عنوان مقاله:

Appropriate Wavelengths for Prediction of Grain Yield and Protein Content

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خلاصه مقاله:

One of the important stages for development an optical sensor for detection of winter wheat growth characteristics is determination of significantwavelengths using multi spectral reflectance data.Diffuse reflectance of crop leaves was recorded with other crop variables during growth stages. Multivariateanalysis including partial least squares regression (PLSR) and stepwise multiple linear regression (SMLR) procedures were used to determine importantwavelengths. The results showed strong relationships between predicted and actual crop variables. The best prediction model built on wavelengths selected by SMLR so that R2, root mean square and relative error (RE) for the validation dataset were 0.85, 1.56 and 3.64% for SPAD, 0.89, 413 and 6.21% for grain yield, and 0.84, 0.56 and 4.85% for protein content

کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا:

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