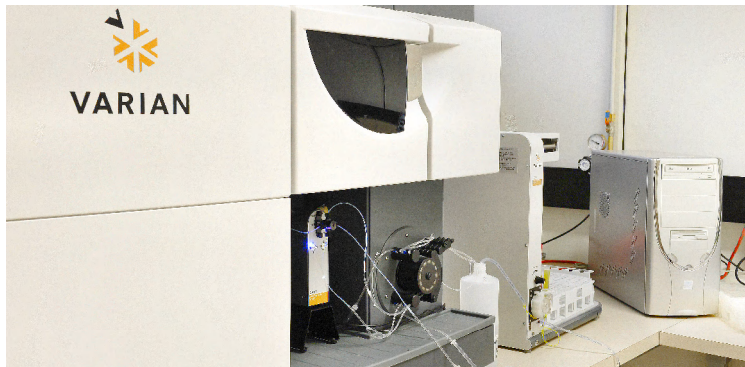


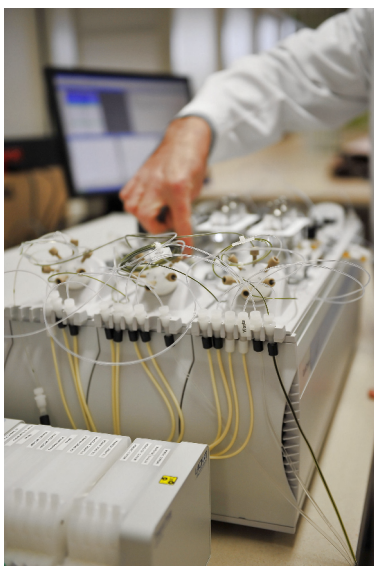
Unlike tissue testing, which requires an involved drying and grinding preparation process, NU-test<sup>®</sup> analysis relies on a wet analysis requiring less preparation time in the laboratory, hence the fast turn around time. The samples are delivered fresh in plastic bags to the laboratory in express post overnight bags. On arrival, trained staff assesses the samples to ensure they meet a strict quality criteria, then prepare the samples for analysis. The sap is extracted using precision hydraulic presses, which gently extracts sap from the sap stream, without breaking down cell structures. The extraction process follows strict quality control procedures by crop type, allowing for repeatability and consistency.

The sap is filtered and diluted then analysed using leading edge, modern instrumentation including an ICP (inductively coupled plasma spectroscopy, Photo 1) and an FIA (flow injection analyser Photo 2). All instrumentation has built-in calibration and Quality Control systems allowing for high accuracy and repeatability of analyses.

NU-test<sup>®</sup> results are automatically transferred from the computer controlled analytical instrument to a LIMS (laboratory information management system), and from there e-mailed or faxed to the client. The LIMS allow us to print client reports for mailing.



*Photo 1 ICP (inductively coupled plasma spectroscopy) used to determine all nutrients, apart from nitrogen. ICP's are used in all applications where very precise detection of elements is required (e.g. mining, petrochemical industry, medicine, soil, plant tissue and water analysis).*



*Photo 2 FIA (flow injection analyser) for the measurement of nitrogen, chloride and ammonium in plant sap (NU-test<sup>®</sup>) and soil extracts (N-check<sup>®</sup>). The FIA is a colorimetric method, measuring the colour change in samples after a chemical reaction has taken place. FIA technology is used widely in the analysis of water and waste water.*