夏日的合歡山綠意盎然,處處展現生機。

he greenish Mt. Hehuan is vibrant with life everywhere in the summer.



歡山不只是台灣的賞雪聖地,更是夏天賞花的好去處。夏日的合歡山,遠望是一片玉山箭竹與台灣冷杉所構成的淺綠與深綠,但走進一看,繽紛的色彩超乎想像。各種顏色的花盛開著,它們有的藏身在玉山箭竹原中,有的立足於崖壁的岩縫中,或是從風化破碎的岩屑地上冒出來,彷彿用盡全身的力氣綻放花朶,整個山區因而處處充滿盎然生氣。

合歡山位於太魯閣國家公園西側,是中央山脈北段高山,涵蓋主峰、東峰、北合歡山、西合歡山、石門山等三千公尺以上的山峰。在亞熱帶台灣,三千公尺高山已是寒帶氣候,除了冬天降雪之外,森林植被也與中、低海拔很不一樣。樹型筆直塔狀的台灣冷杉群聚成森林,同時形成明顯的森林界線,森林界線以上到峰頂,則是玉山箭竹、玉山圓柏、玉山杜鵑等灌叢,當然也有種類繁多的高山草本植物,而這些高山植物陸續開花,就搖身一變成為合歡山夏日的主角。

#### 玉山杜鵑揭開花季序幕

玉山杜鵑是台灣花形最大,生長海拔最高的杜鵑,從2000公尺到3000公尺以上峰頂的環境它都能生長。合歡山區的玉山杜鵑從5月初起陸續盛開,也正式宣告花季揭開序幕。玉山杜鵑盛開時常常開滿一樹,一片花團錦簇,它的花芽前一年9月就逐漸長成,經歷冬天冰雪焠練後,隔年5月才盛開。玉山杜鵑每個花芽開出8-12朵花,有些甚至可達20餘朶,它總是迫不及待地先開花後長葉,爭取傳花授粉寶貴的時光。初開時是桃紅色,漸漸轉為粉紅色,最後成白色後凋謝。初夏花謝後,蒴果逐漸熟成,新葉也在此時開展,而蒴果則在雪季前裂開,飄散種子,完成一年的生命週期,最後在冰雪的覆蓋中度過凜冽寒冬。

It. Hehuan is not just a place for enjoying snow scenes, it also makes a perfect viewing spot for summer bloom. In summer, it is covered by the dark green Yushan Cane grove and the light green Taiwan Fir, and a closer look reveals blossoms in a wide spectrum of colors. Some flowers hide themselves behind the canes, while others stick out from rock cliff or debris. Because of them, the entire mountain is full of life.

Lying in the west of Taroko National Park, Mt. Hehuan consists of Main Peak, East Peak, North Peak, West Peak and Mt. Shimen. Over 3,000 m in altitude, the mountain has snow in winter and forest vegetation very different from that of the low or mid altitudes. Above the Taiwan Fir forests to the mountain peak are bushes consisting of Yushan Cane, Yushan Single-seed Juniper, Yushan Rhododendron and various alpine plants. As the plants blossom in summer, they become the spotlight of Mt. Hehuan.

## Yushan Rhododendron Kicks off Flower

Growing in mountains 2,000m to 3,000m in altitude, Yushan Rhododendron is the tallest-dwelling and largest of its kind. Its blossom in early May unveils the flower festival in Hehuan, and its full blossom is an amazing spectacle. The bud normally grows in September and flowers next May, with each blossom the flower is dark pink, which then turns pink and eventually white before it withers. After that, the capsule becomes ripe, and then it breaks and spreads the seeds to conclude its one-year life cycle in the snowy winter.

## Summer Bloom on Mt. Hehuan

# 夏日合歡賞花趣

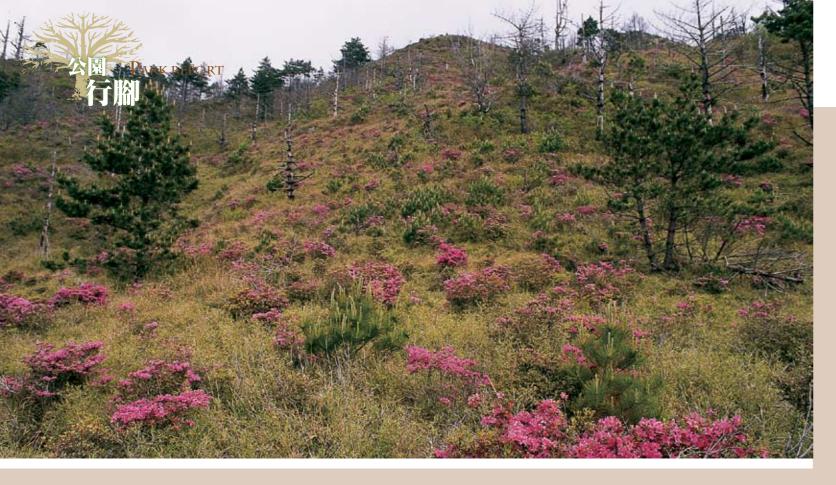
撰文 Text / 林茂耀 Mao-yao Lin 翻譯 Translator / 黃詠蘭 Teresa Huang 圖片提供 Photo provided / 林茂耀 Mao-yao Lin



