



TITLE

BIOCHORUME - BIOLOGICAL SYSTEMS FOR USING MANURE FROM INTENSIVE LIVESTOCK HOLDINGS OF DAIRY CATTLE

HIGHLIGHTS

Development of biological systems for the use of dairy cattle manure from intensive dairy cattle farms, in the fertilization of fast growing forest crops for the production of biomass for energy and animal feed

ABSTRACT

Intensive Cattle Raising of Dairy Cattle (PIPL) has a vital social and economic importance for the Entre Douro e Minho Region (EDM). However, it produces high loads of effluents with polluting and environmental potential, as is the case of dairy cattle manure (mixture of urine, faeces and waters of diverse origins). These effluents have high levels of N, P and K, and micronutrients, such as Cu and Zn, as well as pathogenic microorganisms. In contrast, dairy cattle manure continues to be a resource as a fertilizer for the soil, increasing the organic matter (OM) and nutrients available and improving its structure.

The main objective is to create an innovative model, alternative to traditional, to minimize the problems of excess effluent livestock in the EPL in the EDM region, promoting its valorization as an OM supplier to the soil and nutrient availability for biomass production, and in its contribution to the improvement of the economic sustainability of PIPL companies, valuing the biomass produced in soil decontamination and as a source of energy for the internal use of the exploration units.

In this way, the potential beneficiaries of this action will be the cattle companies that intend to value and optimize the use of a by-product of their activity that presents a high polluting potential. The companies of other livestock activities that present this type of effluents can integrate in their farms these biological systems adapted to the characteristics of their residues. The entities that manage the livestock effluents (companies and municipalities) will be able to diversify the forms of valorization and final destination of the dairy cattle manure.

KEYWORDS

Dairy Cattle, Dairy Cattle Manure, Environmental Biotechnology, Environment, Pollution

PROMOTERS / PARTNERS

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