# Influence of substrate and pH on diversity of aeroterrestrial alga *Klebsormidium* (Streptophyta)

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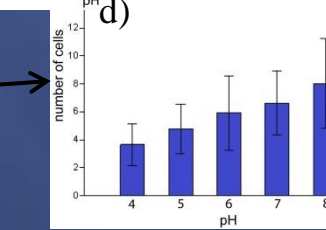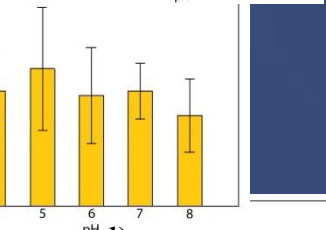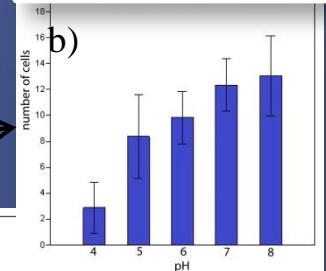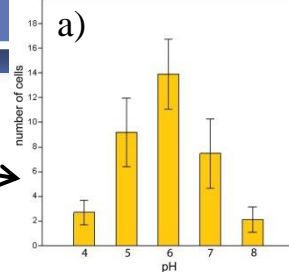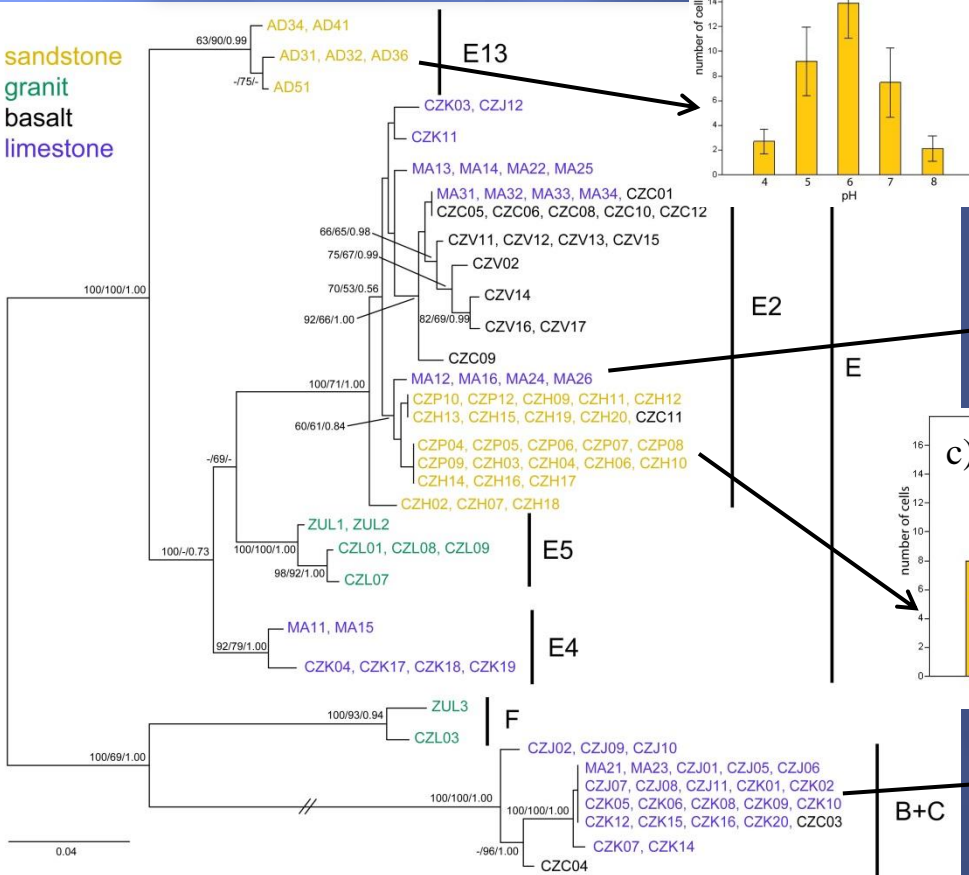**Email: rysadavid@seznam.cz**

Estimate of protist diversity has become a highly controversial topic during the last 10 years. Huge protist diversity could be caused by limited distribution and/or by different preference of habitats, but in the case of aeroterrestrial alga *Klebsormidium* the diversity is not influenced by limited distribution (Ryšánek et al. 2014), but mainly by habitat preferences (Škaloud and Rindi 2013).
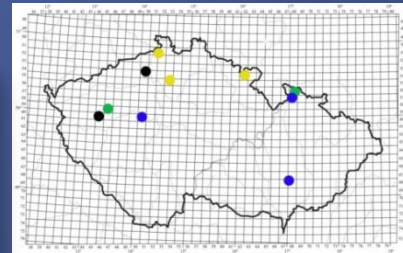

Localities in the Czech Rep.

- 100 strains
- sandstone, basalt, granite, and limestone
- 2-3 localities per substrate
- *rbc*L
- pH 4-8, 6 sandstone and 6 limestone strains

Phylogenetic relationships among *Klebsormidium* genotypes obtained in this study. The phylogenetic tree was inferred based on a Bayesian analysis of *rbc*L sequences. Values at the nodes indicate statistical support estimated by three methods: MP (left), ML bootstrap (middle), and MrBayes posterior node probability (right).

a-d: Bar chart graphs with standard dev.

Measurements pH of rocks
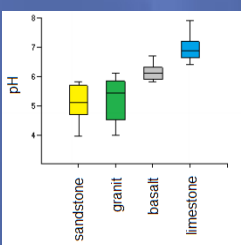
Our results thus not only demonstrate a strong ecological differentiation of *Klebsormidium* clades, but also point to the existence of ecophysiological differences among the particular genotypes, even growing on the same habitats.