

# Top Five Lessons Learned



1. Use of technical replicates for validation, as suggested by most guidelines, underestimates measurement uncertainty => rather use a range of individual samples ideally from different lots.
2. Determination of mycotoxins in aquatic ecosystems shall be further investigated but requires ultra-sensitive LC-MS-based methods.
3. Hyperspectral imaging, NIR and fluorescence spectroscopy have shown good promise for non-destructive (indirect) detection of mycotoxins in grains and nuts.
4. General indicators of low-quality maize, such as insect damage or discoloration are useful features for optical speed-sorting of clean and aflatoxin- and fumonisin-contaminated kernels.
5. Revolutionary developments in mid-IR photonic technologies, including on-chip devices, show great potential to determine mycotoxins in grains.