

Abstract: Modified rich faunas of the Roth-formation (Lower Emsian, Lower Devonian) in the Singhofen area (western Taunus, southern Rhenish Massif) are described. Faunas from two submarine pyroclastic debris flow-sediments ("porphyroids") and a shell-concentration of a nearby location have been compared. An actual fossil-list is presented based on selfcollected fossils, new investigations of old collections and also based on a critical survey of the present literature.

*Limoptera*- and the younger Touristenstein-porphyrroid show great similarities in the composition of their faunas. The special character of the porphyroid fauna differs fundamentally from other Lower Emsian faunas. Both observations are connected with the special sedimentary mechanism of the porphyroids (pyroclastic debris flows).

A special paleontologic part contains notes about the following species:

Trilobita:

*Scabrella spinosissima* (SCHLÜTER, 1900)

Lamellibranchiata:

*Leptodesma (Leiopteria) crenato-lamellosa* (SANDBERGER, 1854)

*Leptodesma (Leiopteria) pseudolaevis* (OEHLERT, 1882)

*Limoptera (Limoptera) bifida* (SANDBERGER, 1854)

*Kochia capuliformis* (KOCH, 1881)

*Phtonia cf. antiqua* DAHMER, 1934

*Grammysia ovata* SANDBERGER, 1854

*Grammysia beyrichi* BEUSHAUSEN, 1889

*Grammysia abbreviata* SANDBERGER, 1854

*Cypricardella unioniformis* (SANDBERGER, 1854)

*Myophoria proteus* BEUSHAUSEN, 1895

*Palaeosolen costatus* (SANDBERGER, 1854)

Incertae sedis:

*Coleoprion gracilis* SANDBERGER, 1852