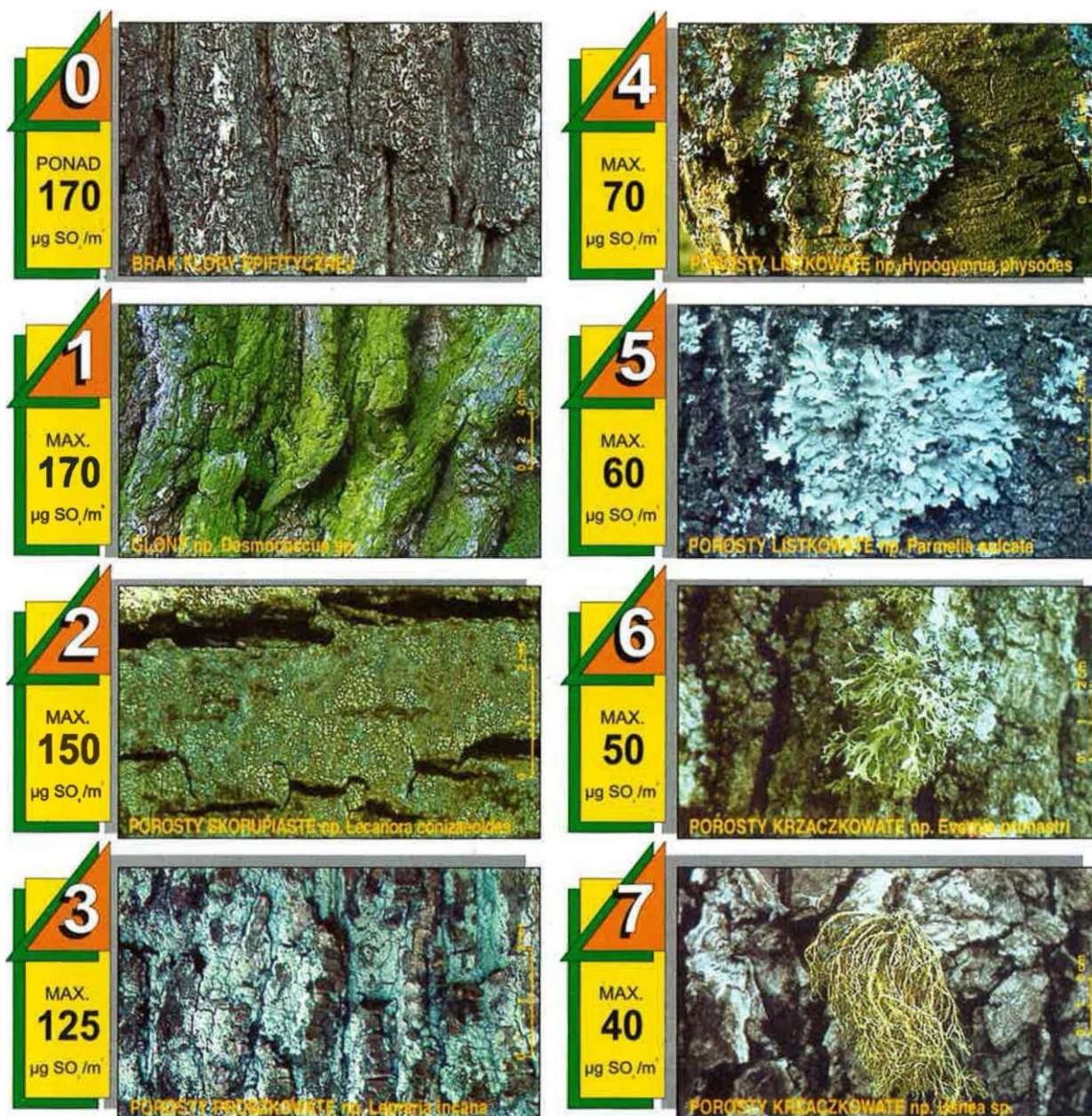


Lichen scale



How to use the lichen scale?

- Look at the pictures of lichens and algae, pay attention to their shape, size and color.
- Look for lichens on the bark of deciduous trees in the area you are exploring.
- Compare the found lichens with those shown in the scale photos.
- Read and record the maximum concentration of SO_2 $\mu\text{g}/\text{m}^3$ of atmospheric air at which the lichens found still occur and the number of the contamination zone.
- Repeat the observations of lichens on other trees growing nearby - this will allow you to more accurately determine the degree of air pollution with sulfur dioxide.

Lichen zones

Lichen zones - these are areas where lichens occur at a certain concentration of SO_2 in the atmospheric air. It has been observed that the less polluted the air, the more species of epiphytic lichens can be found epiphytes - plants that live on other plants, but are not parasites.

Zone 0 - called the lichen desert. It lacks any epiphytic flora. The concentration of air here exceeds $170 \mu\text{g SO}_2/\text{m}^3$.

Zone 1 - only algae can occur on tree trunks - because they withstand air pollution to about $170 \mu\text{g SO}_2/\text{m}^3$.

Zones 2 and 3 - combat zones - fight for survival in a polluted environment. The most resistant crustaceous and powdery lichens grow here.

Zones 4 and 5 - leafy lichens can grow here, of course together with algae and crusty and powdery lichens.

Zones 6 - 7 - areas where SO_2 concentration does not exceed $50 \mu\text{g}/\text{m}^3$. bushy lichens and other lichens in larger thalluses may already be present here. Indicator lichens for zone 7 with relatively clean air (below $40 \mu\text{g SO}_2/\text{m}^3$ may be some species of papilloma).