Stirlings to Coast Farmers Newsletter Article Summer 14/15

Mapping Soil Variation for Efficient Input Use

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Choosing the best product and then applying it only where it is required is the most efficient way to treat soil constraints. STCF have funded work beginning this summer looking at different lime sources, and tools such as a liming calculator and Lime WA audits can assist product decisions. However there is little information available to supplement farmer's decisions about how to go about identifying where these constraints are located and where to apply inputs.

Precision SoilTech has received funding from South Coast Natural Resource Management to economically and scientifically analyse different mapping techniques in the STCF region. The project will have a primary focus on the required resolution of direct soil sampling for creating high resolution maps of pH (to 30cm) and also phosphorus and potassium. Other techniques such as proximal sensing (EM and Gamma Radiometrics), biomass imagery and yield mapping will also be assessed for their ability to supplement the soil mapping process.

Activities Update

Expressions of interest from STCF members were sought in October for project participants. Each participating farmer will host a 50ha test site which will be soil sampled at 1 site/ha for a soil variability analysis. The paddocks selected by farmers are those deemed to be representative of the soil types in the surrounding area, meaning all STCF members can relate the soil types on their farms to one or more of the test sites.

Test sites are currently being identified with farmers and soil sampling will begin in December, at the conclusion of harvest. An example outlines below an example output from the project.

For more information about the project please give me a call on my number above.

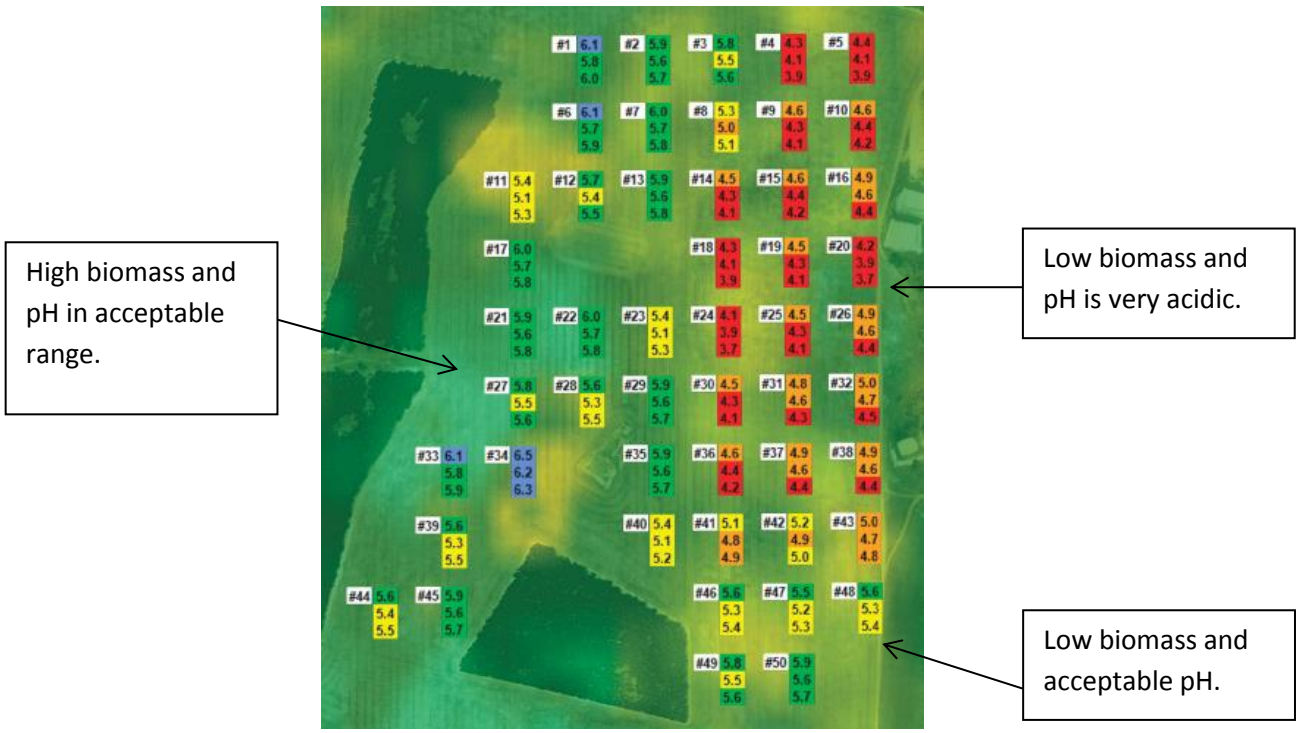

Figure 1: An example pH map with an overlayed biomass image. This map shows areas where pH and biomass are related and but other areas where biomass was affected by another constraint.