ASSESSMENT OF NITROGEN LEACHING FROM A THE SANDY SOIL OF DIVJAKA AREA

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Abstract

Nitrogen (N) leaching in sandy soil decreases fertiliser use efficiency and may depress plant production. The nutrient leaching from agricultural soils can significantly influence environmental quality and human health. The leaching can be a significant loss mechanism for some plant nutrients especially nitrates. The leaching potential of nutrients depends on soil, climate and management factors. In this context, sandy soils in high rainfall areas pose a greater risk to nutrient leaching. The soil samples collected from ap horizonof a sandy soil in Divjaka village (Lushnje) were described and analyzed for their chemical and physical properties in order to assess the potential for nutrient/nitrate leaching. Plant samples for carrot and potatoes were also collected to analyze dhe nutrient contents. To assess the risk of nitrate leaching from the soil theDe Willigen model was used. The results indicated that the soil studied due to the content of variable charge clay minerals might slightly retard the leaching of the nitrate

Keywords: leaching, nitrogen, De Willigen model, sandy soil