Communities of heavy metal-rich soils in the Harz mountains **Communities of heavy metal-rich soils**

High concentrations of heavy metals like lead, cadmium, copper or zinc are toxic for most plants. However, some plant species have developed adaptations that enable them to colonize heavy metal-rich soils. These plants are also referred to as metallophytes, and originally only occurred in very small patches where heavy metal-containing ores leached to the surface.

Photos:

- 1 Mining activities, which began in the Harz over 3000 years ago, have destroyed most of the natural heavy metal-rich habitats (the plant community of the Armerietum halleri). Today, spoil heaps of disused mines or the waste from ore smelting are important manmade habitats of this plant community. Photo: L. Köhler
- 2 The rockcress Arabidopsis halleri is a typical metallophyte. The plant was named after the botanist Albrecht von Haller, who founded the Old Botanical Garden of the University of Göttingen. Photo: L. Köhler
- **3** The spring sandwort (*Minuartia verna*) mainly occurs in the higher elevations of the Alps. However, it is also found in heavy metal-rich habitats at lower elevations in Central Europe, where it can escape the competitive pressure of most other plants. Photo: L. Köhler





More information



