

Gongga Shan (Mt. Gongga; Minya Gonkar), located in western Sichuan (7,556 m), is the highest peak in the Hengduan Mountains of the eastern Qinghai-Xizang (Tibet) Plateau. The horizontal distance is only about 30 km from its peak to the river valley while the vertical distance is about 6,500 m. There are about 3,000 species of vascular plants including about 2,600 species of seed plants and 400 species of ferns and lycophytes in Gongga Shan. The mountain has long served as the east-west divide of the Sino-Himalayan Floristic Region.

The Hengduan Mountains' long geological history, their north-south aligned mountain ranges and rivers, and their great altitudinal diversity make them one of the regions with the richest temperate biodiversity in the Northern Hemisphere.

> *Larix potaninii* forest. Occurring at elevations of 3,000 m to 4,200 m in western Sichuan and Gansu provinces, Larix potaninii forms one of the highest forest vegetation types in western China. Larix potaninii has golden yellow leaves in fall and is highly valued for its ornamental properties.

and that obtains all its nutrition fungi symbiotically associated with its roots (called a mycorrhiza). Such plants are often incorrectly referred to as "saprophytes," whereas a true saprophyte derives its nutrition from decaying organic matter. Fungi are true saprophytes.







Davidia involucrata. First discovered in Baoxing (Mupin) County in western Sichuan, Davidia involucrata, known as dove tree or handkerchief tree, is famous for its large white bracts. It is a mediumsized deciduous tree and naturally occurs in Guizhou, Hubei, Hunan, Sichuan, and Yunnan. It is a favorite tree in horticulture.

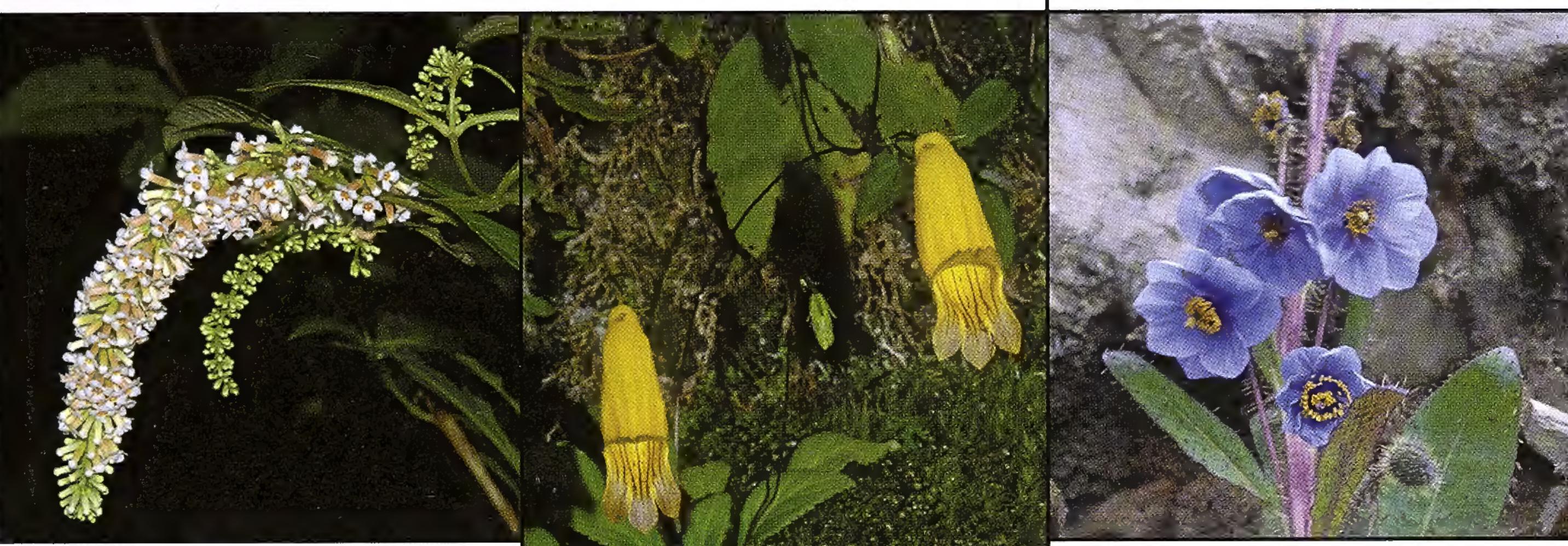


A China has the richest flora of any country in the northern temperate zone. Such high diversity is due to the dissected topography and unique vegetational continuity, which ranges from tropical and subtropical, through temperate, to boreal forests. China has nearly 31,500 species of vascular plants, the third largest national flora (after Brazil and Colombia). This compares with about 20,000 species in the United States and Canada combined and 11,500–13,600 species in Europe. With an estimated 366,000 species of vascular plants in the world, China has about 9% of the world's total. The Missouri Botanical Garden is the coordinating center of the Flora of China project, which began in 1988 and will finish in 2013. The main products are a 47-volume flora and website that will catalog and describe in detail all 31,500 species and illustrate about two-thirds of them.

