

The GEMAS periodic table

OF AGRICULTURAL SOIL IN EUROPE

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Geochemical Mapping of Agricultural and grazing land Soil (GEMAS) is a cooperative project between the Geochemistry Expert Group of EuroGeoSurveys and Eurometaux.

During 2008 and until early 2009, a total of 2108 samples of agricultural (ploughed land, 0-20 cm, Ap-samples) and 2023 samples of grazing land (0-10 cm, Gr

samples) soil were collected at a density of 1 site/2500 km² each from 33 European countries, covering an area of 5,600,000 km².

All samples were analysed for 52 chemical elements following an aqua regia extraction, 41 elements by XRF (total), and soil properties, like CEC, TOC, pH (CaCl₂), following tight external quality

control procedures. In addition, the Ap soil samples were analysed for 57 elements in a mobile metal ion (MMI®) extraction, Pb isotopes and magnetic susceptibility. During 2016 and early 2017 maps for N, I and Br were added.

<http://gemas.geolba.ac.at/>

