

Portable XRF for Plant Material

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The ability to quickly measure both nutrients and heavy metal contaminants in plant and soil material has great potential for improving safety and productivity in agriculture. With the recent explosion of the cannabis market, measurement of heavy metals is particularly important because cannabis naturally absorbs heavy metals out of the soil as it is growing. Since cannabis goes through many concentrations before consumption, even small amounts of heavy metals can be concentrated to toxic levels during processing. This presentation focuses on using a new Plants calibration, developed by Bruker for the portable XRF units, to do a preliminary study on measurement of nutrients and heavy metals in plant material. Data will be presented that demonstrate the possibilities and limitations of this method for cannabis and other plants.