1. Title
Proximal Soil Sensing

2. Type
Working Groups Symposium

3. Organizer(s) & Convener
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4. Rationale
Proximal soil sensing is an active and multidisciplinary field of research in soil science that we are confident will attract much interest at the 20thWorldCongressofSoilScience.Oursymposiumheldduringthe19thcongressinBrisbanehadastrongscientificbasisandwaswellattended.

5. Objectives
The objectives of the symposium on proximal soil sensing will be to report on the development of:
a. state-of-the-art soil sensing technologies

b. modern statistical methods for analyzing soil sensor data
c. methods for multi-sensor data fusion
d. methods for sampling and fine resolution digital soil mapping using sensor data

6. Description

Proximal Soil Sensing aims to develop field-based methodologies for collecting information on the soil from close by, or within, the soil. PSS involves the use of optical, geophysical, electrochemical, mathematical and statistical methods. PPS have many applications such as precision agriculture, soil fertility, soil contamination, archaeology, peri-urban design and high land-value applications, where there is a particular need for high spatial resolution information.