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A Review of Infiltration rate using various models

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Abstract:

In this paper, the collective review of various investigators was discussed by using an apparatus called double ring infiltrometer. Many investigators recommended the optimal result for models using various field data and experimental data is discussed in this paper.

Introduction

The infiltration capacity of is depends on various factors such as Soil profile, water content of soil and vegetative covers and other factors etc. In the light of research, the infiltration rate can be measured by different researchers in context with the various types of soil with their conditions.

Review of Literature

Jagdale Satyawan et. al. (2012) has been reported that the infiltration rates obtained by Kostiakov and Modified Kostiakov method and other infiltration models methods

Balraj Singh et. al (2014) is reported that the different hydraulic parameters like Coefficient of Absorption (A) and Coefficient of Sorptivity (S) were calculated from the various equations of models. It has been seen that there is a variations of different infiltration rate based on soil conditions and also a meteorological conditions.

Avinash S.Kadam (2016) has discussed the infiltration rate for selection of artificial recharge system and also discuss the various parameters involves for effecting the infiltration rate. The author also suggested that the experimental result lies up to certain degree of accuracy as compare with the analytic approach of the system as an output.

Conclusion

It is concluded that the literature shows that the majority if researchers analysis that the infiltration rate depends upon the soil types, use of various mathematical models as well as analytical models. Few have conducted the experiments based in these values a numerical modelling will developed after obtaining these values a correlation among experimental data and computed results may be plotted as per requirement. In this it is also concluded that the double ring infiltrometer is more reliable then single ring infiltrometer.

References:

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