石門山歩追是半緩易行即局山歩追,適合夏季賞花。
Gentle slopes and easy access make the Mt. Shimen Trail perfect for viewing flowers in summer.



梅雨季節雲霧瀰漫在盛開的玉山杜鵑,也為高山植物帶來足夠的水氣。 In spring rainy season, mists cloud all over full-bloomed Yushan Rhododendron and bring sufficient water for alpine plants.



正當玉山杜鵑盛開時,紅毛杜鵑也於5月中旬悄悄開始 綻放,花期可以持續到6月初。紅毛杜鵑花形較小,喜歡 生長在陽光充足的地方,尤其森林火災或森林遭破壞後的 環境,經常和玉山箭竹、高山芒混生在一起。北合歡山下 的公路旁,就有一片台灣二葉松林遭火燒後形成草原,除 了竄出一棵棵台灣二葉松小苗外,紅毛杜鵑也同時在草原 中開闢新天地,恣意生長,開花時蔚成一片,相當壯觀。

### 高山小花繽紛多姿

6月,當杜鵑逐漸謝去,又有另一批嬌客登上夏日合歡 山的舞台。綠意盎然的合歡山,仔細觀察,許多低矮的高 山植物正綻放出豔麗的花朶,紅的、黃的、紫的、白的, 繽紛而亮麗。

這些高山植物有的生長在玉山箭竹原中,例如台灣藜蘆、一枝黃花、台灣百合、玉山抱莖籟簫:有的長在岩屑地或裸岩地,包括玉山佛甲草、高山沙蔘、玉山薄雪草、尼泊爾籟簫、玉山龍膽、阿里山龍膽等。有的則在較潮濕的環境中,諸如梅花草、白花三葉草、黑龍江柳葉菜、合歡山柳葉菜;森林底層常見的有水晶蘭、台灣鹿藥、台灣茶鑣子等。夏天走在合歡山上,美麗的小花幾乎無所不在,使合歡山成為名符其實的花花世界。

一般而言高山植物的花色都非常鮮豔,主要原因可能是高山地區紫外線較強,為了避冤紫外線的傷害,高山植物會擁有較多的花青素來吸收過多的紫外線。同時由於合歡山一年有3至4個月嚴寒的冬季,不利於這些低矮的高

Red-hairy Rhododendron blossoms in mid May and grow into early June. Smaller in size, it likes to grow in sunny places, especially places beset by fire or destruction. It usually grows along with Yushan Cane and Alpine Silver Grass. After a Taiwan Pine forest fire, some Taiwan Pine saplings as well as Redhairy Rhododendrons grew alongside the roads below Hehuan N. Peak. The Red-hairy Rhododendrons grew on the grassland and blossomed into a spectacular scene.

#### Flourishing Alpine Flowers

As rhododendrons wither in June, other bright-colored flowers rise to the center stage of Mt. Hehuan: Veratrum formosanum Loesen. f, Solidago virgaurea var. leiocarpa, Lilium formosanum and Anaphalis Morrisonicola grow in Yushan Canebrakes; Sedum Morrisonensis, Adenophora Uehatae, Leontopodium microphyllum, Anaphalis Nepalensis, Gentiana Scabrida and Gentiana arisanensis grow on debris or bare rocks; Parnassia Palustris, Trifolium Repens, Epilobium Amurense Hausskn, Epilobium Hohuanense grow in damp areas; Cheilotheca Humilis, Smilacina Formosana and Ribes Formosanum grow at the bottom of the forests. In summer, flowers abound in Mt. Hehuan.