Rosa moyesii. Discovered and named by the famous botanist and explorer Ernest H. Wilson, Rosa moyesii occurs in scrub and on slopes, at elevations of 2,700 m to 3,800 m, in Shaanxi, Sichuan, and Yunnan provinces. Its flowers are beautiful, and its fruits and leaves contain large amounts of flavonoids, which are beneficial for human health.

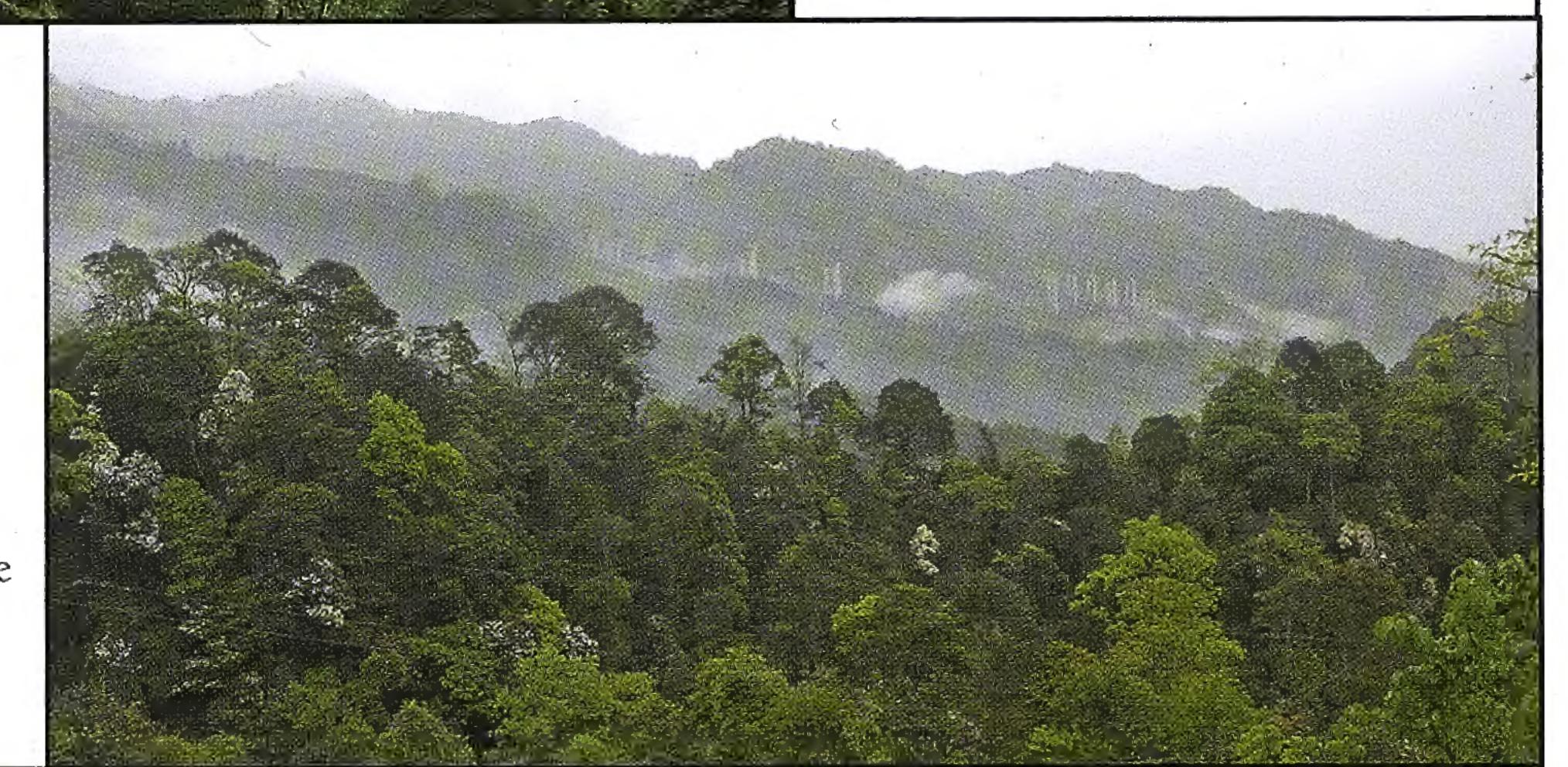


📥 Emei Shan (Mt. Omei). One of the densely forested valleys running off this famous holy mountain in Sichuan province. The trees include species in the Lauraceae, a family with ca. 450 species in China and widely represented in the evergreen broad-leaved forests of the temperate to tropical areas. The moist, shady forest floor and rock faces support a rich flora, including species of Begonia, Impatiens (balsam), Gesneriaceae, Zingiberaceae (ginger), and ferns.



Meconopsis horridula. Doggedly growing in grassy slopes, scree, rock ledges, and stabilized moraines at 3,600 m to 5,400 m in western Gansu, Qinghai, western Sichuan, and Xizang in China, and in Bhutan, northeast India, northern Myanmar, and Nepal, Meconopsis horridula has striking blue flowers that blossom in the cold plateau.

