

Case Study

Analysis in soil, fertilizer and plants



Customer: An institute for agricultural sciences, China

The institute is subsidiary of the Planting Service Center. The main business field includes monitoring soil fertility and fertilizer.

Application: Total nitrogen determination in soil, fertilizer & plants

The KjellFlex K-360 is used to determine total nitrogen in soil, fertilizer and plants. IR digestion shortens total analysis time, and the modular design of the K-360 makes operation more flexible. The throughput in one day has been increased, and urgent results can be obtained in half a day.

Equipment: KjellFlex K-360 and Digestion Unit K-435

The Buchi KjellFlex K-360 has a modular design (semi-automatic/full-automatic, glass splash, plastic splash, acid-resistant pump) with the flexibility to meet the customer's demands. The customer method can be stored and is password-protected. And the unit can determine nitrate levels in fertilizer with the Devarda method.

Benefit / Conclusion: Time saving due to shorter analysis duration

The total analysis time has been shortened compared to the old method of manual digestion, distillation, and titration. The system is also suitable for non-Kjeldahl applications of volatiles. Results and reproducibility are perfect.

"The unit provides fast and accurate results. The operational procedure is very easy and cuts labour costs."

Chief of the Laboratory
