

# Soil mapping and autonomous analysis with TSM \* and TSDA \*\*

Focus: Mapping - Analysis - Soil Sampling – Application

For agriculturally used soils, nutrient supply is an important issue. By carrying out basic studies (pH, phosphorus and potassium available for plants), as well as determining the available levels of magnesium and humus content, the farmer receives important information about the available nutrients in the soil.



With the Topsoil Mapper it is now possible to efficiently perform this sampling by mapping the soil in advance. Simultaneously with any other operation or separately with an ATV. Subsequently, if necessary directly on the field, the soil zone maps are created with the Topsoil Data Analyzer. On the basis of these, soil samples can be taken exactly and on a homogeneous soil surface.



Today we introduce you to **Agrinnovazione** as part of our User Story series. The company based in Treviglio – Bergamo was founded by Dott. Davide Misturini in 2016 and supports its customers in the areas of farm optimization and agricultural productivity.

After studying agricultural sciences and technologies at the University of Padua, many years of experience in the field of mechanization and sustainable agriculture, as well as several years working for a large tractor manufacturer, two years ago he decided to set up his own business.

The aim of the company is to provide Italian farmers with his accumulated expertise in precision farming and new technologies, and to help them to increase their productivity.

## Why the Topsoil Mapper soil sensor?

DM: "The starting point for precision farming practices is to understand the variability of the fields and their fertility. Doing it with traditional methods is really difficult and very expensive. To solve this problem, I rented the Topsoil Mapper in October 2016 to evaluate the system and to analyze the potential benefits for farmers. At the end of the rental period, I decided to buy the TSM in January 2017. This greatly simplifies the determination of the soil zones and makes the collection of soil samples and the creation of application maps much more efficient."

Dott. Misturini knows: "The knowledge of the characteristics of the soil are the starting point for all agronomic interventions!"

**MAPPING**

DM: „Mapping the fields allows farmers to better understand their soils."



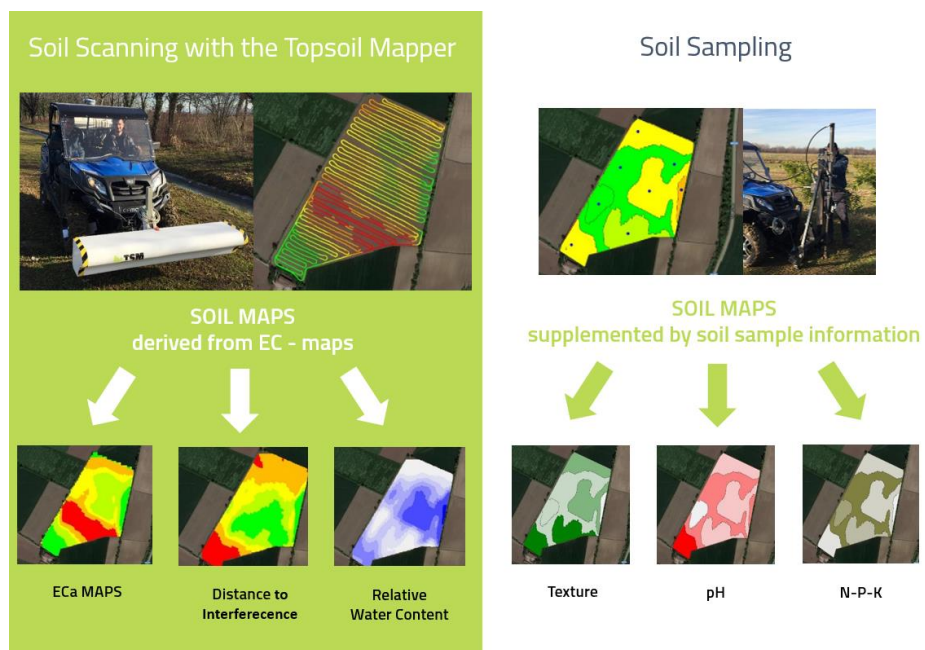
DM: "I like the Topsoil Mapper - you can use it on the field, but also in orchards and greenhouses."

**SOIL SAMPLES**

DM: „I use the TSM to map the soils and divide them into 2 to 3 different zones. After that I use selective soil samples to find out which key elements characterize the zones in terms of texture, N-P-K and microelements. This gives me the opportunity to offer my customers a fast and comprehensive service."



**EVALUATION PROCESS**



**Outlook...!**

DM: „The next step in expanding my service portfolio will be to use the TSM for tillage maps and variable tillage to give farmers the opportunity to reduce diesel consumption while delivering high yields. ”

Site-specific applications start with precise conductivity maps and help Precision Ag experts like Davide Misturini determine soil zones efficiently. With the Topsoil Data Analyzer, shape-files can be analyzed right after mapping, saving time and increasing productivity.

**Agrinnovazione company information:**

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Soil mapping at Agrinnovazione: [https://youtu.be/5uSIYRM2\\_lo](https://youtu.be/5uSIYRM2_lo)