Evergreen broad-leaved forest at Jinguang Si ("Golden Light Temple") in western Yunnan. This forest contains many old-looking, gnarled trees and is probably primary vegetation that has so far escaped logging. The trees are rich in epiphytes, e.g., several species of ferns and an Aeschynanthus, a dwarfshrubby, red-flowered member of the family Gesneriaceae.



A Buddleja davidii. This species is a wild ancestor of the butterfly bush commonly cultivated in the West. It is probably endemic to southern China, where it is quite widespread; records from Japan probably refer to introduced plants. China is the world's richest origin of cultivated plant species, with thousands of wild species having been introduced into gardens over the last few centuries, e.g., bamboos, camellias, orchids, primulas, rhododendrons, and roses.



Cypripedium tibeticum. This orchid grows in sparse forests, forest margins, scrubby slopes, grassy slopes, and stony places at 2,300 m to 4,200 m in Gansu, Guizhou, Sichuan, Xizang, and Yunnan in China and in Bhutan and India (Sikkim). Cypripedium tibeticum is short and robust, with a blackishpurple lip and staminode. It is a beautiful ornamental plant.



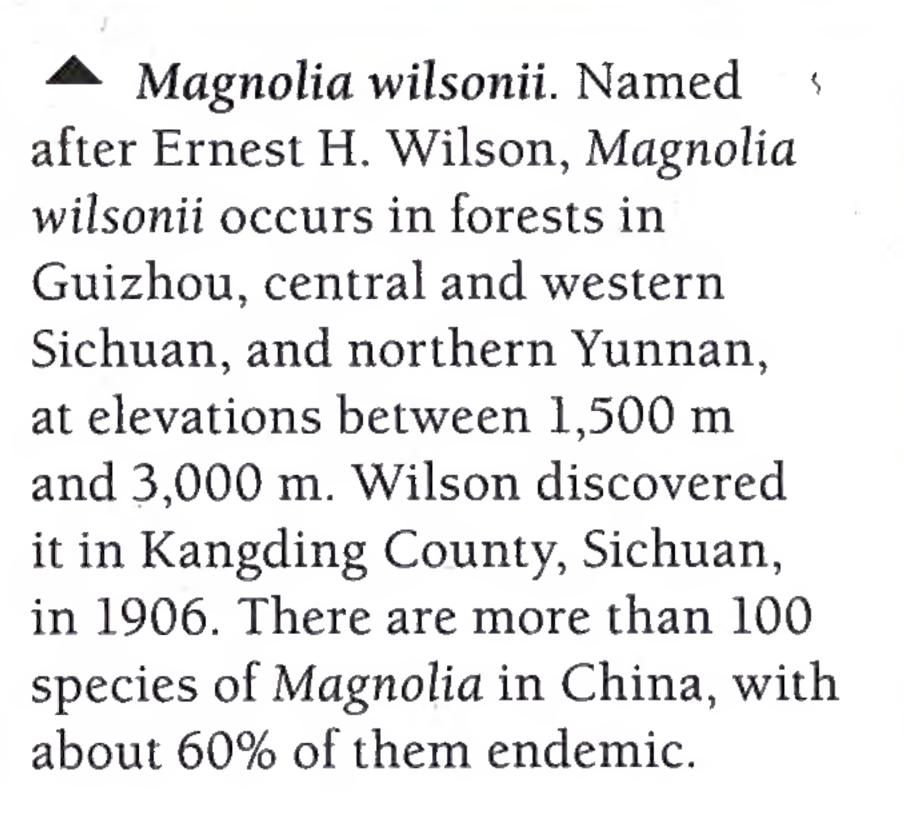
Subtropical evergreen broadleaved forests. Dominated by species of Castanopsis (Fagaceae), Machilus (Lauraceae), Schima (Theaceae), etc., the subtropical evergreen broad-leaved forests occur mainly in central and southwestern China. The biodiversity found in them is very rich.





