

## Flowers and Forests of the Minami Alps

### Living in the zone

The Minami Alps are notable for their extremely high timberline, with forests extending as high as 2,700 meters above sea level. This is due both to the mountains' geology—for example, the soil's capacity to retain moisture—and to their southerly location, which brings plenty of rain in summer and relatively modest snowfall in the winter months.

The forests divide clearly into four zones: the lowland zone (up to 800 m), the montane zone (800–1,600 m), the subalpine zone (1,600–2,700 m), and the alpine zone (above 2,700 m). Each of these zones has its own distinct tree population. The lowland zone features an evergreen broadleaf forest of oak, Japanese bay (*Machilus thunbergii*), and *sudajii* chinkapin (*Castanopsis sieboldii*). Trees such as the Nikko fir, southern Japanese hemlock, and Siebold's beech take over in the montane zone. In the subalpine zone, evergreen conifers such as northern Japanese hemlock and

Veitch's silver fir predominate. Finally, up in the alpine zone, the trees reflect the harshness of their environment. Under the weight of winter snow, Erman's birch grows parallel to the slope in the shape of a crooked arm, while the dwarf stone pine gets shorter according to its elevation, shrinking from roughly head height at 2,700 meters to under knee height on the mountain summits.

As the trees become smaller and fewer in the subalpine zone, flowers proliferate. The alpine meadows of the Minami Alps are home to a tremendous variety of flowering plants. Two of the most prevalent are the yellow *Shinano-kinbai* (*Trollius japonicus*) and the white *Hakusan ichige* (*Anemone narcissiflora*).