

## INFLUENCE OF MINERAL FERTILIZATION AND WAYS OF USE ON NATURAL MEADOW OF *AGROSTIS CAPILLARIS*–*FESTUCA FALLAX* TYPE IN THE RHODOPE MOUNTAINS (SOUTHERN BULGARIA)

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**Abstract.** The experiment showed that the application of mineral fertilization up to  $N_{160}P_{80}$  increased dry matter yields between different ways of use as follows: from 5.88 to 6.45  $t \cdot ha^{-1}$  (annually hay–pasture uses), from 4.72 to 5.21  $t \cdot ha^{-1}$  (annually pasture–hay uses) and from 5.84 to 6.40  $t \cdot ha^{-1}$  (1<sup>st</sup> year: pasture–hay uses; 2<sup>nd</sup> year: only pasture use; 3<sup>rd</sup> year: hay–pasture uses). As regards to studying chemical indicators of the forage (crude fiber, crude fat, crude ash and nitrogen–free extract substances) the mineral fertilization and alternation of ways of use had a positive effect. The introduction of mineral fertilizers at a rate up to  $N_{160}P_{80}$  increased the obtained feed units and crude protein per 1 ha.

**Key words:** natural meadow, mineral fertilization, ways of use, productive and chemical indicators, the Rhodope Mountains.

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