

Test compositions of Euglyphida in soils

Yoshiyuki Aoki (Graduate School of Environmental Studies, Nagoya University)

Tests of 8 euglyphid species collected from different types of soil were chemically analysed by electron probe microanalysis (EPMA). All euglyphid tests contained abundant Si with traces of Al, and some euglyphid tests contained traces of Na, Mg, P, S, Cl, K, Ca, Ti and Fe. Tests of cultured euglyphids also contained abundant Si and traces of Al and Ca, but other elements were undetectable. Chemically highly purified scales of *Euglypha rotunda* and *Trinema enchelys*, by contrast, contained only Si. Therefore, the Al, Na, Mg, P, S, Cl, K, Ca, Ti and Fe detected in the analyses of euglyphid tests were possibly derived from organic matrix, cementing substances, cell debris from inside the test and/or excrement of the testate amoebae. The X-ray powder diffraction pattern of purified scales also indicated amorphous-state silica.