Alpine plants are colorful in general, as they contain more Anthocyanin to lesson the damage from ultraviolet rays in mountainous areas. Also, 3-4 months of severe winter is unfavorable to their growth. So they have to 山植物生長,它們必須在短短的8至9個月內完成生長、開花、結果等傳宗接代的任務,而鮮豔的花色也有利於吸引 昆蟲來幫它傳花授粉。

合歡山不僅氣候嚴寒,土壤層也較淺薄,大多是裸岩地或是岩屑地,保水性差,因此高山植物也都各自演化出一套適應耐寒抗旱的生存機制。玉山佛甲草、穗花佛甲草的葉片細小肥厚;有的主根粗大,如高山沙蔘,都具有儲存養分和水分的功能;有的葉片反捲或表層被覆臘質,如玉山柱鵑,則是可以減少水分被蒸發;此外,尼泊爾籟簫、玉山薄雪草等葉表被覆絨毛,除了可減少水分蒸發之外,也有禦寒的功能;羊茅等其鬚根長得密密麻麻,則是讓它在雨後的最短時間內,可以吸收到最多的水分。

#### 雪地下的生機

夏天的高山植物爭奇鬥豔,花謝後很快就結果、散播種子,然而進入冬季後,高山冰天雪地的環境對許多植物而言,是一種很大的考驗,長久以來,高山植物已練就出一套適應這種寒天地凍環境的本領。例如玉山小蘗、高山薔薇以落葉來適應冰雪,以減少能量的消耗;而體型低矮的高山沙蔘、龍膽、玉山當歸等草本植物,地上的莖葉早已在冰封之前枯萎,飽藏豐富養分的地下根莖保留一線生機,等到天氣暖和,冰雪消溶時,吸收雪水的滋養,很快就能長出新芽,開始另一個生命的循環。

grow, blossom, and pollinate within 8-9 months, and their bright colors can also attract insects to spread their pollens.

The temperature on Mt. Hehuan is very low. Its soil profile is thin, consisting mostly of bare rock or talus with poor water retention. Because of this, alpine plants evolve to withstand coldness and dryness: Sedum *Morrisonensis* and *Sedumsu Bcapitatum* have small but thick leaves; *Adenophora Uehatae* has thick roots to store nutrients and water; Yushan Rhododendron has wax-covered leaves to reduce water evaporation; *Anaphalis Nepalensis* and *Leontopodium microphyllum* have leaves covered by fluff to withstand coldness; Fescue has dense roots for maximal water absorption.

### **Life in the Snowy Mountain**

The Alpine plants bloom in summer. After they wither, they bear fruits and pollinate. However, the snowy winter in the mountain poses a huge challenge to them. Therefore, these plants have developed knacks to adapt to the freezing environment. *Berberis morrisonensis* and *Rosa transmorrisonensis* drop leaves to adapt to the snow; *Adenophora uehatae*, *Gentiana Arisanensis* and *Angelica Morrisonicola* store rich nutrients in the roots below ground prior to the snowfall. When it gets warm and the snow melts, the sprouts grow and set off another life cycle.





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- 1. 合歡北峰的二葉松林歷經火災後長出成片的紅毛杜鵑,5月盛開時形成一片紅色的花海。 Fields of Red-hairy Rhododendron are grown in Taiwan Pine forests in Hehuan N. Peak after fire, and create a beautiful sea of red flowers when in its full bloom
- 2. 紅毛杜鵑花形較玉山杜鵑小,仔細觀察它的 莖、葉、果實都密生著褐色的短剛毛。

With leaves, stems, and fruits covered in fine brown fuzzy hairs, Red-hairy Rhododendron has flowers smaller than those of Yushan Rhododendron.

3. 盛開在合歡山岩屑地上的花一玉山佛甲草。 Morrisona Sedum is in full bloom on talus in Mt Hehuan.



高山植物夏季開出美麗的花朶,令人賞心悦目,然 而在高寒的環境中,也都各自發展出適應環境的生存 本事,儘管身上壓著厚雪,或結滿霧凇、雨淞,都可 安然度過,展現堅韌的生命之美。

#### 值得推薦的賞花步道

合歡山是可及性高的高山,到合歡山賞花最容易的 方式是只要沿著台14甲線公路步行,沿途就可欣賞到 許多精彩的植物。然而如果想要遠離車輛干擾,也有 幾條容易親近且景觀生態俱佳的登山步道值得探訪。

#### 石門山步道

石門山是合歡群峰中最容易攀登的台灣百岳,海拔 3,237公尺,目前已鋪設有棧道與石階,從登山口出 發沿著步道,約20分鐘就可登頂。步道大致與公路平 行,登頂後再從原路折返。

步道途中可觀察到玉山杜鵑、玉山圓柏、刺柏等灌 叢。此外,玉山箭竹林中或碎石坡、裸岩地上,也可 輕易發現一些低矮的花草,種類相當多。

## 合歡東峰步道

合歡東峰3,421公尺,是合歡群峰的第二高峰,登 山口有兩處,一處在合歡山莊對面,另一處在松雪樓 旁,從登山口到峰頂落差約三百公尺,坡度較陡,約 一小時可登頂。合歡東峰頂上有成叢的玉山杜鵑,盛 開時可欣賞到花團錦簇的美麗景象。此外,站在山頂 群山環繞,尤其綿延的奇萊連峰可一覽無遺。

Alpine plants grow beautiful flowers in summer, and in winter, they have survival skills to withstand coldness. Despite the heavy snow, rime and glaze upon them, these persistent plants always survive the severe winter.

