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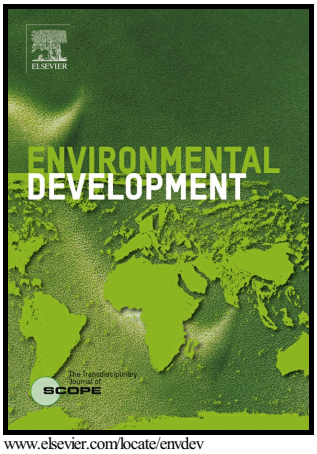

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ABSTRACT

Soil organic matter is highly pivotal as it can improve physical, chemical and biological properties of soil through various functions. Direct measurement of soil organic matter at large scales requires a great number of soil samples which is time consuming, tedious and costly. Consequently, alternative methods must be developed to provide a rapid overview of soil organic matter with reasonable accuracy at large scales. Remote sensing can be considered as a non-destructive, rapid and inexpensive method for such purpose. Among different remote sensing features, hyperspectral spectroscopy may produce inexpensive, quick and accurate way of producing soil organic matter maps at large scales. This study aimed to assess the feasibility of providing accurate soil organic matter distribution maps for