

Abstract

In order to reduce nutrient losses on farming land with the declination up to 6% from Research Centre for Pastures Preajba, Gorj there have been tried two methods: the applying of organic – mineral fertilizers and buffer strips with pasture herbs. The applying of organic – mineral fertilizer L120 which was obtained from lignite coal has determined the diminishing of phosphorus losses. This way, on the sown pasture, the phosphorus losses have ranged between 0.21 and 0.27 kg/ha when superphosphate fertilizer has been applied and 0.15-0.20 kg/ha when organic – mineral fertilizer, L120 has been given. Buffer strips with 10 m width, along Preajba creek have mitigated the nutrient losses from sloppy adjacent terrains. In this manner, without buffer strips there were lost 0.78 t/ha of soil, 111.2 kg/ha humus, 7.99 kg/ha P and 0.59 kg/ha K. When buffer strips were put in place, the losses were only of 0.286 t/ha soil, 19.5 kg/ha humus, 1.22 kg/ha N and 0.053 kg/ha P.

Key words: organic – mineral fertilizer L120, slope, nutrient losses, buffer strips