the widespread and mostly tropical family Gesneriaceae, this species grows on rocks and as an epiphyte on trees in southwestern China and northern Myanmar. The genus Briggsia has a little over 20 species distributed in the Sino-Himalayan region. In China the Gesneriaceae have around 500 species and rising; several new species are being discovered and described each year.

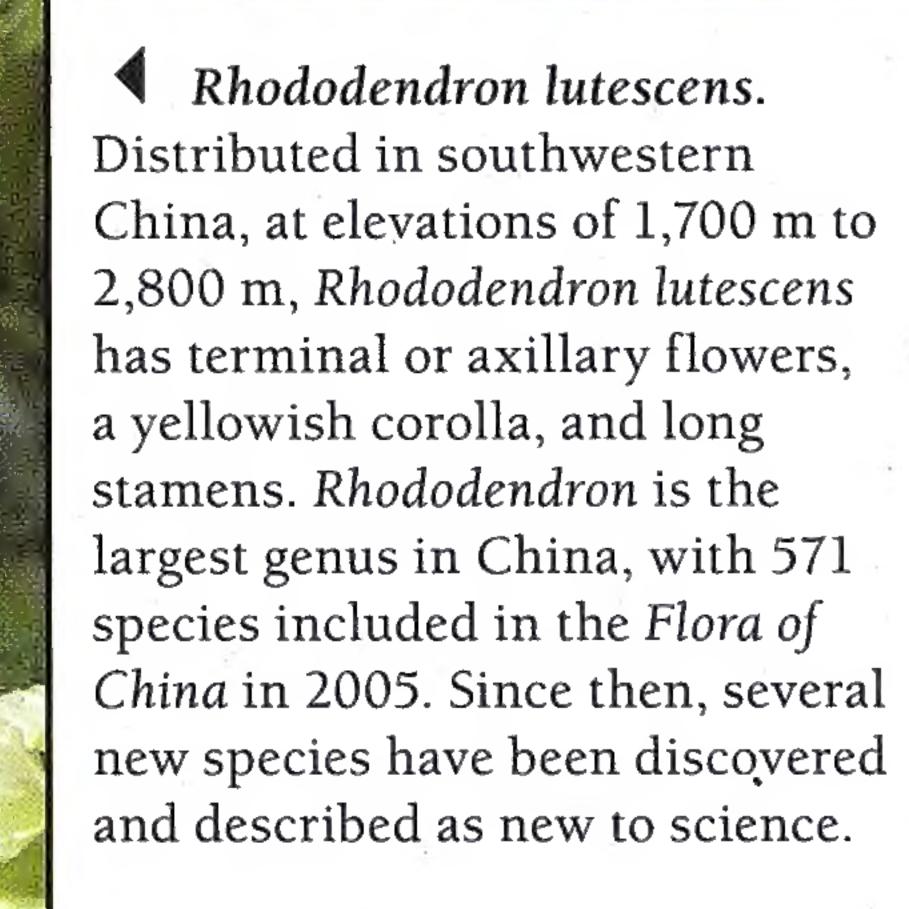
A member of Briggsia longifolia. A member of



and Dr. Libing Zhang

all'

