

The relevance of P-soil analyses on combating P-losses

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Since decades soil analyses for the determination of plant available P are used as basis for fertiliser recommendations. An Austrian study reveals a correlation between P-concentrations in seepage water and extractable P contents in soils (wpa, 2005). However, methods and recommendations differ to a great extent overall European countries (Neyroud and Lischer, 2003). This may also influence P-balances and thus the vulnerability of water to eutrophication due to (mineral) P-fertilisation. In several Middle and Eastern European countries actual comparisons of P-analysis methods and fertiliser recommendation schemes were carried out (Fotyma et al., 2008). The results of this investigation partly confirmed the former findings and will be introduced. Furthermore it will be discussed, how a minor change of methods could influence P status classes and fertiliser recommendations. Also possible impacts on soil-P-balances for different crop rotations on arable land will be considered.

Fotyma M. et al. (2008): Soil testing methods and fertilizer recommendations in Central–Eastern European countries. In preparation.

Neyroud, J.A., and P. Lischer (2003): Do different methods used to estimate soil phosphorus availability across Europe give comparable results? *Plant Nutr. Soil Sci.*, volume 166, 4, p. 422-431.

Wpa (2005): Phosphataustrag aus landwirtschaftlich genutzten Flächen in Oberösterreich („P-losses from agriculturally used areas in Upper Austria“). Final Report.