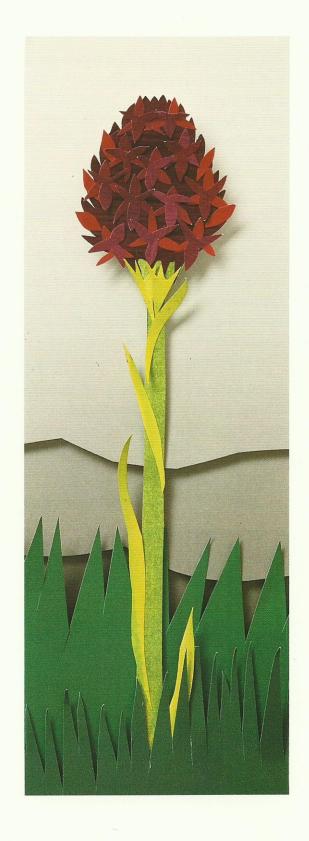
Black vanilla orchid

Nigritella nigra

One of only three truly Alpine orchids, this small, fragrant species has been well-known since ancient times. Today it occurs in most European mountain ranges, sometimes in abundance. Its days may be numbered, however, as its fragile habitat is overrun by human activities and development.



Black vanilla orchid

Where to look: The orchid can be found from June until October in sunny meadows and pastures, usually between 800 and 2700m. It prefers poor, chalky soils with dependable moisture.

What to look for: The black vanilla orchid is distinctive from other Alpine flowers, with its blackish, cone-shaped mass of tiny flowers, poised on a slender stalk 8-20 cm high.

A closer look will reveal that the compactly grouped flowers are, in fact, a deep purple, red or reddish-brown. They release a sweet odour, like that of vanilla, which attracts many insects including butterflies, their main pollinators. Several pointed leaves emerge along the entire length of the stem. Dark green above and pale green below, these become shorter near the top of the plant and may be red-tinged just below the flower itself.

Threats: Although the black vanilla orchid is still common in some areas, the destruction of enormous grassy surfaces to provide facilities for winter tourism has significantly reduced its occurrence in many areas.

The species is also threatened by agriculture, which dries and fertilizes the soil. Summer grazing, especially by sheep, interferes with its reproductive cycle. The overuse of pesticides has exterminated many of the butterflies and moths on which orchids depend for their pollination. The recolonization of abandoned fields by bushes and trees also destroys orchid habitat.

People still collect these attractive orchids, or dig them up in vain attempts to transplant them. However, the flowers cannot survive unless the soil, climate and pollinating species are exactly right.

What we can do:

- 1. **Stop picking the flowers.** We should also tell our friends not to collect them or try to transplant them. We might remind them that if we leave the flowers to complete their reproductive cycle, there will be even more to enjoy next year.
- 2. **Protect vanilla orchid habitat.** We can work to control the transformation of the black vanilla orchid's habitat into tourist resorts and grazing pastures. Where resort development is going ahead, we can make sure that the impact on the environment is minimized.
- 3. **Establish and enforce protective measures.** We can campaign for legal measures to help prevent exploitation of the species by commercial collectors and gardeners.

Based on material provided by Dr G. Müller, Director of the Cantonal Museum and Botanical Gardens, Lausanne, Switzerland.





