A METHOD OF MEASURING ROOT VOLUME IN CORN (Zea mays L.)

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METHODS have been developed and described for quantitatively measuring corn stalk quality. However, studies of corn root systems have not kept pace with stalk investigations. This is due primarily to the lack of suitable measuring techniques. Consequently, root systems per se have not been studied extensively.

The method reported herein was employed at the Missouri Agricultural Experiment Station to determine whether volumetrical differences in corn root systems could be detected by a water-displacement measuring device. The application of this technique, in association with other methods for classifying types of corn root systems, could result in a useful tool for determining inherited differences in root morphology, as well as for determining the influence of various environments on the morphological traits of the root system.