

Crop nutrition - Nitrogen



Make science-based site-specific in-season Nitrogen Recommendations across your fields in just a few clicks.

Crop Nutrition is the most sophisticated yet user-friendly tool in our modelling arsenal. You can get an in-season site-specific Nitrogen Recommendation

1 Specific to your field

FluroSense collected **30 years of weather data**, analyses the **crop patterns** in each individual field and runs scientific bio-physical crop models to **calculate management zones**, crop nutrient removal, residual organic matter and soil parameters.

2 Economic parameters

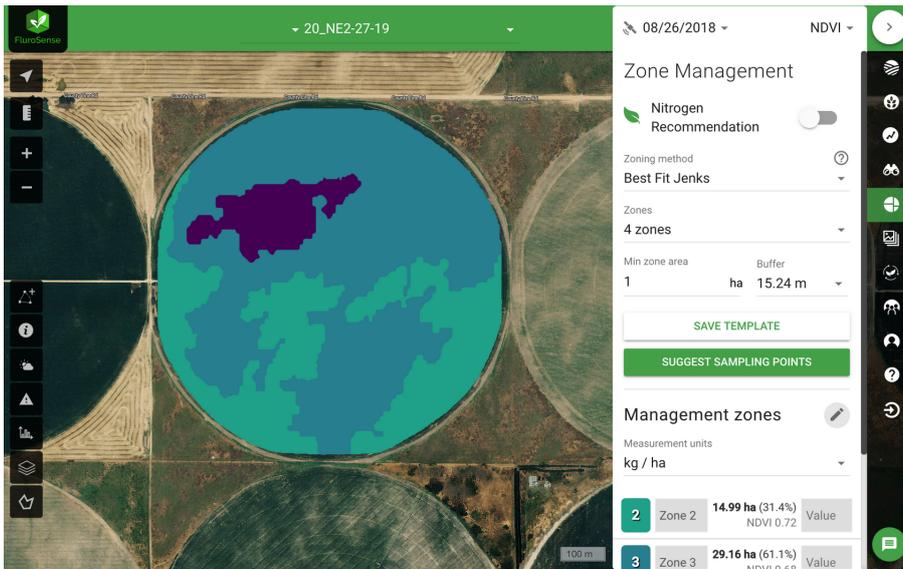
With hundreds of crop simulations for various weather outlooks at your fingertips, you can now apply your knowledge and experience to adjust the Yield Prediction and resulting Nitrogen Application Recommendation by changing Economic, and Weather Parameters.

3 Machine-ready files

We made it easy for you to use the Nitrogen Recommendations generated by FluroSense - the output files are machine-compatible and are provided in common formats (**kml and shp file**).

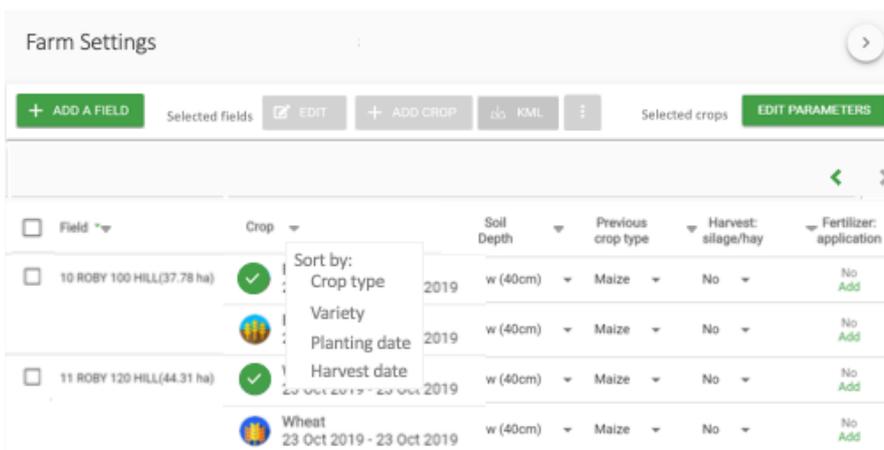
The screenshot displays the FluroSense mobile application interface. The top bar shows the FluroSense logo and the field ID '20_NE2-27-19'. The main screen is split into two panels. The left panel, titled 'Edit recommendation settings', features a form with the following fields: Fertilizer (Urea), Fertilizer price (500 \$AUD/T), Crop price (250 \$AUD/T), and Amount of fertilizer available (optional) (0 T). Below the form are two sliders: 'SEASON OUTLOOK' (ranging from DRY to WET) and 'ATTITUDE TOWARDS RISK' (ranging from Low risk to High risk). A disclaimer at the bottom states: 'Disclaimer: Nitrogen recommendation is based on an average of all possible seasons, with information to date, and settings used. Actual risk levels will be determined by the actual season, crop price/quality, and other agronomic factors.' A green 'UPDATE RECOMMENDATION' button is at the bottom. The right panel, titled 'Zone Management', shows 'Nitrogen Recommendation' with a toggle switch, 'Recommendation date' (06/26/2018), and 'Edit soil & crop parameters'. It lists '4 zones' and 'Management zones' for 'Product: Urea (kg/ha)'. A table shows two zones: Zone 1 (16.91 ha, 32.80%, 196) and Zone 2 (34.78 ha, 67.46%, 216). At the bottom, there are buttons for 'EDIT RECOMMENDATION SETTINGS' and 'EXPORT KML'.

4 Auto-creation of management zones



Zone management creation in FluroSense is a streamlined and extremely quick process. Once you have selected the Zoning tool, the platform **automatically creates** the Management Zones using your current spatial layer. You can easily select **a different spatial layer**, change the Zoning method, add a buffer or set a minimal area of the zone that you want to generate.

5 Connects to your Farm Management System



To **speed up and simplify** the setup of the Nutrient Modeling on your fields, we have built import tools and APIs that **connect to** a range of **Farm Management Systems** that make it quick and easy for you to import the data on your historical farm operations.

Renown scientific models working with your farm data

The team at FluroSat has built a **unique implementation** of the renown **scientific model** that has been under constant improvement by the international plant science community.

We have combined this model with a range of **weather and remote sensing analysis tools** for model initialisation that look at your cropping history and help estimate a range of model input parameters, asking you to provide only a few inputs to speed up the setup.

Unique implementation of the model that combines scientific model and **your farm data** allows us to provide Yield predictions for each of your fields and crops (adjustable) and tailor Nitrogen Recommendations based on individual's field history.

All done automatically for you to make sure that your in-season applications are on time!