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(57) Abstract :

The identification of agricultural crops is a tedious task using conventional methods which is essential in crop condition monitoring and crop growth. The objectives of the present invention were to develop and evaluate spectral signatures of crops to improve nutritional diagnosis of crop at spatially. The present invention describes about enlargement of crop spectral signature using multiband frequencies for crop discrimination. The Current invention promotes crop identification based on spectral signature, botanical pigments extraction methods and morphological parameters estimation for various applications. The present invention can be used for crop insurance policy schemes and identified spectral signatures of crops will be used as an end member extraction for hyperspectral imagery. Amalgamation of diverse methods greatly improves accuracy of targeted yield acreage to increase the crop productivity. The present invention provides a facile method for identification and discrimination of crop types with an inexpensive manner using geospatial data.

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