Soil Property Analysis of Coastal Lowland using Landsat TM Image - The Case of the Kimhae Delta Plain of Korea -

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Abstract

Using Landsat TM Image of the Kimhae Delta Plain, Korea, this study clarifies the reason why paddy fields make different tones after harvest. In order to examine the brightness difference, the study collected soil samples from areas and analyzed a soil grain size and chemical contents. According to the analyses, the brightness difference could not be explain by the soil moisture, grain size composition and the quantity of organic matters. However, two sample areas showed a clear difference in their saline contents, and the distribution pattern of saline soil and non-saline soil corresponded with the landform development of delta. Therefore, the study concluded that the saline difference is the cause of the bright difference.