MODELING THE MAIN DRYING AND WETTING BRANCHES FOR HYSTERESIS LOOP OF SOIL WATER RETENTION

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The mathematical model of main drying and wetting branches for hysteresis loop of soil water retention is developed. Model parameters are interpreted using the concepts of soil being a capillary-porous medium. It has been suggested to use the lognormal distribution of effective pore radii and factors of physical soil properties for model parameters' adequate assessment.

Keywords: differential soil water capacity, soil water retention curve, capillarity, hysteresis loop, lognormal distribution of effective pore radii.