

The flora of gypsum grasslands



Geo bed gypsum

The weathering of gypsum rock (calcium sulphate) leads to the formation of shallow Rendzina soils rich in calcium, potassium and magnesium. Many plant species of sunny, open habitats in Southern and Southeastern Europe grow mainly on gypsum Rendzinas here in Germany. Gypsum from the Late Permian (Zechstein) can be found as outcrops on the southwestern edge of the Harz Mountains, where it has been weathered into karst formations such as sinkholes or cones.

Photos:

- 1 The high water solubility of gypsum rock means that rainfall can cause the formation of underground caves. As these gradually grow in size, the ceiling of the cave collapses, leaving a funnel-shaped hole. These sinkholes are important habitats for plant species that need high moisture levels, such as hart's-tongue fern (*Asplenium scolopendrium*).

Photo: L. Köhler

- 2 Creeping gypsophila (*Gypsophila repens*) is a typical species of gypsum plant communities. Many species of these communities are threatened by industrial gypsum mining.

Photo: L. Köhler

- 3 The collection of plants here reflects the grassland vegetation on Zechstein gypsum in the southern Harz Mountains. These species can be seen particularly well along the "karst trail", which runs over 250 km along the southern edge of the Harz. Photo: L. Köhler



Experimental Botanical Garden

More information

