

## CHEMICAL COMPOSITION AND FEED VALUE FOR RUMINANTS OF WEEDY MAIZE SILAGE

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**Summary.** Nutritive value of maize silage comprises the existent nutritive elements in the dry matter of fodder. However, there are many weed plants in ensiled green mass of maize *Zea mays*. Weeds can affect the value and digestibility of silage and can have toxic elements. That can influence the productivity of cattle and the quality of their products.

The field and laboratorial experiments were carried out at the Lithuanian University of Agriculture. The silage was made from non-weedy maize; from weedy maize where these weed species dominated: white goosefoot *Chenopodium album*, field pennycress *Thlaspi arvense*, scentless mayweed *Tripleurospermum inodora* and shepherd's purse *Capsella bursa-pastoris*; and from maize crop with noxious plant black nightshade *Solanum nigrum*. The chemical composition, digestibility and feed value were established using Wender's fodder analysis and Hohenheim test of fodder value. Potential usage of three kinds of maize silage were investigated. Weeds decreased energetic value of maize silage but increased the amount of crude protein by 10% and of mineral elements of 50%. The amount of crude protein was 15% bigger in maize silage with 10% of black nightshade than in non-weedy silage, but it did not influence positively the energetic value of fodder.

**Keywords:** maize silage, chemical composition, digestibility, ruminants, weed plants