Key words: anthropogenic costs, gross energy, methodology, meadow agroecosystems, metabolic energy

Summary

The article presents methodological basis for definition of gross energy flows in grasslands agroecosystems (aboveground and underground mass, soil fertility). Showed methodical approach to the evaluation of total anthropogenic energy expenditure for different technologies and the production of gross energy in a single indicator for the SI system. In the examples given in the tables, produced in length of stationary experiments on meadows cultivation, shows the leading role natural renewable energy sources (use of solar energy, biological characteristics of renewable phytocenoses itself, biogenic environmental factors etc.) and in general, the role grassland agroecosystems in modern biospheric processes. At the same time, the production of metabolic energy (physiologically available to animals) and collecting it in a costs per anthropogenic can predict the economic efficiency of new reception and technologies developed in the fodder production. The methodology can be used not only for research cultivation of meadows, but also in other crop production.