

EXPERIENCE OF FODDER GALEGA (*GALEGA ORIENTALIS* LAM.) AND TRADITIONAL FODDER GRASSES USE FOR FORAGE PRODUCTION IN ORGANIC FARM

Ligita Baležentienė, Vidmantas Spruogis

Aleksandras Stulginskis University

Studentų 11, LT-53361 Akademija, Kaunas distr., Lithuania; +370 37-75 22 02; e-mail: ligita.balezentiene@asu.lt

Summary. Fresh mass of fodder galega is protein rich and contains bio-active substances (vitamins, especially C, carotene, and minerals), and therefore is high valuable fodder. Moreover, fodder galega produce heavy yield (60–70 t ha⁻¹ fresh mass, 15 t ha⁻¹ hay, and 12 t ha⁻¹ dry materials) without mineral fertilizer supplement, thus biomass is ecologically safe feed.

The main object of this study was to evaluate galega chemical composition, selective consumption as well as the effects of increasing cattle daily liveweight gain of stable feeding and grazing. Feeding and grazing experiments were carried out at organical farm conditions during years 2008–2009. Agrochemical analyses of timothy, red clover and galega biomass were done at Agrochemical Laboratory of Lithuanian Agriculture University.

Biomass of fodder galega has better chemical content and metabolisable energy (9.6 MJ kg⁻¹) than traditional feed grasses, namely timothy (8.1 MJ kg⁻¹) and red clover (9.3 MJ kg⁻¹). Moreover, galega fresh mass and hay of fodder galega were suitable for feeding due to good edibility (4–5 points). Galega enriched animal ration with protein¹ (223.2 g kg⁻¹), vitamins² as well as with Ca (12.41 g kg⁻¹), Mg (3.62 g kg⁻¹), Fe (80 mg kg⁻¹) and Cu (8.0 mg kg⁻¹). Therefore galega improved feed value and selective consumption of animal feeds. The daily liveweight gains of free grazing and stall-feeding heifers came up to 634 and 863 g, respectively, and average increase by 70 and 61 g in comparison with heifers³ intake of cultural pasture grass was observed.

Keywords: ecology, *Galega*, productivity, feed value, edibility, heifer, liveweight gain.