ALFALFA MANAGEMENT IN NORTH-EASTERN ROMANIA

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Abstract

In the last years, the alfalfa crop (*Medicago sativa* L.) area is increasing because of its high productivity and quality. Improving technologies for growing alfalfa helps to raise productivity and quality parameters as well. One of the most important factors that influences both quality and productivity of alfalfa is the growth stage in which the alfalfa plants are harvested. The research was conducted in NE region of Romania (47°05'-47°10' north latitude and 27°28'-27°33' east longitude). During experimentations we monitored the influence of alfalfa plant maturity at harvest on the dry matter yield (whole plant, leaves and stems) at the four cuts in the second year of vegetation. The results showed that delaying harvesting contributes to a higher total DM production but with a decrease in the quantity of leaves. It was observed that the first cut represented 45-48% from the total DM yield, second cut 20-27%, third cut 26-27% and fourth cut 0-9% from the total DM yield. The largest quantity of leaves were obtained when alfalfa was harvested at mid bud, late bud and early flowering. Regardless of the growth stage at harvest, at the first cut was obtained half (48-53%) of the stem production from the entire year.

Key words: harvesting growth stage, forage yield, alfalfa leaves, alfalfa stems, dry matter distribution