

LECO

EMPOWERING RESULTS



Experience with LECO CN Analyzers

Paco San Nicolás

I'm Paco San Nicolás, head of the Ionomics Service at the Center for Soil Science and Applied Biology of Segura (CEBAS-CSIC) in Murcia, Spain, and I am writing these lines to share a bit of our experience with LECO brand CN analyzers. We process around 50,000 samples annually of all types and for various purposes. The samples are usually agricultural soils, plant material, compost, fertilizers, and organic matter. We handle samples from many users, from CEBAS itself to CSIC centers of others parts of Spain: IPE, IdAB, CIDE, EEZA, EEZ, IEO... public organizations and universities: UM, US, UAL, UIB, UV, UPV, UCLM, UAM, UPNA... and private companies.

The analyses we perform are C/N, for which we weigh about 0.1 g of dry, ground sample and measure it directly according to its nature in the different analyzers; and, on the other hand, total organic carbon analysis by removing carbonates with 2N hydrochloric acid on a heating plate and then measuring total carbon.

Previously, we had a LECO TRUSPEC CN, which was replaced this year by an 828 Analyzer. In addition to the 828, we have a 628 that we mainly use for TOC.

We have been using these instruments since 2009, and every time they release a new version, we are impressed. They are very robust instruments, with very simple daily maintenance; they are built to work. Analysis times are very short, and their robustness, accuracy, repeatability, and precision are excellent. In short, they are instruments designed to work—the more we use them, the better they perform.



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