

26. Study of Plant Leaf Morphology and Stress Effect on Plant Growth by FTIR Spectroscopy.

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Abstract:

Absorption and Fourier Transform Infrared spectroscopy (FT-IR) are employed to for analysis of plant pigments and investigation of effect nutrients on the growth of plant. The plant Mogra (*Jasminum officinale*) was selected for study. The chlorophyll pigments of plant exhibits the action spectrum of slandered chlorophyll plant pigments. The chlorophyll-a, chlorophyll-b and total chlorophyll, was estimated, from the absorption spectrum of young cotton leaf. The absorption ratio A_{430}/A_{663} obtained using the data of absorption spectra. The effect of nutrient stress on the vibrational frequency of IR spectra was studied.

Key words: nutrient deficiency, FT-IR Spectroscopy, photosynthesis