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A TECHINIQUE FOR THE MEASUREMENT OF RELATIVE AMOUNTS OF DISPERSED HUMUS IN SOIL PROFILES.

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ABSTRACT

One soil profile i.e., Khurrianwala soil series was investigated to measure the relative amounts of the dispersed humus in the various soil layers. A technique has been developed which allows the measurements of dispersed humus indirectly from its optical density in a 1:5 soil : water ratio. A KONTRON UVKON-860 spectrophotometer was used at a fixed wavelength of 207 nm. The readings obtained were then plotted on paper through a KONTRON plotter-800. The enrichment of the dispersed humus is found in two layers i.e., 45-50 and 65-70cm and considered responsible in combination with dispersed clay to qualify the Khurrianwala soil series to be dense.

INTRODUCTION

The use of saline water for irrigation is becoming a practical means for its disposal. Furthermore, the use of this resource will become imperative in the future, as it is increasing day by day due to the shortage of good quality irrigation water (Rodin et al., 1975). It is generally recognised that the concentration of sodium and other cations in irrigation water can affect the permeability of soils greatly by swelling (Van Olphan, 1977) and through dispersion and redeposition of clay platelets at voids (Shainberg et al., 1981 a&b). In addition to dispersed clay, dis-