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(57) Abstract:

Soil classification is a crucial aspect in agriculture, construction, and environmental management as it determines the suitability of the soil for various applications. The traditional methods of soil classification are time-consuming and require expert knowledge, leading to the development of new techniques using technology. The use of MATLAB and embedded systems is a promising approach for soil classification. The soil samples are scanned and the digital images are processed to extract relevant features such as colour, texture, and shape. These features are then fed into a neural network, which classifies the soil into various categories based on its properties. And the output sent to controller using TTL and the control gives output using LCD display and message to respective person using GSM module.

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