#### **Must-visit Bloom Trails**

Mt. Hehuan is highly accessible. Drive along 14 A Road and you can see beautiful flowers along the way. If you want to avoid traffic, the following trails with high accessibility and rich ecology are highly recommended.

Mt. Shimen is the easiest to climb among Taiwan's top 100 mountains. Footways and stone steps have been paved throughout the 3,237 m-tall mountain. It takes about 20 minutes to get from the entrance to the peak, with trails in parallel with the roads. Along the way there are Yushan Rhododendrons, Yushan Single-seed Junipers and Formosan Junipers. A wide range of short plants can also be spotted in Yushan Canebrakes or on bare rock.

#### Hehuan E. Peak Trail

The 3,421m Hehuan E. Peak is the second highest mountain of the Hehuan Mountains. One of its entrances lies across Hehuan Villa and the other beside

Songxue Lodge. It takes about 1 hour to go from the entrance to the peak, where the Yushan Rhododendron blossom can be spotted during its season. Also comes into the view when one is on top of the mountain is Qilai Mountains

#### 合歡主峰步道

合歡主峰海拔3.417公尺,登山口位於武嶺附近,約 1小時可登頂,步道途中可一路欣賞山巒美景及高山植 物。合歡主峰山頂早年一直都有軍隊駐守,限制一般 民衆攀登,軍隊撤離後,太魯閣國家公園管理處將受 破壞的環境重新規劃,整建觀景平台等設施。此外, 為了讓受干擾的植被逐漸恢復自然,近年來太魯閣國 家公園管理處也在這裡進行高山植物復育,逐年栽植 培育成的高山植物小苗,存活率極高,都已能看到它 們開花結果。

#### 北合歡山步道

北合歡海拔3.422公尺,是合歡群峰最高山,登山口 位於台14甲公路37.1公里附近,登頂去程約需2小時, 往返約需4至5小時。合歡北峰是欣賞紅毛杜鵑最佳的地 點,一進入登山口就置身在紅毛杜鵑花海中,滿山盛開的 杜鵑,非常壯觀。

Mt. Hehuan is 3,417m tall. Its entrance is around Wu-Ling and an hour's travel is required to get to the peak. On the trails one can enjoy the mountains and alpine plants. There used to be troops stationed on the peak and access from the general public was denied. After the troop's withdrawal, Taroko National Park Headquarters rebuilt some facilities and gradually grew alpine plants. The saplings had a high survival rate and have blossomed into flowers.

3,422m in height, Hehuan N. Peak is the tallest among the Hehuan Mountains. Its entrance is near the 37.1 km point on the 14 A Road. It takes 2 hours to get to the peak. From the entrance to the peak, N. Peak is the best spot to watch the spectacular Red-hairy Rhododendron blossoms.





1. 合歡東峰視野遼闊,或坐或臥,體驗高山美

Tourists may sit or lay back to enjoy the beauty of alpine scenery with glorious mountain views from

2. 高山沙蔘宛如紫色的風鈴,吸引昆蟲前來採蜜

Adenophora morrisonensis Hayata subsp. uehatae (Yamam.) Lammers resembles strings of small purple bells, attracting pollinating insects.

## 合歡山賞花貼心提醒

- 1. 合歡山區氣溫較平地低約18℃以上,日夜溫差大,且 高山天氣變化大,請備妥禦寒衣物及雨具。
- 2. 登上高山如有出現頭痛、噁心、厭食、倦怠等高山症的 反應,千萬不可輕忽,請儘速往低海拔移動,多數會不 藥而癒。
- 3. 不要任意脫離步道,因為這將使高山植物容易受到傷
- 4. 高川垃圾清運不便, 強風也容易將垃圾吹到川谷, 維持 山區環境清潔,請務必將垃圾隨手帶下山。

#### **Reminders on Bloom Viewing**

- 1. There is a huge temperature difference of 18°C between the mountain area and the ground. The weather changes a lot and visitors are advised to bring their winter clothes and rain gears along.
- 2. Once signs of headache, nausea, appetite loss, and fatigue emerge, move downhill and the signs of discomfort will fade.
- 3. Do not leave the trail path, for this would damage the alpine plants.
- 4. It is difficult to remove garbage on the mountain, and the gust often blows garbage to the valley. Please take away your garbage with you at all times.