Cyclamen

Cyclamen, those ever popular winterflowering pot plants with colourful swept-back petals, mostly come from northern and eastern regions of the Mediterranean, with just a few species from as far east as the Caspian Sea and from North Africa.



World distribution of *Cyclamen* species. Modified from Yesson C, Culham A. 2006



Göynük Canyon in Antalya Province of southwestern Turkey. Photo: Tanya Dedyukhina, CC BY 3.0. https://creativecommons.org/licenses/by/3.0>via Wikimedia Commons



The name *Cyclamen* comes from the Greek *kyklāmīnos* (κυκλάμινος) - a circle - describing the round tuber. There are about 23 species of *Cyclamen* originally included in the plant family Primulaceae. They were briefly moved to the *Myrsinaceae*, but molecular biologists tell us that *Cyclamen* now belong in the subfamily Myrsinoideae of the Primulaceae, so they're now back in the *Primula* family.

Most modern potted *Cyclamen* are cultivars and hybrids of Cyclamen persicum from wooded, rocky hillsides of Turkey, Lebanon, Syria, Algeria and Tunisia, and possibly also the Greek Islands of Rhodes, Karpathos and Crete. order to survive hot. In dry Mediterranean leaves summers. of Cyclamen die back in late winter. The tubers remain dormant until the rainy season returns in late autumn when new leaves are soon followed by flowers.

The unusual *swept back* appearance of the petals is rather remarkable. Just below the point at which the flower stalk is attached to the base of the flower, the stalk reverses direction by 180°, forming a shape not unlike a shepherd's crook and the petals then reflex back on themselves to produce their upright, rabbits' ears appearance. Not satisfied with this, each petal then twists on its long axis.





Cyclamen, Bil'in, in Palestine. Photo: Mburnat, CC BY-SA 3.0 https://creativecommons.org/licenses/by-sa/3.0, via Wikimedia Commons





Cyclamen persicum on steps of Magarsus Ancient Amphitheatre. Karataş - Adana, Turkey. Photo: Zeynel Cebeci, CC BY-SA 4.0 <https://creativecommons.org/licenses/by-sa/4.0>, via Wikimedia Commons

Plants can have a range of storage organs to stockpile carbohydrates or water. Those that have underground storage organs, such as *Cyclamen*, are referred to as *geophytes*, and the underground option comes with many benefits, particularly the option to avoid

extreme heat, extreme cold, drought, lack of light, and being eaten by herbivores. Unsurprisingly, geophytes are relatively common in arid and alpine environments. When conditions become favourable, plants regrow from the underground storage organs.



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Some of the more familiar geophytes we know as tubers (potatoes, *Cyclamen*), bulbs (onions, lilies) and rhizomes (*Iris*, ginger). These storage organs continue to grow and develop while they are underground so when suitable above ground growing conditions return, the plant can penetrate the surface with

minimum effort, allowing for rapid expansion of new leaves to maximise photosynthetic effort, followed soon after by flowers and then seeds. Mary-Lou Watkinson of University of Florida (2018) describes the underground storage organs of geophytes as "built-in disaster readiness kits": that enable plants to prepare for adverse conditions, just as we prepare for hurricanes and tornadoes!



Encyclopedia of Life: http://eol.org/pages/595303/details

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