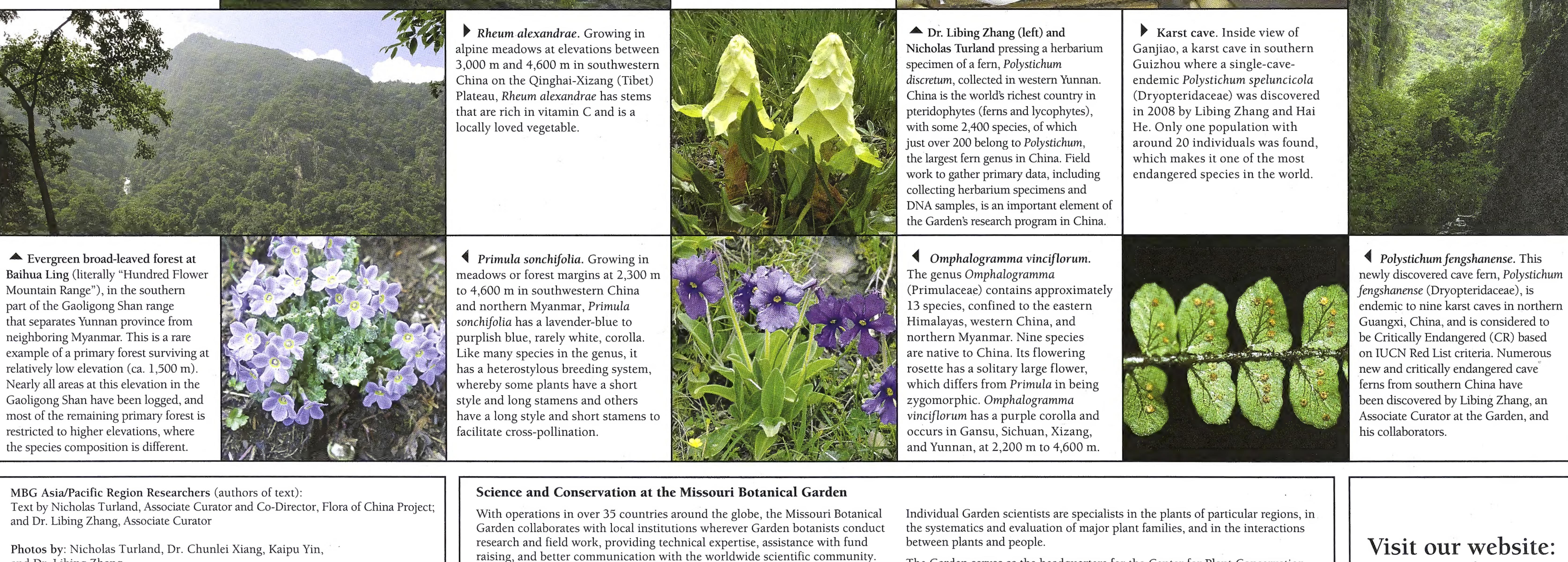




Traditional Tibetan village. On July 5, 1908, Ernest H. Wilson stayed a night at a farmer's house at this Tibetan village in Danba County, Sichuan, and called the house "my apartment." After more than 100 years, the farmer's descendants live in another house in the same location in this village.



📥 Pinus yunnanensis, Yunnan pine. It is unusual to encounter such large trees of this species, which is more often seen forming secondary forests. These trees are by a temple, where it is likely that they have been protected. Such "sacred areas" are very important for plant conservation because they often contain relics of the primary vegetation in areas otherwise radically modified by human activities.



America, sub-Saharan Africa, Madagascar, China, Vietnam, and North America.

The Garden serves as the headquarters for the Center for Plant Conservation and for several major collaborative publications, such as Flora of China and The research division consists of 46 Ph.D. botanists assisted by 144 support staff and 20 graduate students. Studies concentrate on the plants of Meso- and South Flora Mesoamericana.

Visit our website: www.mobot.org



M.S.del J.N. Fitch lith.

Vincent Brooks, Day & Son Lidimp

L.Reeve & C? London.

Trollins chinensis

Trollius chinensis is a species of globeflower endemic to northern China. It belongs to the buttercup family, Ranunculaceae, and was originally described by the Russian botanist, Alexander von Bunge, in 1833. The Chinese name is "jin lian hua" (金莲花), which literally translates as "golden lotus flower." A perennial herb growing to about 80 cm tall and flowering in June and July, it grows on grassy slopes at elevations of 1,000 m to 2,200 m in Hebei, Henan, Jilin, Liaoning, Nei Mongol, and Shanxi provinces of northern China.

©2011 Missouri Botanical Garden. Illustration from *Curtis's Botanical Magazine* by William Curtis; Bentham-Moxon Trust; Royal Botanic Gardens, Kew; Stanley Smith Horticultural Trust. (London: Academic Press, 1827–1927). The Missouri Botanical Garden maintains one of the world's finest botanical libraries, including over 6,500 rare books, the earliest dating from 1474. Select illustrations are available as fine art prints for purchase at the Missouri Botanical Garden Press website, www.mbgpress.org. View the entire collection of digitized rare books online at www.botanicus.org.

