

Devonian Algae of the South and Austro Alpine

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From the outset in the last century geologists discovered Devonian algae in the South and Austroalpine but, curiously, they often did not recognize their algal nature.

- Although there are a lot of strata rich in algae, taxonomic studies are currently more or less absent. Besides bluegreen algae and cyanobacteria the Austrian Devonian algal flora can be characterized by representatives of Codiaceans and Udoteaceans. Unfortunately insufficient taxonomic data are available at this stage on Dasycladaceans and so it appears, that they are of minor importance. But it seems that they will get more prominent through future systematic sampling.
- Our taxonomic investigations on lower- to middle Devonian algae are focused on shallow water deposits of the Graz Palaeozoic, the (Central) Carnic Alps and the Karawanken Mountains.
- The algal flora of the Eifelian Barrandei-Limestones of the Graz Palaeozoic is characterized by an Udoteacean-Dasycladacean-association, whereas in the lower- to middle Devonian of the Central Carnic Alps Udoteaceans and Codiaceans are predominant. Characteristic elements of the Karawanken flora are representatives of the "*Renalcis*" group.
- These different associations are significantly controlled by environmental factors (coastal-, lagoonal- and reef-framework-environments).

The increasing interest in Devonian algae - especially since the last decade - has lead to controversially discussed conceptions within the systematic framework. This will be demonstrated in case of *Lancicula* s. l.