

## **Abstract**

The study aimed to assess the quality of forages obtained from a permanent grassland of Dorna Depression (Romania) under the influence of organic versus mineral fertilization. The experiences were monofactorial in three repetitions, located on a grassland of *Nardus stricta* L. to follow the effect of fertilization with 20-50 t ha<sup>-1</sup> manure, applied annually or every 2 years and N<sub>100</sub>P<sub>100</sub>, N<sub>140</sub>P<sub>140</sub> and N<sub>200</sub>P<sub>200</sub>, on the chemical composition of the forage. It was observed for experience with organic input, crude protein (CP) content increased from 6.38% to 9.32%-13.14%, NDF and ADF decreased from 74.71% to 50.08%-60.20%, and from 47.09% to 43.11%-37.47%, respectively, and in experience with chemical fertilization CP increased from 6.48% to 6.59%–14.08% while NDF and ADF, decreased from 72.25% to 59.28%–51.92%, and from 45.64% to 39.79-32.10%, respectively. The values of the investigated parameters indicate an improvement in forages quality.

**Key words:** organic input, mineral fertilization, permanent grassland, nutritional value