

The Role of Analytical Chemistry in Agricultural Research

Corinne Jud Khan

Agroscope, Rte de la Tioleyre 4, 1725 Posieux, Switzerland
corinne.jud@agroscope.admin.ch

Agricultural research, as conducted by Agroscope, covers the entire value chain from crop cultivation, and animal production to final consumer products. It contributes to a competitive and multifunctional agricultural sector and to the production of high-quality food for healthy nutrition within the framework of a resilient and healthy environment. Analytical chemistry is an essential pillar and in many respects a prerequisite for these activities. It ranges from the establishment of reference methods and the execution of standardized methodologies under accreditation to support legal tasks to dedicated method development and application for specific research questions. The mode of collaboration with internal and external partners includes everything from full support, over user lab guided method applications to both collaborative and own research projects for method development. Essential advantages of a fully fledged “inhouse” analytical chemical competence center include cost-efficient services owing to a critical mass and scaling factor, knowledge gains and security, short ways between customers, partners and experts, and superior quality assurance/quality control due to standardized and harmonized procedures. Twenty-four years after the last such overview [1], we will provide several recent examples illustrating the withs and breaths of analytical chemical activities at Agroscope.

[1] H.J. Bachmann, T. Bucheli, J. Paul, N. Stünzi, H.R. Bossard, *Chimia* 2002, 56, 304-305.