Kajian Erodibilitas Tanah Pada Beberapa Sub Group Tanah Di Kecamatan Semin

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ABSTRAK

Bentuk permukaan bumi selalu mengalami perubahan dan perkembangan, baik secara fisik maupun kimiawi. Salah satu proses yang menyebabkan perubahan bentuk permukaan bumi tersebut adalah erosi, yang salah satu faktornya adalah nilai erodibilitas tanah. Erodibilitas tanah adalah kepekaan tanah terhadap terjadinya erosi. Wilayah Semin memiliki 4 sub group tanah yaitu Typic Hapluderts, Typic Eutropepts, Typic Troporthents dan Lithic Haplustols. Keempat sub group tanah tersebut memiliki sifat-sifat yang berbeda. Tujuan dari penelitian ini untuk mengetahui nilai erodibilitas pada setiap sub group tanah yang terdapat di Kecamatan Semin. Penelitian ini menggunakan Metode Survey, pengambilan sampel tanah secara Purposive berdasarkan Peta Satuan Lahan Kecamatan Semin. Pengamatan struktur tanah dan pengambilan sampel tanah yang akan dianalisis dilakukan dengan cara membuat mini pid dan menggunakan ring sampler. Analisis data erodibilitas tanah dilakukan dengan menggunakan persamaan Weischmeier 1978 yaitu $100\ K = 1{,}292\ [2{,}1\ M^{1{,}14}\ (10^{-4})\ (12\text{-}a) + 3{,}25\ (b\text{-}2) + 2{,}5\ (c\text{-}3)]$. Hasil Penelitian menunjukkan bahwa nilai erodibilitas tertinggi pada sub group tanah Typic Troporthents dengan kemiringan lereng landai yaitu 0,730 termasuk dalam kelas erodibilitas sangat tinggi sedangkan nilai erodibilitas terendah pada sub group tanah Typic Hapluderts dengan kemiringan lereng agak curam yaitu 0,184 termasuk dalam kelas erodibilitas rendah. Faktor yang menentukan nilai erodibilitas tanah adalah bahan organik dan tekstur tanah khusunya fraksi lempung, debu dan pasir sangat halus.

Kata kunci : *Erodibilitas, Kecamatan Semin, Sub Group Tanah*

The Study of Soil Erodibility at Various Soil Sub Groups in Semin Sub-District

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ABSTRACT

The shape of the earth surface is always changing and developing, both physically and chemically. One process which causes the changes in the shape of the earth's surface is erosion, and one of the factors is the value of soil erodibility. The soil erodibility is the sensitivity of the soil to erosion. The Semin Sub-District has 4 soil sub groups, they were Typic Hapluderts, Typic Eutropepts, Typic Troporthents and Lithic Haplustols. They have different kind of characteristic. The purpose of this study is to determine the erodibility value in each soil sub group in Semin Sub-District. This research uses Survey Method, and purposive soil sampling is based on Land Unit Map of Semin Sub District. The observation of soil structure and soil sampling were analyzed by making a minipit and using a ring sampler. Analysis of soil erodibility data was carried out using the Weischmeier equation 1978 which is 100 K = 1.292 [2.1 M1.14 (10-4) (12-a) + 3.25 (b-2) + 2.5 (c-3)]. The results showed that the highest erodibility value in the Typic Troporthents sub group with the slope of 0.730. It is included in the very high erodibility class, meanwhile the lowest erodibility value in the Typic Hapluderts sub group with a rather steep slope of 0.184. It is included in the low erodibility class. The factors which determine the value of soil erodibility are organic matter and soil texture, especially the clay, dust, and very fine sand.

Keywords: *Erodibility, Semin Sub-District, Soil Sub Groups*