## **Book of Abstracts**

## Wageningen Soil Conference 2015

'Soil Science in a Changing World'

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## COMPARABLE AND RELIABLE DATA FROM LABORATORIES WITHIN GLOBAL SOIL RESEARCH

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Good data are always the basis for good science and are also used to advise farmers and to do risk assessments in case of soil pollution. Research moves from application of a laboratory analysis for a single site to application of the result in regional studies and even for global use. This increases the need that the laboratory analysis results are correct and moreover comparable with other laboratories worldwide.

The Soil Science groups at Wageningen University began a programme to facilitate laboratories to improve their quality by starting WEPAL ((Wageningen Evaluating Programmes for Analytical Laboratories) almost 60 years ago. WEPAL organises proficiency testing schemes that contribute to maintaining and improving the quality of laboratories worldwide which specialise in soil quality and related fields. It has developed into a world-leading organiser of proficiency testing programmes in the fields of plants, soil, sediments, biomass and organic waste, with over 500 participants worldwide.

Parameters to be analysed in the different matrices varies from soil characteristics and nutrients to contaminants like heavy metals and organic contaminants. Wepal has developed a system that guarantees that all laboratories do receive a sample with the same composition. Participating laboratories receive four times a year samples having a different origin. They submit their results by a web based application and receive a report within two weeks after the proficiency test deadline. The report contains all relevant statistical data and information on the applied methods. Laboratories use their result to show customers that their results are comparable or if not to improve their performance. Participation in a proficiency testing programme is a must for laboratories having an accreditation.

WEPAL cooperates with Quasimeme, which is another proficiency testing programme focussed on research in the marine environment.