The Test of some Annual and Perennial Fodder Cultures for Fresh Matter Production in Ecological Conditions of Cojocna

Nicușor SIMA\textsuperscript{1)}, Gheorghe MIHAI\textsuperscript{1)}, Rodica SIMA\textsuperscript{1)}, Marius SABO\textsuperscript{2)}, Dorin PLEŞA\textsuperscript{1)}

\textsuperscript{1)}University of Agricultural Sciences and Veterinary Medicine, Faculty of Animal Science and Biotechnologies, 3-5 Manastur Street, 400372 Cluj-Napoca, Romania; flaviusima@yahoo.com
\textsuperscript{2)}Didactic Station of University of Agricultural Sciences and Veterinary Medicine, Cluj-Napoca, Romania

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**SUMMARY**

The rhythmic supply with quantitative and qualitative fresh matter forage during the summer represents for bovine breeders one of the most important problem that they confronted with. In order to give Transylvanian farmers some solutions for this problem, in the frame of Cojocna Didactic Station, in the spring of 2010 year, were settle down experiments with perennial fodder plants, sown in the last decade of March (alfalfa pure culture as control – M1 and eight mixtures of poaceous and fabaceous, from M2 to M9) and with annual fodder plants, sown in the last decade of April (oat and pea as control; triticale and pea; rape; millet; sorghum x sudangrass hybrid). By choosing of a varied assortment of species, as ecological requirements, it was tried to establish some structures of cultures which have to respond both to the actual climatic changes (Lorgeau \textit{et al.}, 2007; Pervanchon, 2007) and to the principles of sustainable agriculture concept. In case of perennial species, at first cycle of harvest (first decade of June), increases of fresh matter yields which were statistical assured were recorded for following mixtures: M7. \textit{Trifolium pratense}, \textit{Lotus corniculatus}, \textit{Trifolium alexandrinum}, \textit{Dactylis glomerata}, \textit{Festuca pratensis}, \textit{Lolium hybridum} (29.21 t·ha\textsuperscript{-1} fresh matter yield), M8. \textit{Trifolium pratense}, \textit{Trifolium repens}, \textit{Dactylis glomerata}, \textit{Festuca pratensis}, \textit{Lolium hybridum} (21.62 t·ha\textsuperscript{-1} fresh matter yield) and M2. \textit{Medicago sativa}, \textit{Trifolium alexandrinum}, \textit{Dactylis glomerata}, \textit{Festuca pratensis}, \textit{Phleum pratense}, \textit{Lolium hybridum}, \textit{Lolium perenne} (21.62 t·ha\textsuperscript{-1} fresh matter yield). In case of annual species, at first cycle of harvest, only the mixture made from pea and triticale (25.07 t·ha\textsuperscript{-1} fresh matter yield) outran the control (23.13 t·ha\textsuperscript{-1} fresh matter yield) but the increase of yield had not statistical assurance. All the others annual species realized smaller yields in comparison with control, but for rape and sorghum x sudangrass hybrid the yield differences were significant negative.

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**REFERENCES**