, which gave rise to its common name “The Medusa *Epidendrum*”, as well as its scientific name “*Epidendrum medusae*”.



***Lycaste schilleriana***

This is a warm-to-cool growing lithophyte (plant that grows on rocks) or terrestrial orchid species found in Colombia at an altitude of 1,400m. It produces a single waxy and fragrant bloom. Each spike carries a solitary flower with olive brown sepals. The flower width can measure up to 22cm long, making this one of the largest *Lycaste* around.



***Oncidium chrysomorphum***

This species can be found in Venezuela and Colombia as a warm-to-cold growing epiphyte (plant that grows on another plant for support) in wet pre-montane and montane forests at elevations between 900m and 2,200m. The plant produces many side branches densely covered with golden-yellow fragrant flowers, and these prolific blooms are an outstanding sight for a medium-sized plant.



***Oncidium hastilabium***

This species can be found at the upper elevations of the Andes from Venezuela to Peru. It has oval-shaped and compressed pseudobulbs (a bulb-like enlargement of the stem in orchids) bearing erect to arching inflorescence of up to 80cm in length. The flowers open in succession and are pale green with chocolate brown bands, coupled with a white spear-shaped lip that has a rose-purple base. Each large, fragrant bloom measures up to 7.5cm in diameter.



***Masdevallia Machu Picchu***

(*Masdevallia ayabacana* x *Masdevallia coccinea*)

This primary hybrid (cross between two species) created in 1986 between *Masd. ayabacana* x *Masd. Coccinea* inherits the fine traits from both parents, including the long-tailed sepals from the pod parent and the deep pink purple colouration from the pollen parent. With the good shape and intense colour of the bloom, this is one of the most attractive hybrids ever known to have been produced.



***Phragmipedium warscewiczianum***

*Phragmipedium* is the slipper orchid of tropical South America, and is related to the Asian slipper orchid *Paphiopedilum*. This Colombian and Ecuadorian warm-to-cool growing lithophytic (plant that grows on rocks) species is found on exposed cliff surfaces at elevation between 600m and 2,800m. Each inflorescence bears three to four large pale green flowers, with the dorsal sepal and synsepal (fused lateral sepals) slightly twisted with greenish veins. The tail of the petals can extend to as long as 61cm. The unique pouch-like lip serves as a trap to enable the pollinating insects to complete their task.



***Psychopsis Mariposa 'Three Lip'***

(*Psychopsis papilio* x *Psychopsis Kalihi*)

Native to Central, South America and Trinidad, the genus *Psychopsis* means "butterfly-like" in Greek. As such, it is also commonly known as the "Butterfly Orchid". This particular hybrid between *Psychopsis papilio* x *Psychopsis Kalihi* flowers throughout the year, with each inflorescence producing one long lasting bloom at a time in succession. This is a peloric (a mutation) form of the hybrid, in which the petals are enlarged and mimic the lip of the orchid in shape and colour, giving each flower the appearance of having three lips.



## **ALL ABOUT THE ANDES**

Spanning more than 5,000km across seven countries, the Andes is the longest continental mountain range in the world.

The rugged terrain of the Andes causes the climates of adjacent regions to differ wildly from one another: dry cactus scrubland can be found less than 5km away from moss-covered forests. These numerous isolated habitats result in the large number of species found throughout the region.

In this vast mosaic of peaks and valleys, forests and deserts, lies a treasure trove of biodiversity: the Tropical Andes. An estimated 30,000 species of vascular plants, more than 1,700 species of birds and more than 980 species of reptiles can be found in this region.

The rich biodiversity of the Tropical Andes is exemplified by none other than the orchids which call this region home. Some species are confined to only a single valley or tree!

The Orchids of the Andes display explores the relationship between the Tropical Andean landscape, its flora and the people. It is a celebration of the infinite beauty and rich variety of this region!

### **Elements of the Land**

#### **Tungurahua**

Tungurahua, which means “Throat of Fire” in Quechua language, is one of the most active volcanos in Ecuador. Towering more than 3km over its northern base, Tungurahua has been showing eruptive activity since November 2011.

#### **Inca Ruins**

Remnants of Incan civilisation can be found in the Tropical Andes. Remarkably, many Incan structures were built without any mortar – large stones were cut to fit precisely together. In certain structures, the precision of the cut was such that a knife cannot be slotted in between the gaps. To this day, archaeologists are still uncertain how such an exact fit was obtained.

#### **Llamas**

Llamas were an integral part of Andean civilisations. Herded in flocks, they were used as pack animals for transport, and also provided meat, medicine and wool. Look out for the replicas of llamas in the orchid display, covered with real llama wool!

### **Andean Music**

Andean music is a very broad set of rhythms, styles, sounds, instruments and performers found along the Andes mountain range, from Colombia to Argentina and Chile, crossing to Ecuador. It dates back to pre-Inca times, where music was played with wind instruments as part of daily life and religious practices.

Later in the Inca Empire, under the influence of the Europeans, Andean music was played with string instruments. Some common instruments used in Andean music are Charango, Quena, Zampoña, Conga, Rondador, Panflute and Flutes.

## SANGRE CRIOLLA



Enjoy the traditional sounds of Ecuador with Sangre Criolla, an Ecuadorian band with 35 years of musical experience. Having performed in numerous countries including France, Germany, Russia and India, the band will be in Singapore to share their Ecuadorian culture through music and to celebrate the launch of the Orchids of the Andes display at Gardens by the Bay.

The band will be playing instruments such as the Charango (a small lute-like instrument), Quenas (traditional flute of the Andes) and Zampoñas (a series of flutes bound together), among others.

They will also be performing over the weekend in Cloud Forest as well as at The Canopy.

Date	Time	Venue*
Fri, Oct 5	6.00pm – 6.30pm	The Canopy (outside Flower Dome entrance)
Sat, Oct 6	11.00am – 11.30am 2.30pm – 3.00pm 6.00pm – 6.30pm	Cloud Forest Cloud Forest The Canopy (outside Flower Dome entrance)
Sun, Oct 7	11.00am – 11.30am 2.30pm – 3.00pm 6.00pm – 6.30pm	Cloud Forest Cloud Forest The Canopy (outside Flower Dome entrance)

*\*An admission ticket is required to enter Cloud Forest, while The Canopy performances are free.*